

Jamhuuriyadda Somaliland
جمهوريّة أرض الْ صومال

Republic of Somaliland



MINISTRY OF HEALTH

COMMUNITY HEALTH WORKER (CHW)
TRAINING MANUAL

MARCH, 2013

COMMUNITY HEALTH WORKER (CHW)

TRAINING MANUAL

SUPPORTED BY:



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FOREWORD

REPUBLIC OF
Wasaarada Caafimaadka



SOMALILAND
Ministry of health

THE MINISTER

REF: MOH/ M/1.00/5/ /13

Date: 16/03/2013

FORWARD

Somaliland people are experiencing one of the lowest health statuses in the world. Under-5 mortality is in the range of 117 to 225 per 1,000 live births. There has been little or no progress in reducing child mortality in the last 20 years. Maternal mortality is among the highest in the world, between 1,044 and 1,400 per 1,000,000 live births. Sixty one per 1,000 new-born infants die within the first month of life, the highest neonatal mortality rate in the world. Most of our population are living in the rural and remote villages which are facing limited access to essential basic health care services. One of the reasons being lack of qualified health workers and as evidence shows that the majority of the maternal and child deaths occur at communal levels which necessitated our attention to be focused on it.

The impetus of revising and standardizing the community health worker's materials emerged from the need of MOH to have updated national training material aligned with the EPHS blue print in which we have adopted as the health delivery mode in Somaliland. The overall vision is to guide us an appropriate and accessible basic primary health services are available in Somaliland to children, women and men at community level through educating selected, trained community members in health promotion and providing first level services. They have a crucial role to play in enhancing the health system's capacity to prevent maternal and child illnesses and in promoting child spacing, skilled antenatal and postnatal care and delivery and timely referral of complicated deliveries, maternal and neonatal emergencies and have very strong and crucial role in educating and supporting families about how to recognize and respond appropriately to danger signs, particularly in children and childbearing women. The review of these materials have been started and accomplished with the full engagement of all concerned stakeholders and partners. The CHW materials consist of the following:

- Community health workers curriculum
- Community health workers manual
- Curriculum for trainers of Community health workers
- Manual for trainers of Community health workers

Last but not the least, we would like thank all the Ministry of health staffs, our health professional associations, UN and INGOs agencies who have participated in the review and redrafting of these materials. In particular we would like to thank THET, UNICEF, DFID and EC for their technical and financial assistance in supporting this process. We hereby endorsed these materials and committed to implement it and sincerely beseech all partners to follow suit and work with us according to these materials to assist in the strengthening and reformation of an effective and equitable primary health units in Somaliland

Dr.Hussein Muhammed Mohamed
Minister of Health, Republic Of Somaliland



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We would like to acknowledge the partners and stakeholders who gave of their time, knowledge and ideas to the review of the 2008 Community Health Worker training materials, and the development and approval of the Ministry of Health Somaliland 2013 materials. These materials being the;

- Community health worker curriculum (2013)
- Community health worker manual (2013)
- Curriculum for trainers of Community health workers (2013)
- Manual for trainers of Community health workers (2013).

The following organisations were represented at the review and approval workshops, interviews and through email and telephone communications. Their unwavering support, assistance and guidance was invaluable.

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Health centre and Primary health unit staff including Community health workers (Berbera and Burao areas)
Health Poverty Action
Horn Health Concern
Medair
Merlin
Open University REACH programme
PSI Somaliland
Regional health offices Sahil and Tohgdeer
Save the Children UK
Somaliland Family Health Association
Somaliland Nurses' and Midwives' Association (SLNMA)
UNICEF regional office Nairobi, and Somaliland office Hargeisa
WHO

We now have the materials needed to scale up Community Health Worker training in Somaliland. What remains are practical actions by each agency in coordination with the Ministry of Health to ensure that community health and health for all Somalilanders becomes a reality.

Mahad Sanid every one!!

THET

GLOSSARY AND TERMS USED

AIDS	Acquired-Immune Deficiency Syndrome
ARV	Antiretroviral therapy (for HIV and AIDS)
BEMOC	Basic emergency obstetric care
CCMCI	Community case management of childhood illnesses
CEMOC	Comprehensive emergency obstetric care
CHAST	Child health sanitation training
CHW	Community health worker
CPR	Cardio-pulmonary resuscitation
EPI	Expanded programme of immunisation
FGM	Female genital mutilation
GBV	Gender-based violence
HIV	Human immunodeficiency virus
IDP	Internally displaced persons
IMAM	Integrate management of acute malnutrition
IMCI	Integrated management of childhood illnesses
INGO	International non-governmental organisation
MAM	Moderate acute malnutrition
MCH	Maternal and child health
MDG	Millennium development goal
MMR	Maternal mortality ratio
MoH	Ministry of Health
MTCT(P)	Mother to child transmission (prevention) of HIV
MUAC	Mid-upper arm circumference
NGO	Non-governmental organisation
ORS	Oral rehydration salts
OSCE	Objective structured clinical examination
OTP	Outpatient therapeutic programme
PHAST	Public health and sanitation transformation
PHU	Primary health unit
RDT	Rapid diagnostic test for malaria
RUTF	Ready-to-use therapeutic food
SAM	Severe acute malnutrition
TBA	Traditional birth attendant
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

TERMS USED

Community health worker	A person who has been appointed by the community of origin and the MoH having successfully completed the CHW course
Trainee	A person undertaking the CHW training course
Trainer	A person who has undertaken the CHW ToT course

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For use of original images:

(PSI Hargeisa) Original images learning unit 18.

UNICEF / CARE

Dr. Gillian Barber

INTRODUCTION AND HOW TO USE THIS MANUAL

Welcome to the Somaliland Community Health Worker course. This is the Manual you will use during the course. Your trainer will help you. Most of the activities and information in this manual will be used during your time learning with the group. You will carry out some activities back in your community or at a nearby health centre.

When you have successfully completed the course, you will need to keep this Manual so you can refer to it when you need to.

The manual is designed to be used by trainers with the Community Health Worker Curriculum (2012). The two documents match each other. Each Learning Unit in the Curriculum is matched by an equivalent Unit in this Manual. This is except for Learning Unit 19 which is a Unit that gives you the opportunity to work as CHW under supervision. There will be no new knowledge learning in Unit 19 so there is no section here in this Manual. You will be using knowledge and skills you have developed through the whole course.

Here is a list of the course units in this manual:

Unit	Unit title
1	Introduction to the CHW course, role and ethics
2	Primary and community health care
3	How the body works
4	Healthy people
5	Healthy environments
6	Community assessment
7	Health promotion, education and communication
8	Integrated community case management of childhood illness
9	Nutrition and malnutrition
10	Immunisation
11	Community management of health problems in adults
12	Communicable diseases with STIs, HIV and AIDS
13	Managing the Primary health Unit
14	Family case study
15	Maternal health and illness
16	Newborn health and illness
17	Mother and baby case study
18	Child spacing

You will find activities to do in many places in these Units. Some will be practical things to do, some are things to think about or talk about with your fellow trainees. Your trainer will help you and may use them as class activities. Activities are marked this way:

ACTIVITIES

ENJOY the course!

UNIT 1 INTRODUCTION TO THE CHW COURSE, ROLE AND ETHICS

These are the things you should know and be able to do after studying this learning unit:

- Know what to expect during the course
- Explain to others such as the community what Somaliland CHWs do
- Begin to work with Community Health Committees
- Follow a code of behaviour that does not harm anyone.

The CHW training course

How is the CHW course organised?

- The course for CHWs lasts for 34 weeks
- It is divided into 6 Blocks of learning
- Most Blocks lasts for 6 weeks. The final one lasts 4 weeks.

Most Blocks are divided into

- 4 weeks in the training centre
- 1 week in a community. This should be the community you come from if possible
- 1 week in a health centre or other health facility. This should be the one that you live nearest to if possible.

Each Block except the final one is followed by 1 week of home leave. This may change if needed, for example to allow for the public and religious calendar.

What are the responsibilities and rights of trainees during training?

As a trainee CHW there are things that you should do (responsibilities).

The responsibilities of CHW trainees are to

- take part in all learning activities in the learning centre, health centres or other facilities, and in your community
- work with other trainees when expected to do so by trainers
- treat each other, clients you meet, your trainers and supervisors with respect
- accept other trainees whatever their background
- be respectful to community leaders and health committees and work with them
- take part in assessments with honesty and avoid all forms of cheating
- accept decisions about your success or failure made by those responsible for the course
- set a good example for healthy living and encourage this at home.

There are also things that others should do for you (rights). As a trainee you will

- be treated fairly at all times and not be treated differently from others

- be given a wide range of learning experiences by trainers and practice supervisors
- be helped to cover all parts of the 2012 curriculum unless decided otherwise by the MoH;
- be supported by trainers and practice supervisors. They will watch your progress and give help when needed.
- have your achievements assessed fairly
- be respected by trainers, practice supervisors and other trainees
- be awarded the MoH CHW certificate when you have completed the course successfully.

What are the role, responsibilities and competencies of CHWs?

(A competency is what CHWs should know, be able to do and how they behave.)

This section is based on the CHW Curriculum 2012 for Somaliland. The curriculum is based on the 2011 MoH job description and on the 2009 Essential Package of Health Services. It is also based on the experience of people involved with the programme.

What are the role and responsibilities of CHWs after being awarded the certificate?

The Somaliland CHW is a health advocate, promoter, educator and mobiliser. This means that CHWs

- inform people about health issues
- encourage them to make changes so that they can become more healthy
- support communities in making changes so their environment and lifestyle is healthier
- support families who have children to keep them healthy
- makes sure families know how to react to illness and danger signs in the right way
- encourage them to use health facilities properly and take part in health campaigns e.g. immunisation.

Being an advocate is more than encouraging good health. You may need to be an advocate FOR PEOPLE as well as for HEALTH. You may need to speak for people who would not be listened to normally and be their voice.

CHWs act when people are ill and makes sure they receive the best treatment. This means that CHWs will

- identify signs, symptoms and danger signs of illness.
- classify those who need to be referred to the health centre for treatment, and those who can be treated at home or at the PHU.
- refer those with danger signs to a health centre.
- treat everyone as though they are their own family members.
- treat those who do not have danger signs. They use the kit of medicines and equipment approved by the MoH for CHWs to use.

A sign is something someone can see in a sick person e.g. fast breathing, pale face, yellow eyes. A symptom is something a person tells you about e.g. a pain, feeling sick.

Here are some other things that CHWs should do:

- be friendly and kind
- help people to take responsibility for their own health
- carry on learning
- know what they do well and what they need help with
- know when something is more than they can deal with
- set a good example. People take notice more of what they see you than of what you say.

She is too sick for me to treat. Take her to the Health centre FAST



CHWs have a supervisor or manager who is usually a nurse at the nearest health centre. CHWs

- report to them regularly
- follow their guidance
- receive help from them to stay up-to-date, often through on-the-job training.

What should CHWs know and be able to do, and how should they behave? The competencies

CHWs should know and be able to do many different things. They should behave in ways that help people best. These are known as competencies.

There are seven competencies known as 'overall' competencies. But each one is divided into many different 'specific' competencies. These give more information about what CHWs should know and do. They also show how they should behave. These can be seen in Annex 1.

Overall competencies:

1. **Collaboration:** CHWs collaborate with community residents , health committees, and other lay and professional health workers.
2. **Accountability:** CHWs are accountable to clients, families, the community and supervisors, and report to their health committee and supervisors .
3. **Advocacy:** CHWs act as advocates for the community AND advocate in the community for appropriate use of health services.
4. **Health promotion and education:** CHWs promote good health and nutrition and raise awareness in the community.
5. **Community mobilisation:** CHWs support others in achieving healthy environments and lifestyles, and effective use of services.
6. **Identification and treatment of common health problems:** CHWs identify health problems in the community including of children, and act appropriately to deal with them.

It is important to understand that CHWs do not do everything. For example CHWs do not give injections of any type unless extra training has been given at a later date after certification. This is so even if clients buy medicines at a pharmacy and asks the CHW to inject them. Injections given incorrectly can cause infection and paralysis. CHWs do not give medicines that are not recognised for administration by them and supplied in the kit. The kit is specified in the EPHS (2009) although this may change over time.

How should CHWs behave?

CHWs follow a ‘way’ of behaving that is like other health care workers in Somaliland. These are called ‘codes of behaviour’. These are based on codes used right around the world and advised within Islam. The Somaliland Nursing and Midwifery Association is developing a code of ethics.

‘Ethics’ just means the right way to behave. Ethical ways of working that are right for CHWs to follow include

- doing good and doing no harm
- avoiding discrimination – not treating people in different ways
- making sure that the confidentiality, privacy and dignity of clients is always respected
- the only incentives accepted are the ones approved by the MoH such as salary where the CHW is employed.

Thinking about ethics

‘Ethics’ has a similar meaning to ‘moral’.

Many people around the world have thought about what is good and right behaviour. Many of them have thought about the topic of helping and harming people who have health problems. The most important idea is that no health worker should harm others in any way. They should not take advantage of people who are less able to look after themselves than usual. Here are some examples of this:

- A CHW thinks about what she is doing and gives the right medicine to a child with a cough. This is good.
- A CHW is in a hurry and gives the wrong medicine to a child with a cough without thinking properly. The child becomes very sick. This is bad practice and is unethical because it may do harm.
- A CHW gives medicine because she wants to please her relative who asks for it. This is unethical.
- She decides not to tell anyone of the mistake even though the child needs treatment after what she has done. This is even more unethical.
- A CHW promises the Community Health Committee to ask for advice with building new latrines when she next visits the health centre. This is good.
- A CHW promises to ask for this advice as long as the community leaders pay her extra. This is bad. It is unethical.
- Two women bring their children Ahmed and Hassan to see the CHW. They are both the same age. Ahmed is a lively little boy and is walking and talking. Hassan is not learning to talk and just makes noises. He cannot walk at all. He just sits. The CHW treats Ahmed. She sends Hassan and his mother away saying it is not worth bothering with this child. This is not good. It is called ‘discrimination’ (treating people in different ways).
- A CHW demands money from a sick patient in order to open the PHU. She is already paid for working. This is bad and unethical.

ACTIVITY

Can you think of other examples?

ACTIVITY

What do you think about this story?

Mariam is a CHW who works in the village where she has lived since marrying. Her manager checks her drug kit and finds some antibiotics are missing. There is nothing recorded in the weekly report. Mariam knows her husband's brother took them when Mariam was visiting a friend in the next village. She did not give him her permission.

Telling the truth can be very difficult. What should Mariam have done? It can be very difficult to do the right thing sometimes. We all know that it is wrong to cause pain to someone without a good reason. It is more difficult when what we do or say involves someone else as in this story.

There are some ideas that can help us that you learned about above (ethical ways of working). These four ideas should always be used in deciding what to do:

Justice	•Treating people equally and fairly
Doing good	•Everyone should have only have good things done to them
Doing no harm	•It is important to do as little harm as possible
Being able to decide for ourselves (called autonomy)	•People have choices about what happens to them. No-one can force them to have treatment if they do not want it.

The issue about consent is very important. Here are some points to remember:

- It is important that patients give consent to anything that is done to them.
- Giving consent must be voluntary; no-one has forced them.
- To give consent they need information.
- Parents or guardians can give consent for their young children.
- Sometimes the family must give consent for people who are unable to do this. They may be very sick, very old or have limited abilities (called limited mental capacity). Different cultures look at this in different ways. Women may be included in the list of people who can not make decisions for themselves in some cultures. Do these ideas about 'ethics' help us to look at this?

Another idea can help us to decide what is the right and ethical thing to do. It is a framework that spells out the English word MORAL and is listed below:

- Make enquiries (find out about) the possible difficulties

- Outline the options (possible things that can be done)
- Review (look at) the alternatives (different things that could be done)
- Act
- Look back and evaluate (Was it the best action or not)?

ACTIVITY

Here is another scene that CHWs may have to deal with:

Faduma has two daughters. You find out that they will be taken to her mother's village next week to have FGM done. Think about the information in this course unit.

- What would you say to Fadumo?
- Would you tell anyone what is planned?
- If you tell someone, who would it be?
- Is it right that she makes this decision for her daughters?

Another important thing that CHWs need to remember is the same for all health workers. Part of the 'doing no harm' is to respect patients and treat them with loving care. This applies whatever their faith, race, age, sex and health condition. It is important for CHWs to

- respect patients' dignity e.g.
 - men and women should not be mixed together in a hospital ward.
 - men and women should not be uncovered more than is necessary for examinations or treatment. This is so even when it is only the health worker who is there.
 - women may need a special gown for physical examinations. Some examinations can be done over the gown.
 - women should have private facilities for changing menstrual pads or cloths. If possible they should have access to sanitary protection they can burn instead of washing and drying.
 - make sure that people who die are treated with the same respect and dignity as if still alive.
- protect their privacy e.g.
 - patients should be able to talk to CHWs and other staff where no-one can hear them if they want to;
 - they should be examined where no-one can see if they wish.
- keep information about them confidential. This means telling no-one (unless the patient agrees or it is important for their health) about
 - what they have said;
 - what is wrong with them;
 - what has happened to them.
- assist patients with their religious performances if required and allow access to facilities they need.



Human rights

Codes of ethics (or ways of behaving) for health care workers are based on human rights. Human rights are basic things like fairness and justice that people can expect to happen to them. Almost all countries in the world have signed an agreement to protect human rights. As well as the rights listed above, some other important rights are:

- to receive treatment and health care
- to be protected if weak and vulnerable
- not to be abused in any way
- to be given information and explanations about treatments including their risks and benefits
- be treated honestly
- to have someone speak for them if they cannot do so. This is called ‘advocacy’.

There are other human rights that are especially important for children. These will be looked at later in Unit 4.

As well as the internationally accepted codes of ethics, you always need to make decisions based on your knowledge and experience. As a Muslim you need to make decisions in the best interest of the patient and based on Islamic teachings. Almost certainly, you have been using your knowledge and understanding of Islam in thinking about the issues raised in this Learning unit. Here are some important ideas about right ways of behaving that are taken from the Quran and other Islamic writings.

Principles of health care ethics in Islam

Islam considers access to health care as a basic right of the individual, the family and the community. Sometimes difficult decisions have to be made when choosing the best options for patients' care. The health care worker may have to do this for the patient using their own knowledge, experience and agreement of the community.

The health worker takes Islamic laws and medical ethics into account. The two main principles are

- Emphasis on sanctity of human life which derives from Quran 5:32 “*whosoever saves a human life saves the life of the whole mankind*”
- Emphasis on seeking a cure which is derived from saying of the Prophet Mohammad (PBUH), “*seek cure as God has created no disease without creating a cure for it except for old age*”.

Three of the five fundamental goals of Islamic Sharia relate directly to the role of CHWs

- Protection and preservation of human life
- Protection of the human mind
- Family life and reproduction

There are key rules of Islamic medical ethics which are necessary to remember:

- Every effort should be made to remove harm where possible.
- Necessity overrides prohibition. If there are certain actions which are prohibited by Islam, they can become permissible in dire necessity.

- Accept the lesser of the two harms if neither can be avoided.
- Public interest overrides the individual interest.
- The life of the mother must not be endangered in order to save the child.

As you can see, Islamic medical ethics upholds the basic ethical principles considered earlier:

- *Justice*
- *Doing good*
- *Doing no harm*
- *Being able to decide things for ourselves.*

So CHWs need to make decisions based on their own knowledge and experience. They should do this in the light of Islamic teaching whether the patient is Muslim or not.

It is important that patients should be treated with dignity and respect whether they are Muslim or not. They should be treated with the loving care you would give to one of your own family.

In Somaliland there are some guidelines that apply to CHWs:

- Assist patients with their religious performances if required.
- Respect a patient's modesty and privacy, particularly women, who may need a gown that covers the whole body. This will avoid unnecessary exposure during physical examination. Some examinations may be done over the gown.
- Allow Muslim patients the facilities to perform Islamic prayers if they are able.
- Whenever possible uphold patient confidentiality and ask consent when needed.
- Take time to explain procedures, tests and treatments, risks and the benefits.
- Be aware of your boundaries and limitations.
- Be honest with patients at all times.
- Be a positive team member.
- Make sure that you refer people who need more help than you can provide without hesitation or delay.
- Ensure that patients who die are treated with the same respect and dignity as if they were alive.

Working with community leaders and health committees

Community leaders are important decision-makers and influence the way people think in their communities. They be political, traditional or religious leaders. These are all important people for the success of CHW work. They have a lot of influence and are usually the main ones to make decisions or to persuade the people about any issue. Working with community leaders is important so that changes take place as easily as possible.

Community Health Committees are usually the main groups that CHWs will work with. There may also be other committees such as for sanitation. These committees will be made up of residents who are interested in the topic as well as the local leaders.

In Somaliland, Community Health Committees recommend someone from the community to be their CHW. The committee will be keen to work with their CHW. They will also be expected to report how well the CHW is doing the work to the local health staff. They will already have respect for the one they have chosen and believe that this person will be good at the job. It is important to keep this respect. The newly qualified CHW will need to earn it by performing well. Respect depends on the CHW's ability to do the work and on his or her behaviour and reputation.

As a CHW you will work with your Health committee and other leaders. Together you will

- decide what difficulties people in the community experience
- work together to find solutions and carry them out together.



As a CHW you

- advise on the best ways of dealing with problems
- may need to ask advice or for help from others such as health centre staff or NGOs active in the area
- have an important job to do in helping people to see what needs to be done
- have an important job in mobilising the community to take action.

While you are training it is important that you work with the committees and leaders from the beginning. It is helpful if the committee introduces you to the residents as a trainee. The committee should explain about the training and what you can and cannot do. Once you have the certificate, the committee should introduce you again and explain what you will be doing now.

It is also a good idea for you to visit each household to introduce yourself in your new role.

After some time has gone by, it is good for you to ask the leaders, committees and families how well you are meeting their needs. Six months is a good amount of time. This is called evaluating the service. The local CHW supervisor or manager may be able to help.

You also need to work with other health workers in the community such as TBAs or another CHW. How work is shared will be thought about in Unit 13.

UNIT 2 PRIMARY AND COMMUNITY HEALTH CARE

These are the things you should know and be able to do after studying this learning unit:

- Explain what 'health' means
- Explain what Primary health care (PHC) means
- Describe the Somaliland PHC system and how CHWs work in it
- Describe how the PHC system links to other health services
- Tell people about health facilities they may need to use and how to use them
- Understand your own community and how people live.

What is health?

The WHO says that health is physical, mental and social well-being. It is not just being without illness and disease. Healthy people are active, can be useful to others and can learn. Of course people become less energetic as they become older. They also usually do less than when younger. They also may find learning a bit harder. But this does not mean they are unhealthy.

We all have different ideas of what being healthy means. Some of us may feel healthy even when we have got quite serious problems. Others may think they are unhealthy when there is nothing wrong with them at all. Many things make a difference to how healthy we feel.

Here are some of them:

- being needed by other people
- being loved
- being respected
- having something to do
- being able to support the family
- feeling that we control what happens to us.



You may be able to think of other things that make people feel healthy and things that make them feel unhealthy.

What is primary health care?

Primary health care is health care that happens at community level instead of in hospital. It focuses on preventing ill health, and on making services as easy to use as possible. Some treatment services are provided at primary health care level.

The reason that primary health care became important was that people began to understand the causes of ill-health better. They realised that it is not all about curing disease. They also realised that poverty, bad living conditions, not having the right food, and being unhappy are very important.

Another thing they realised was how important are clean water supplies and good sanitation. This is what Primary health care is all about.

Here are some points about hospital and primary health care:

- Hospital care is very expensive for governments and for patients
- It is often difficult for people to get to hospitals
- Hospitals do not meet all of the needs people have
- Hospitals are not always acceptable to people
- Many people are scared of hospitals and of the doctors and nurses they meet there
- People are often more willing to use services provided nearer home
- Nurses, midwives and doctors who work in Primary health care may be known and trusted by people who go to see them.

The real start of Primary health care was in 1978 when countries of the world met at a conference organised by WHO and UNICEF. They made an agreement that 'Health for all by the year 2000' should be everyone's priority. They also pointed out that everyone should take part in preventing ill-health. This includes individuals and communities. This should not be left to doctors, nurses and midwives. This is why Community Health Committees and CHWs are so important. They can help people to help themselves onto the road to health.

There are some essential elements of Primary health care. These are all provided in Somaliland. You will learn about these next.

The health care system in Somaliland

Primary health care services are very important in Somaliland. There are six core programmes which cover all the essentials of Primary health care. These are:

- Health of mothers and newborn babies, and reproductive health
- Child health
- Preventing diseases that spread between people and watching out for them. Diseases that spread are called communicable diseases. Prevention includes promoting clean water and good sanitation, immunisation and health promotion and education
- Care of the seriously ill and injured including first aid
- Treating common illness
- Caring for people with HIV, STIs and tuberculosis.

These programmes are included in the Somaliland plan for health services. This is called the Essential Package of Health Services (EPHS) and was agreed by the MoH in 2009. This forms the basis for all the health activities of the government and others such as NGOs.



The drawing below shows the different facilities in Somaliland and which health care staff work in them.

Somaliland health system



Ways of living in Somaliland

Throughout the world you will find people living in different ways and holding different ideas about things. Somaliland is just the same. It is important that you understand what matters to the people in your community. It is important that you understand ways of living that help people to stay healthy, and ways that may harm them. It is also important that you understand the barriers people face to living healthy lives.

Some issues that might affect them are:

- whether people are nomadic or live in one place all the time
- whether the community is rural or in a town
- how far it is from roads and what transport is like
- what facilities are available e.g. water supply, schools and health care
- local traditions and ways of living (culture)
- what resources people have e.g. if they live in poverty
- whether they have lived in the area a long time or have been displaced from others places by violence or famine.

Later in the CHW course you will have more opportunity to think about these issues and why they matter.

UNIT 3 HOW THE BODY WORKS: ANATOMY AND PHYSIOLOGY

These are the things you should know and be able to do after studying this learning unit:

- Describe the main systems that make the body work
- Describe how they work
- Identify important body parts
- Describe how the body uses the food, water and oxygen it needs
- Describe how the body keeps itself warm and protected
- Use what you know in all the work you do as a CHW

The body systems

The human body is a very complicated structure. It is made up of several ‘systems’. These all work together to keep the person alive and healthy. The main things the body needs to do are to:

- move
- get oxygen to the blood
- take the oxygen we need around the body
- nourish itself and remove waste
- take in fluid and remove waste
- protect itself
- see hear and taste
- think, plan and control the body
- reproduce.

Move

Movement happens because of our

- muscles
- joints
- bones

Movement also needs nerves to control it and blood to feed muscles. You will learn about these later.

Muscles pull on bones to enable us to move. We have a bony framework called the skeleton. Where different bones meet we have joints. The muscles are attached to the bones. When the muscle



tightens up, the bones move. You can try this with your arm or leg.

The bones, joints and muscles all work together to make us stand or sit, run or walk, turn around or hold a child. Without bones we would just be a heap of flesh on the ground. The pictures show the skeleton and the muscles.

Getting oxygen

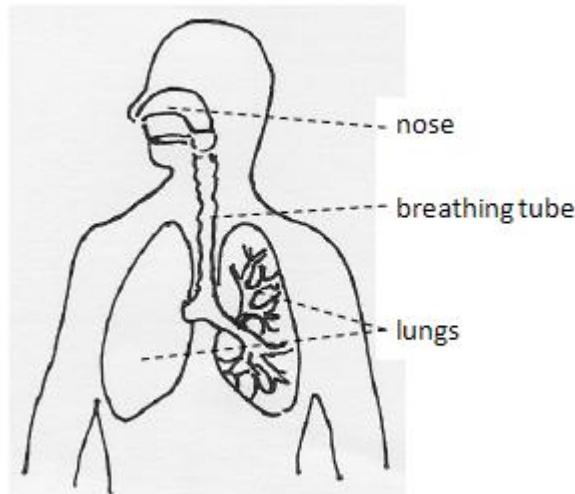
This system is called the respiratory system and is made up of the

- nose and mouth
- breathing tubes (called the trachea and bronchi)
- lungs.

The picture shows the parts of the respiratory system.

Air is breathed in through the nose and mouth. It goes down the tubes into the lungs. The lungs are inside the ribs which are bones in the shape of a cage. In the lungs, the oxygen we need to live is taken out of the air. The air that we no longer need is pushed out when we breathe out.

The oxygen is used by the whole body. We cannot live without oxygen.



Breathing happens when the bones of the chest (ribs) are pulled outward and there is more space in the chest. This happens without us thinking about it most of the time. We can also think about breathing in and out. You can try holding your breathe and see what happens.

Counting breathing /respirations

You will learn more about this in Unit 8 and 11. You need to watch the chest move as the person breathes in and out. This is more difficult to do accurately in adults than it is in children. This is because people whose respirations are being counted will probably breathe faster when they know they are being watched.

You can count respirations after counting the heartbeat. Hold onto the wrist still so the person does not notice that you are counting the breathing now.

ACTIVITY

You need to watch the way the chest moves.

Count each in-breath for one minute. Or you could do it for 30 seconds and double it. Do this without telling each other, sometime during the class when you are all sitting quietly.

1. Then at some point, all run around or walk fast and count again.
2. What is the difference?

3. Can you think why this happens? How does this link with a fast heart rate (see next section). Your trainer can help you decide the answer.

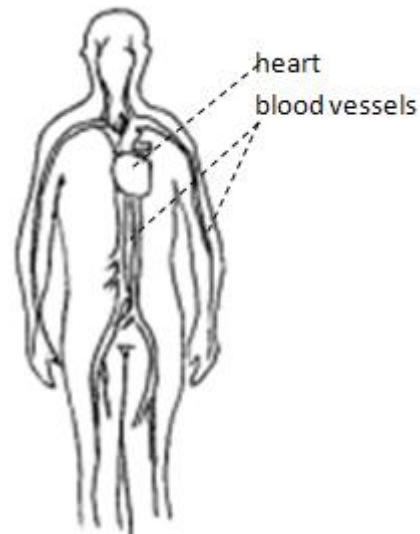
Taking oxygen around the body

This is called the circulation system. It is the main transport system of the body. It is made up of the

- heart
- blood tubes or vessels

When oxygen enters the lungs it is passed into the blood. The blood passes all around the body along blood vessels. These start very big then become smaller and smaller as they reach places like our skin. When the body has taken the oxygen it needs, the blood passes back along bigger and bigger vessels to the lungs. The waste is taken away from your lungs when you breathe out again.

The heart is in your chest. You can feel it if you put your hand over the middle of the left side of your chest. You will feel it beating. You can also feel a beating by feeling on the inside of the wrist below your big thumb joint. This is called the pulse. This is where health workers most often count people's heart rate. This beating means that your heart is sending the blood around your body as it should do. The heart is a very strong pump. It works harder when we are active than when we are resting.



Counting the heartbeat.

- You can count at the inside of the wrist and at the neck. You are feeling the person's pulse which counts the same as the heartbeat. Your trainer will show you how to find the pulse.
- You can count for one whole minute. Or you can count for 15 seconds by the clock and multiply this by 4.
- Use your first finger, not your thumb. If you use your thumb you may be feeling your own heartbeat. You are feeling the blood pumping through the blood vessels.

ACTIVITY

Try running and feel what happens to your heart. First count your heart beat. Run for 100 metres. Count it again. What has happened? You will feel your heart beating faster. Think about how the heartbeat and respiration rate are linked.

- You breathe faster to get more air in, and so get extra oxygen. You also breathe waste gas out faster. You make more waste gas when exercising.
- The heart beats faster to pump extra blood round the body for exercise. The blood carries oxygen from breathing, and food for the body. It also carries waste gas back to the lungs so it can be breathed out.

You could do the activity below also:

ACTIVITY

Work in pairs.

1. One trainee sits down. The other counts the heart beat of the trainee sitting down. Write this down.
2. The trainee who was sitting down runs or walks fast, or runs up stairs or steps.
3. The person counting now counts the runner's pulse again and writes it down.
4. What is the difference?
5. Can you think why this happens? Your trainer can help you decide the answer.

The picture above shows the parts of the circulatory system.

The blood also carries broken down food around your body so that all parts of your body receive nourishment.

Nutrition and waste removal

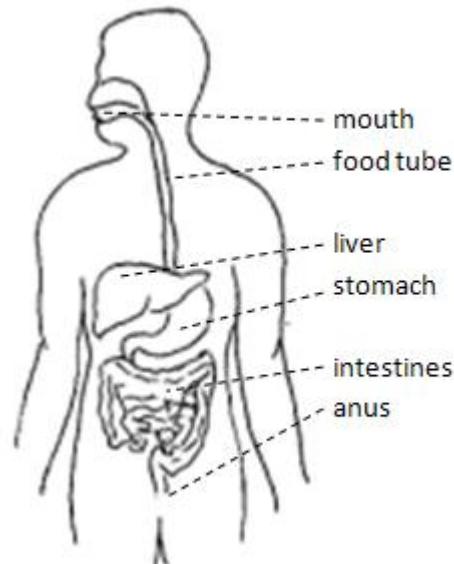
This is called the digestive system. It is made up of the

- mouth, teeth and tongue
- feeding tube (the oesophagus)
- stomach
- intestines (long tube from the stomach to the anus). These all connect up.

You can see these parts of the digestive system in the picture.

This is what happens to our food.

1. In the mouth food is chewed up and swallowed. Water is swallowed too.
2. The food passes in small balls down the oesophagus tube.
3. Food and water arrives in the stomach. The stomach is like a bag. Muscles move the food and water around. The stomach has special juices which help to digest the food. In the stomach food and water is mixed up and passed on to the next part of the tube.
4. Nourishment and water is taken into the blood from the intestines. The food is mostly liquid here. Then the nourishment and water travels to the body parts in the circulation.
5. The intestines are several metres long. They are folded up in the body.
6. We pass out waste via the anus. The waste is often called 'stool'. It is also called 'faeces'. Most people have other words they use too.



The intestines have muscles in them. If you put your hand on the belly (called the abdomen) you may feel the movements caused by the muscles. You cannot control these movements. You may also hear them as they can be very loud as gas is moved along.

You can normally control passing stools. Babies and very young children cannot control them. This may happen too when people get very old.

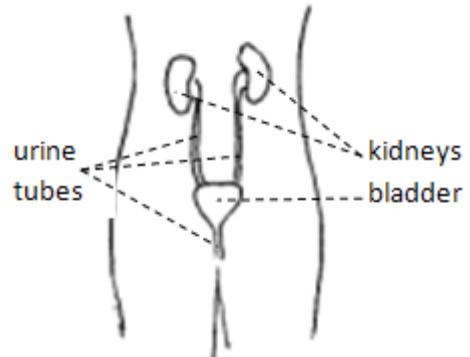
Getting fluids in and waste fluids out

The urinary system is made up of

- two kidneys
- two tubes from the kidneys (ureters)
- the bladder
- the tube from the bladder (the urethra).

You can see these parts of the urinary system in the picture.

The fluids we drink go from the mouth to the stomach and intestine like food does. In fact most food has water in it also. Once in the intestines, most of the water passes into the blood. It is circulated around the body and through the kidneys. The kidneys are small and take away waste and water we do not need . This makes the urine that we pass. It looks like coloured water because of the waste in it.



The bladder is just for storing urine until we can pass it.

The urethra is different in men and women. In men it passes along the penis and out of a small hole. In women it passes out of a small hole hidden in the genitals.

Protecting ourselves

There are several ways we protect ourselves. These are the

- skin
- muscles and skeleton
- our senses – sight, hearing, smell, taste
- our brains and nerves
- immunity. You will learn about this later in Unit 10.

ACTIVITY

Think about this story. Mariam smells burning and hears her son screaming. She sees her cooking fire is spreading toward her house. Mariam grabs a bucket of water and runs toward the fire to put it out. Think about the ways her body has used to protect her and her family and house.

Now think a bit more. While Mariam is putting out the fire she grabs a cooking pot. It is very hot and she drops it and jumps out of the way. She finds a little burn on her leg later that blisters and breaks. The skin around the blister becomes very red for a few days. What else has Marian's body used to protect her? Which protections did she use?

Your trainer will help you to think about this. It is quite difficult. It will help you understand how the body protects itself.

We have not talked about taste. Taste is important because it makes us happy to eat our food. It often warns us also about food that is bad because it tastes bad. Taste can also protect us from poisoning ourselves. Many poisons are bad to taste, they are often sharp or bitter and we spit them out. Animals don't touch many poisonous plants for this reason.

Smell protects us too, not just from burning as with Mariam. A bad smell from food usually tells us it is not safe to eat, like rotten meat.

Thinking, planning and controlling ourselves

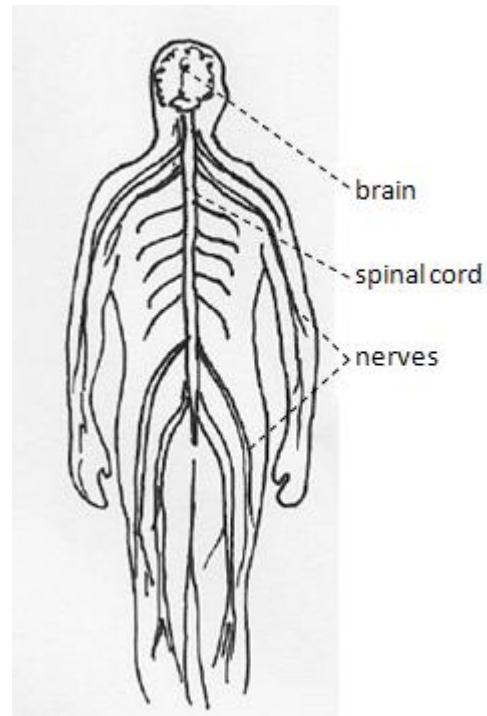
In the last activity we saw Mariam act quickly to stop a cooking fire from spreading. One reason she could act quickly was that messages were sent very fast around her body. Messages pass around the body along special nerves that look like string. Think of a landline telephone wire. The nerves are a little like that. The whole system is called the nervous system. It is made up of the

- nerves
- spinal cord (a bundle of nerves that passes up the whole body in the back-bone or spine)
- brain.

You can see these parts of the nervous system in the picture.

The nerves send messages from many parts of the body. This may be the skin, the eyes, ears, nose, tongue. Messages travel along the nerves, then along the spinal cord. At the top end of the spinal cord is the brain where messages are read. The brain then decides what action to take. This might be to

- pull away a hand at risk of being burned
- run away from danger
- turn and fight danger
- shout for help.



When the brain has decided on the best action, messages are sent to the right place in the body for these actions to happen. This happens very fast. You may do something deliberately. You may also take actions without thinking about it at all. Many of the things that happen in the body are

controlled by the brain and nerves without you knowing about it. If you had to think always about breathing you would never be able to sleep!

Pain happens when the nerves and brain are affected by something happening to the body. Most of the time pain means there is something wrong. So pain is a protection too as it warns us to take action.

The brain does much more than this. The brain is the place where you think, plan, remember, learn, love. Without a brain you would not be a person and would anyway not be alive at all.

Reproducing ourselves

Having babies to keep humankind going is very important. We are designed so that both the woman and the man contribute something of themselves to each new baby. This helps humans to stay healthy. If people who are closely related produce a baby together, the baby can be harmed. It makes it more possible that problems such as deformities will happen.

Young men can make women pregnant from their adolescent years. Young women are able to become pregnant from around the time their menstrual bleeds start. They are fertile even if sexual activity is not considered to be right for them. The changes that take place in the bodies of adolescents are called puberty. You will learn more about this in Unit 4.

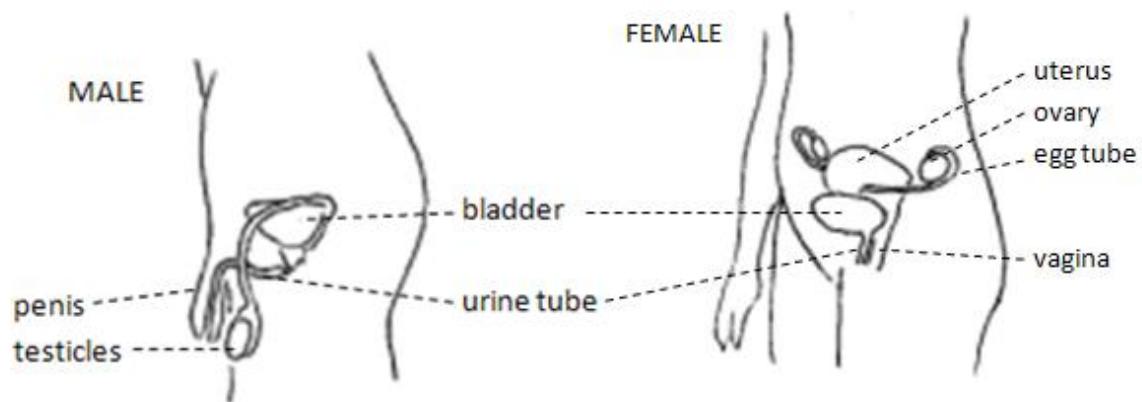
The baby develops from both the man's sperm, and woman's eggs. When the man and woman have sexual intercourse, the sperm meets the egg in the woman's body. This can only happen when the woman is producing an egg. This happens about every four weeks. It is usually about 2 weeks after her monthly bleed has started. The bleed is called 'menstruation'.

Men produce sperm all the time and they are stored in the testicles. So men can make a woman pregnant at any time, even when they are old. Women stop making eggs around age 50 and also stop menstruating. This is called the 'menopause'. Women become less able to become pregnant as they near their menopause. Eventually they stop producing eggs completely. They cannot then become pregnant.

When the egg and sperm meet during intercourse, one sperm may enter the egg. This is called 'fertilisation'. The fertilised egg develops in the side of the uterus. At first it is called an 'embryo', then a 'fetus'. The woman provides nutrients for it from her blood. This is what the afterbirth or placenta is for.

The woman is normally ready to give birth when the fetus is fully grown. She starts to feel her uterus going very hard every few minutes. These are called 'contractions'. The contractions become stronger, more frequent and painful. The birth passage opens up. Eventually the woman pushes her baby out. The woman pushes the placenta out after the baby.

You can see these parts of the male and female reproductive system in the pictures below.



UNIT 4 HEALTHY PEOPLE

This Unit looks at what you need to know and be able to do to help individuals and families stay healthy. In the next Unit (5) you will learn about making sure the environment around you is a healthy place. Later in the CHW course you will learn more about some of the topics in this unit, for example about nutrition. This is only an introduction to some of the subjects.

These are the things you should know and be able to do after studying this learning unit:

- Discuss what health means
- Discuss the main essentials for health
- Explain the main influences on health to their communities
- Advise on the basic elements of a healthy diet especially for children, adolescents and childbearing and lactating women
- Discuss the importance of early and exclusive breastfeeding and appropriate complementary feeding
- Encourage parents to stimulate child development with play and communication
- Identify health-protecting and harmless customs and home remedies
- Inform communities about the impact of harmful customs and help them with making change. Harmful practices may be e.g. FGM, harmful treatments for children, early marriage, harmful food practices and taboos.
- Provide education about reproductive and sexual health and mobilise people for child-spacing and for STI and HIV testing where appropriate
- Assist people to overcome difficulties of physical and intellectual disabilities, and communities to remove barriers to a rewarding life
- Explain how people become sick including infection and the main causes
- Describe key ways of preventing infection in the home and PHU
- Demonstrate effective hand-washing and explain its importance
- Take accident prevention measures and teach others
- Provide basic first aid for injuries and emergencies and refer those needing medical attention.

What does 'health' mean?

We all talk about being healthy but do we know what this means?

Activity

Think about what the word 'health' means to you. Look back at Unit 2.

The WHO said that health is about physical, social and mental well-being. It is not just about having no disease or disability. The WHO said this many years ago in 1948 but it is as true now as it was then. This is despite many changes happening in people's health in that time.

Activity

What changes have you seen in people's health in your lifetime? What about in your parents' lifetime? What has caused these changes for the better or for worse? Remember that mental health is included too.

What do we need to remain healthy?

Before we look at answering this question, try this activity.

Activity

What do you think is important to you so that you stay healthy?

In 1943 a man called Maslow said that people have needs that must be met if they want to stay healthy. This diagram shows how he described this. He wanted to show that basic needs are the most important. They must be met before people can reach the best they can be. This is called 'reaching your potential'. Reaching your potential is important for being really healthy.



Activities

- How do you know when people respect you or give you affection?
- How do you think it affects you and your health if respect or affection are missing?

If basic needs (survival needs) are so important for health you need to understand what these are so you can help people.

Activities

- Discuss with other trainees what these basic needs are
- Think about what it is that makes it difficult for people (including children) to meet basic needs
- Then ask yourselves why some people do not feel safe, loved or respected.

Some suggestions for basic needs are water, food, warmth, shelter, freedom from abuse or disease.

Activity

Marian has just arrived in your village with her baby and small child from an area where there is fighting. Her husband has been killed and her house was burned down. They have no belongings and only the thin clothes she is wearing. She has no money. They are exhausted, very hungry and frightened. What do you think are the things that put at risk the health of Marian and her children?

Why are people not healthy?

There are many reasons why people may be unhealthy. Here are some of them:

Poor nutrition	Disease of body or mind	Disability	Stress
Accidental injury	Homelessness	Lack of education	Poverty
Chewing khat, smoking, alcohol, drug abuse		Violence, conflict, trauma	
Natural disasters and climate change		Lack of knowledge about health	
Poor access to health care		Polluted environment	

Activity

In your group, share examples you know about where these issues have been linked to ill-health. For example, an older woman with breathing difficulties because of the smoke of her cooking fire.

Many of these reasons link with each other. For example:

- Poor nutrition and poverty makes it more likely that a child will catch infectious diseases. They are also less likely to recover quickly.
- Chewing khat can be linked with mental illness.
- Smoking tobacco (e.g. in cigarettes) causes many diseases and deaths. People who smoke suffer many more heart attacks, strokes, cancer and difficult breathing than do those who do not smoke.

Activities

- a. Why are poor children and adults less likely to get well quickly from illness?
- b. Think about other ways in which these causes of ill-health link with each other. Maybe you could draw this out on a large piece of paper.
- c. Add any other causes of ill-health if you think of them.

As you can see from the list, some of the causes of ill-health are to do with the way we live. There are many ways of living that are very helpful. Some of these are that Somali families love and take great care of their children. Another might be that women can seek help from their clan if they have a serious problem such as a husband who beats them. Another helpful way of living could be that people have guidance about good ways to live from their faith.

Activity

What other helpful ways of living can you think of?

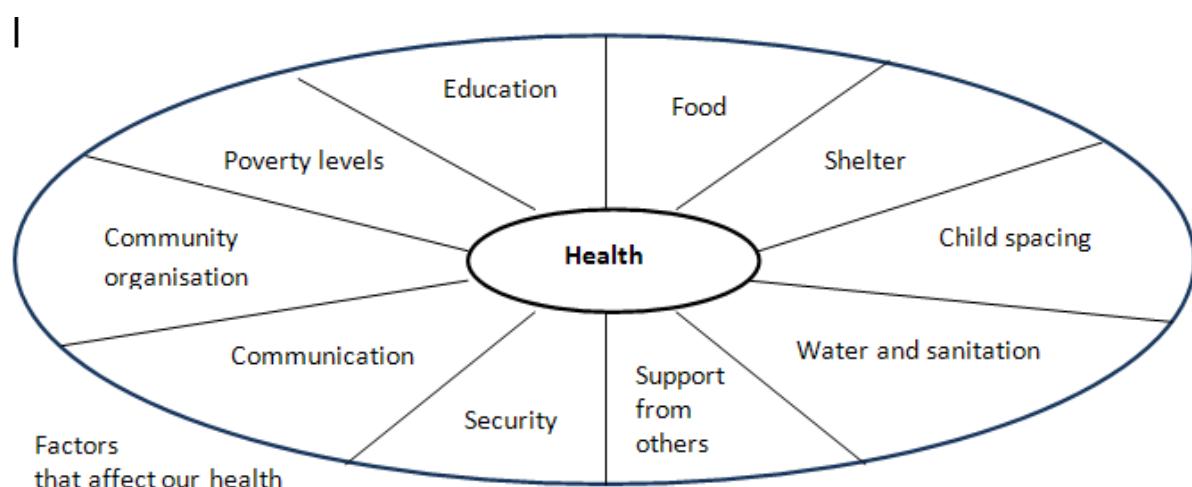
Not everything is helpful. Marrying very early can put young women at risk. The younger they are, the more often they experience problems in pregnancy and birth. A woman who marries someone she does not like may be very unhappy. This can affect her physical as well as mental well-being. Performing FGM is another tradition that can harm girls and women and may cause their deaths or lifetime ill-health. This is why the Government of Somaliland and people such as religious leaders support campaigns that try to stop FGM.

Activity

What other traditions or ways of living can you think of that may be harmful to physical or mental health? The list above will help you.

These issues are all studied later in the CHW course. They are important because CHWs can help their communities overcome many of these causes of illness.

Poverty and lack of control over our own lives is also linked to ill-health. The drawing below shows how this works.



One last issue for this section is to think about women's health.

Why does women's health matter?

'Women are half the sky' goes the old saying. But they do not usually have half the resources, half the money, half the food, half the health care, half the education. In many countries women:

- work while men rest
- suffer bad health because they eat last in the family so only eat what is left over
- may not be permitted to have health care in good time

- may have no education and skills to support themselves
- may not be allowed to make household decisions
- may have frequent pregnancies even when they are not well enough to do so.

So why does it matter then?

Women need to have good conditions for their lives, not just health care. This makes things better for her, and for her whole family. If she is healthy and well-nourished, she can look after her family better. She will have healthier babies. She can work for her community. We all know that when a woman dies in childbirth her baby will probably die too. We know that her other children will have worse health and may not survive. The family will be in greater poverty if she dies.

Good food for women is one of the important ways of staying healthy. Malnourished women are usually anaemic so get very tired and can not work well. They have more problems in pregnancy and birth. They have smaller sicker babies. They do not recover quickly. If they then have too many pregnancies close together their health becomes even worse.

Another very important way of helping women stay healthy is by refusing to have girls' genitals cut. FGM comes later in this Learning Unit.

Women may have serious illnesses that men cannot have. Often women's illnesses do not show up. Often women hide them and do not tell anyone as they are so busy. They may also hide them because they do not want to see a male CHW, nurse or doctor. That is why Somaliland is training female CHWs as well as men.

A final issue for women that affects their health is safety. They may have unsafe conditions at home. Many women have bad lungs from standing near cooking fires. They may burn themselves, even catching their clothes alight. Many women experience violence, at home or outside. Women may be attacked when out alone. Walking away from the village to get firewood or draw water is when some are attacked. Where there is conflict, women often suffer violence. The whole community needs to think together about how they can help women stay safe. We look more at gender-based violence in Learning Unit 15.



As a CHW you can help women by advocating for better safety for women, better food, and better health care. You can help the community to think about women's needs.

How can our needs for good nutrition be met?

First of all let us look at what 'nutrition' means. Nutrition means the way our bodies use food we eat to help us grow and stay healthy. When we are growing, we need food to help us grow properly. When we are tired and work hard we need energy to help us stay strong.

We will get sick less often if we are well-nourished. If you have two people living with someone who has tuberculosis, one is well-fed, the other is malnourished. The well-fed person will be less likely to

get sick than the malnourished one. If we are sick, we need good food also to help us to fight disease and get well faster.

Everyone needs a good variety of foods to stay healthy, especially growing children, pregnant and lactating women. This is called having ‘a balanced diet’. Balance is important because we get sick if we have too much of one thing and not enough of another. For example too much fat and sugar or not enough body-building protein is very unhealthy. You will learn more in Unit 9.

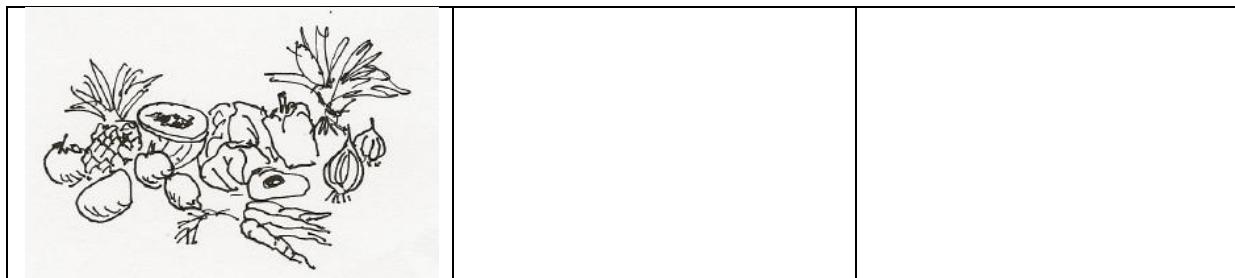
There are three main types of food. These are

- body-building food which is called ‘protein’;
- energy giving food which are called ‘fats’ and ‘carbohydrates’;
- protection foods which are called ‘vitamins’, ‘minerals’ and ‘fibre’.

Activity

Look at the Table which shows what the foods do and some of the foods that contain them. Write into the boxes some foods you can obtain in your own community. In Unit 9 we will look at this again in more detail.

Main food types	Main sources	Local foods
Body-building food (proteins) 	Meat from animals, birds and fish, eggs, beans, peas, nuts, milk	
Energy food (carbohydrates and fats) 	Cereal e.g. millet porridge, rice, pasta, bread, potato, fruit, some vegetables. Sugar gives energy but has no other nutrients	
Foods that protect from illness (vitamins and minerals, fibre)	Meat, fish, beans, peas, eggs, nuts, seeds, fruit, vegetables including leafy ones Cereals, fruit, vegetables including leafy ones	



Water is also very important. You can live longer without food than you can without water. Not drinking enough water makes our bodies dry. This is called dehydration and can make us very ill. It also often happens just because we are ill, especially with fever.

It is very important that food and water are clean so that we do not become sick. It is also very important that food is prepared in a clean way. You will learn more about clean water and food later in the course. The most important thing to know for now is about hand washing. You will learn about this soon.



What do children need to stay healthy?



Keeping children healthy starts from birth. In fact it starts while the child is developing in the mother.

Food

A woman needs to be well-nourished to produce a healthy baby. Once born, the baby needs to have breast milk. This should start early - as soon as possible after the birth, at least within one hour, and be continued into childhood. For the first six months, breast milk should be the only thing babies are given. This is very important and is called 'early and exclusive breastfeeding'. There are some other very important facts that you will learn more about later. Here are these facts:

- Mother's milk provides exactly the right nutrition for a newborn baby to grow properly.
- Mother's milk provides the right amount of water for a baby even if the weather is hot and dry.
- Mother's milk protects babies from infection.
- Giving water and other substances to babies can:
 - damage their digestive systems
 - cause life-threatening diarrhoea
 - reduce babies' ability to suckle at the breast
 - and so reduce the amount of milk the mother produces.



- Fully breast-fed babies become sick less often with problems like pneumonia, bronchitis and diarrhoeal disease than do other babies.
- Finally, breastfed babies are more likely to remain healthy throughout their lives than those who are not breastfed or have less mother's milk.

As babies grow older, they need to have nutritious foods introduced gradually from 6 months. These are called 'complementary' foods. Babies can gradually be introduced to the food eaten by the family. They still need mother's milk for two years. You will learn more about child nutrition in Unit 9.

Good food is very important for making sure children grow as they should. Later in the course you will learn how to make sure children in your community are growing well. You will also learn how to help with growth monitoring and nutrition programmes. These are provided in Somaliland by the government and by NGOs.

Hygiene

Hygiene, clean surroundings and clean as well as nutritious food are very important for children. Babies and young children may have infectious diseases more often than do most adults. They are vulnerable. They are especially vulnerable to diarrhoeal diseases and to chest infections. They can become sick very fast and it can be difficult to get to medical help quickly enough. Their own protection against disease (their immune system) is less well-developed than in most adults. This is particularly so for babies who have not been breastfed. Another vulnerable group is HIV positive babies. You will learn more about this in Units 5 and 12.

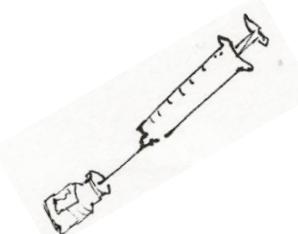


Another reason for young children being vulnerable is that they crawl around at ground level or may walk barefoot. They may eat soil and other things they find. This means they can catch diarrhoeal diseases and parasites.

Because babies and young children are so vulnerable, hand washing and clean water supplies are especially important for them.



Immunisation



Children who are properly and fully immunised are less likely to catch diseases. Diseases that can be prevented by immunisation are diphtheria, tetanus, polio, measles, whooping cough, pneumonia, hepatitis B and tuberculosis. Immunisation should start with the newborn. In fact immunising pregnant women against tetanus protects both her and the newborn child. You will learn more about this in Unit 10.

Preventing malaria

Malaria is a problem in some areas of Somaliland and in some seasons. Malaria can be a very severe illness and can cause death. Malaria parasites get into the blood when certain types of mosquito bite. The chance of getting bitten is less likely if the child sleeps under an insecticide-treated mosquito net.

Play, communication and stimulation for children

Play, communication and stimulation are very important for the normal, healthy, development of a child. This is especially so for babies and young children. The brain is growing at its fastest rate during the first 2 years. This is also important for enabling babies to make relationships with their mothers and other people. These things are all important too for older children.

Children learn by playing. It is not a waste of time even for school-age children. Toys can be very expensive to buy but can easily be made at home. Of course they need to be safe so that children do not cut themselves or swallow small objects. Here are some ideas for home-made toys:

- metal spoon and plate or cooking pan to bang
- old tin and stones to rattle (avoid sharp items and things small enough to swallow or choke on)
- different sized containers to stack and put inside each other
- doll made from old cloth
- toy truck made from old boxes or from dried mud
- ball made of layers of plastic bags tied with string.



Children can learn a lot even without toys. It is more important that the family plays with them. Here are some examples:

- copying games
- counting
- colour and shape matching
- simple word games
- finger games
- songs, stories, rhymes.



Activity

What learning games can you think of? How do you help children to develop?

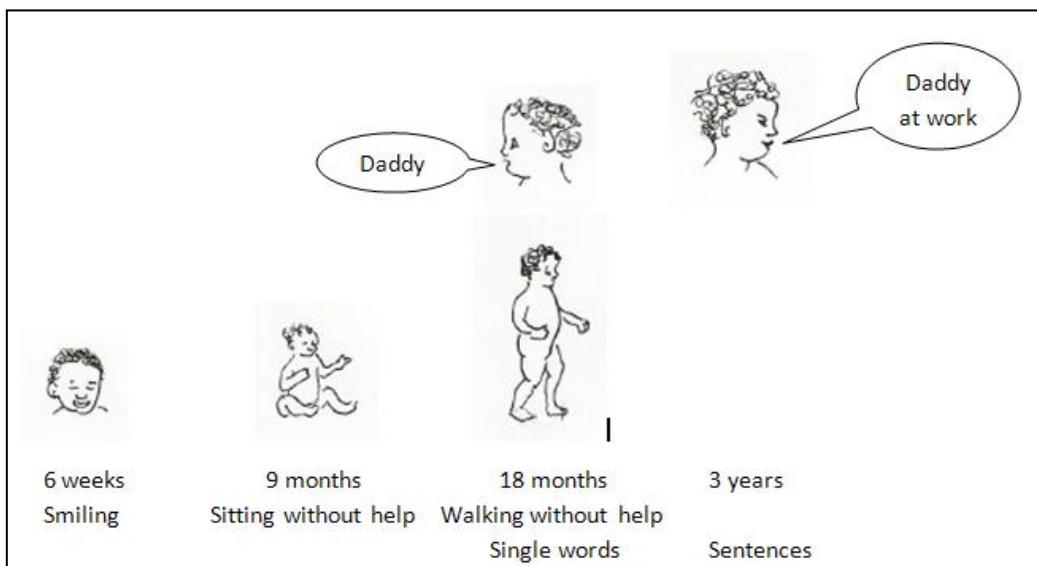
Playing with babies and children is part of communicating. Babies learn to communicate right from

being newborn. Communicating is a normal part of becoming people who can join in fully in family and community life. Some adults fail to talk to babies and young children. Then speech can be delayed as well as emotional development. Talking with our eyes is also very important. If adults ignore young children and do not stimulate them, they may walk later and

learn less well. They may also become very shy and lack confidence. Mealtime is especially important and children should not be left to eat alone.

In the end, the most important thing that families can do for children is to love them and pay attention to them.

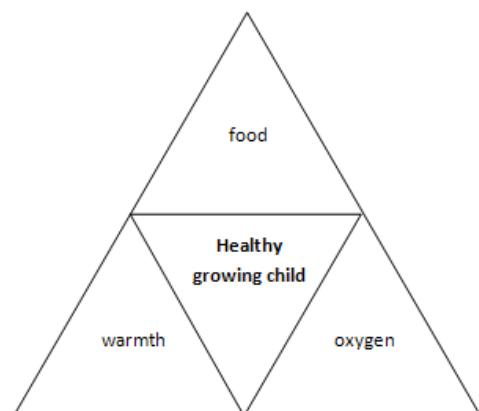
It is important for you to know the main milestones a child should reach. This will help you to check that children in your community are developing properly. The drawing below will help you understand this.



As well as play and stimulation being important, so is rest. Children need plenty of sleep to help them grow and stay healthy.

Warmth and shelter

Children get cold quickly even in hot temperatures. This happens most often when they are wet or ill. This is why newborn babies have to be dried quickly once they are born and should then be wrapped with the mother. When children become cold they use more food for energy. Energy helps them keep warm. A child who is constantly cold or wet will use food and energy to keep warm instead of for growing properly.



Too much heat is just as dangerous. Babies that are kept too warm may die. Children who are left out in the sun too long can lose too much fluid. Fair-skinned children may burn in hot sun.

Keeping children safe

Children do not understand danger well. They have to learn. They need to be protected by their families while they are learning so that they do not come to serious harm. You will learn later about safety in the home.

- a. List some of the dangers you believe children face.
- b. Talk together about how families can protect children.

Dangers for children are many. They may be dangers in the environment or they may even be from other people. Children have the right to be protected from abuse and violence. This abuse may be from harsh punishment. It may even be deliberate harm done by others. Young girls may be more vulnerable than boys. This is even more so when there is violence and war but harm can even be caused by people children know.

Customs and habits that affect infants and children including FGM

Every society has particular ways of living that effect children. They may be helpful or even harmful.

ACTIVITIES

- a. Can you think of local customs and ways of doing things that are helpful to babies and children?
- b. Now can you think of local customs that may be harmful to children. These may be to do with food beliefs and taboos. They may be things that are done to children such as female genital mutilation (FGM). They may be other forms of cutting.
- c. Now you have a list of local practices. Go through this list together and talk about why people do these things in Somaliland. There is normally going to be some reason for why people believe they should do things.

As FGM is such an important issue, you need to know more about this to help communities to do their best for girls and young women.

FGM

FGM means cutting the genitalia of girls and young women. It has been done since before the time of Islam, Christianity and Judaism. It is mainly done now in North and West of Africa, the Middle East and some places elsewhere in Africa. It is done for many reasons. The reasons are different across the areas where FGM is performed but these are some of them:

- To make sure girls remain virgins until marriage
- To celebrate a girl becoming a woman
- Some traditions believe uncut young women are
 - unclean and may poison their babies as they are born
 - not properly feminine
 - unlikely to marry
 - may become promiscuous.
- Young girls and women who are not cut can be teased or bullied for being 'different' from their friends who have had FGM.

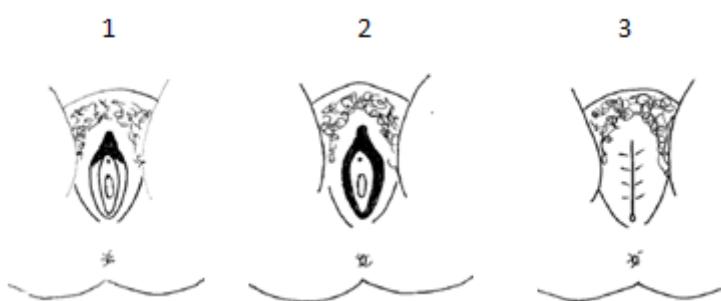
Some people believe that FGM is required for women who are Muslims. The senior religious leaders in Somaliland have stated clearly that this is not a requirement. So have senior Islamic scholars in many countries. Many Somaliland religious leaders actually combat FGM being done as does the Government.

What is FGM and how is it done?

Girls and women are cut using a variety of sharp tools. These may be razor blades, knives, cut bamboo, and other sharp objects. They may be sewn up using thread, wire or thorns.

There are four main types of FGM. These are shown in the Table and drawings below.

Type	What is cut
1	Part, or all of the clitoris and its covering
2 Sunna	Removal of the clitoris Part or all of the inner lips of the genitals
3 Phaoronic	Part or all of the external lips of the genitals Closing or narrowing of the vaginal opening (infibulation)
4	Pricking, scratching, clipping, stretching, the genitalia or vagina, or scarring with herbs



Types 3, and more recently 1 and 2 are very common in Somaliland with almost all girls being cut.

What effect does FGM have?

FGM has many effects.

The obvious effects with the Phaoronic type of FGM come from the closing of the vagina. The opening to the urine tube (urethra) is often almost closed off too. This means that

- many girls and women find it difficult to pass urine
- blood from menstruation may be held back causing pain, infection and damage inside
- women in labour may not be able to push the baby out past the scar tissue. It has to be cut open. She may tear badly. Scar tissue can lead to
 - damage or death of the baby
 - fistula in the woman.

A fistula is a hole between the vagina and rectum, or vagina and urine tube or bladder. This causes constant leakage of urine or faeces, or both. Many women are rejected by their husbands and families because of this.

Girls and women may suffer infections of the urinary tract, throughout their lives. They may become infertile from infection of their reproductive organs.

Some girls and women suffer from the memories they have of being cut, perhaps being held down even by people they love. The physical and mental effects of FGM can make sexual intercourse difficult and painful. This affects their relationships with their husbands.

There are some effects of FGM that can happen early.

- Infection. Girls may be infected with bacteria, HIV or tetanus. This is because FGM is often performed
 - in surroundings that are not clean
 - using tools that have been used on others
 - with unwashed hands
 - animal dung, roots and leaves may be used to cover the wounds in some countries .
- Girls may bleed very heavily
- Accidents may happen with the cutting, because the circumciser is not skilled or because of the girl's struggles
- The pain and blood loss can cause shock
- Girls may not be able to pass urine afterwards.

So girls may be severely injured or bleed heavily, or get infected. They may have long-lasting effects from this or may become very ill and may die soon after it is done or later.

In many places, other ways are being used to celebrate a girl becoming a woman. Many people in Somaliland and the government are campaigning to persuade people to stop cutting their girls and women. Many other countries are doing the same. Most countries have laws now that make it illegal to perform FGM. It may be illegal to arrange for a girl to be taken to another country to have it done.

What are the special needs of adolescents?

The time between about 13 and 18 or 19 years is called the adolescent years. In most countries, young people become more independent from their families but still cannot make legal decisions for themselves until 18. Adolescent girls and boys often want more independence to find out about life. This can lead to conflict with their families who may worry about them. Families may also fear that young people may not make wise decisions.

Adolescence is a time of fast growth and many changes in the body. Girls often develop earlier than boys but the changes are great for both. The biggest changes occur during the time of puberty.

During puberty, boys

- grow in height, develop muscles and become stronger
- develop body hair
- genitals become larger
- begin to produce sperm that can make girls pregnant.

During puberty, girls

- change in shape, particularly developing breasts
- grow body hair
- commence menstrual periods, usually monthly
- begin to produce eggs from their ovaries

- can become pregnant.

Some adolescents find these changes very frightening.

- They may find the body changes are embarrassing for them.
- They may have no idea what is happening to them and what changes still to expect.
- They may not understand the new sexual feelings they experience.
- They may not understand the emotions and moods they experience.
- They may not know how to deal with their new feelings.
- Sexual activity can be very tempting . They may not understand the dangers and what people expect of them. They may not know how to act if others pressurise them.
- They may not know how to deal with big decisions such as about marriage.

Early marriage is a big issue in many families. The dangers of early marriage and adolescent pregnancy to women's health are well-known. Young women and their babies are at much greater danger when pregnancy occurs in the adolescent years. They are more likely to become ill in pregnancy and suffer complications during birth. The biggest complication is of long labour and 'obstruction'. This occurs when the baby cannot pass easily down the birth canal. The adolescent woman's pelvis will not be fully developed so may be smaller than the baby's head. This causes severe problems including fistula and maternal death. The baby will probably die or become severely disabled.

It is very important that families and others close to young people support them, care for them, listen to them and guide them. Sometimes the parents are not the people they choose to talk to.



Grandparents are often the ones who are best able to listen to them without being too critical. Teachers may be good people to fill this role too. Whoever it is, it is very important that young people have ways of finding out information to help them understand what is happening to them. It is better that information comes from someone they trust as long as it is correct information. Sources like friends, and the internet if they have access, may be less reliable.

It is also important that health workers take extra care with adolescents. They need to be respected and to have people take notice of them. If they are ignored or not respected they may avoid health workers in future. They need privacy when with health workers, and they need to know that confidentiality is guarded. It is very important that health workers are careful about passing information to parents without permission from young people. CHWs may need to discuss this with supervisors.

Adolescents are not children. They need to be involved in deciding what treatment or help they will have if they are ill. The older they are, the more important it is that young men and women have choices. They need to make decisions for themselves.

Good nutrition is very important through adolescence. Boys need good food to build their strength. Girls need good food to build a strong pelvis and good stores of the mineral iron from their food. Iron is essential for healthy blood and for recovering after birth even after a young women leaves her adolescence.

How can we make sure we have good reproductive health?

Reproductive health means physical, social and mental well-being related to our reproductive functions. The term ‘sexual health’ is sometimes used. This means health related to being a sexually active person.

There are many ways people can keep safe. Here are some of them:

- looking after personal hygiene
- for women:
 - delaying pregnancy until at least 18 years of age to reduce the risks to mother and baby
 - using child spacing to allow for recovery between pregnancies
 - making good use of maternal health services for pregnancy and birth
 - seeking medical advice if bleeding occurs between periods or after the menopause
- protecting themselves from HIV and other sexually transmitted infections. This is often called ‘healthy sexual behaviour’.
- seeking advice from health professionals as soon as abnormal symptoms are experienced.

ACTIVITY

Promoting sexual health in families is part of the role of CHWs.

- What do you think are healthy ways of behaving?
- What do you think are unhealthy ways of behaving and why are they unhealthy?
- How do you think you can promote healthy sexual behaviours?
- How can you help older married women to support younger women?

Providing reproductive health services is an important role for the Somaliland MoH. This includes child spacing services.

There is one more thing that is important for women. Most women want privacy and do not like others to know, for example, when they are menstruating. In some societies women will even shut themselves away. Women need discrete access to latrine facilities. They also need to have an easy way of dealing with menstrual periods. They need private washing facilities and good disposal for soiled cloths or sanitary products. If these are available to them they need sensitive and discrete distribution. CHWs can help to advocate for the provision of sanitary products and for privacy.

You will learn more about these topics in Units 12 and 15.

How can people living with disabilities lead healthy lives?

Disability means a loss of function of some part of the body. There are many ways in which people can be disabled. The difficulties are often called 'impairment'. Here are some of them:

- difficulty walking
- difficulty using the hands
- thinking and learning difficulties
- sight impairment (may be completely blind)
- hearing and speech impairment (may be completely deaf or dumb).

ACTIVITY

You may know some people who have difficulties in getting around, or can not see or hear well. You may also know people who find learning or solving problems is difficult.

- a. Make a list of things they find difficult to do.
- b. How do they find ways around their difficulties?
- c. Is there any way in which you could help them as a CHW?
- d. Now make a list of the things that they are able to do for themselves and for others. For example, someone who cannot see may be very good at telling stories to children, or at making things. People who cannot walk well may still be able to visit the local shop or the latrine alone if they have walking aids. Being independent is very important and makes people happier.



What causes disability?

Disabilities have many different causes. Sometimes we can not know why someone has a disability. Here are some common causes of disability.

- *Deformities*: polio, accidents, burns, injuries from birth, leprosy
- *Problems using legs or arms, or paralysis (inability to move the body)* : injuries, damage to the brain before or after birth, stroke
- *Sight difficulties, even blindness*: rubella infection before birth, injuries, infection e.g. trachoma, changes with older age
- *Hearing difficulties*: injury, too much noise, changes with old age, rubella infection before birth
- *Speech difficulties*: stroke, brain injury, hearing problems (children with hearing problems find learning to speak difficult)
- *Learning difficulties*: damage to the brain before or after birth, injury e.g. traffic accidents, infection e.g. meningitis. Learning



disabilities are sometimes called 'mental disabilities'.

- *Memory problems and confusion:* old age, injury, infection.

Preventing disability

The CHW has an important role in preventing disabilities. One of the most important things is to encourage families to have children immunised against polio.

It is also important to encourage women to use maternity services to prevent birth injuries to babies when complications happen. Remember that brain damage in babies can be caused before, during and after birth.

Another way that CHWs can help is by teaching about safety at home and in the community.

Supporting people with disabilities

Communities can help to make life easier for people who live with disabilities. The CHW can help them with this. Here are some ideas. You will think of many more. They could:

- advocate for fairness to children with disabilities in the community
- make walking aids for people who are unsteady e.g. sticks, frames
- help them to get hold of proper mobility aids that serve their needs, e.g. wheelchairs
- make sure that the area and home is safe for people who can not see well
- place sticks or big stones along the path to the latrine so blind people can find their way
- make sure older people do not trip or get lost
- remind or help confused and forgetful older people or people with learning disabilities to wash themselves properly and eat well.

Everyone can keep their eyes open to ensure someone with a learning disability comes to no harm.

Although people often need help, at the same time it is important that people stay as independent as possible. Disabled and older people usually prefer to make decisions for themselves. They need to be involved. It is easy to forget to ask people what they want to happen. Even people who have problems that do not affect their ability to make decisions may find that no-one consults them.

In Somaliland it is usually the family which helps people to live better lives despite disability. The CHW and community can still do a lot to help.

Stigma and discrimination

People living with disabilities often say that they feel ashamed and face stigma. Stigma means being labelled as different and perhaps shameful. People may believe that the disabled person has done something wrong. They may believe that the disabled person must deserve it, or perhaps their parents have done wrong. Disability may be seen as a punishment. They may be seen as dangerous. People may even believe they have been bewitched. People who have fits (epilepsy) often suffer from the stigma of the illness for this reason. Sometime people even get badly treated. This may involve being teased, bullied, or even beaten or shut away.

Discrimination is a common problem experienced by people living with disabilities in some countries. Discrimination means treating people differently because of something like disability. Of course

disabled people may need special help. Discrimination means different treatment when this is not necessary. Here are three examples:

1. Ahmed has a severe limp because one leg was twisted from polio. He walks with a stick to help him. He first went to school when he was six years old. Other pupils shouted at him and called him bad names. They tried to trip him up and would not play with him. Teachers shouted at him and gave him bad marks even when he was working well. When Ahmed finished school he tried to get a job as a clerk. The employer would not employ him even though he has better school marks than the person given the job.
2. Hawa and Abdi want to marry. Isaac's family refused them permission because Hawa has a bad burn scar on her face.
3. Hamda can not walk since she was injured in a road accident. She saved up some money to go to a dentist in town. The dentist's clinic was up many stairs. When Hamda arrived, she could not get up the stairs to see the dentist and had to go away again.
4. Musa has had difficulties with everyday activities since he was a baby. His mother had a difficult labour. He often shouts out for no reason and finds it difficult to make friends. He can be rough and hurt people when he is frustrated. He wants to see the singers and actors who are coming to the village. Village people try to stop him.

What do these four stories tell us?

- Ahmed's story talks about discrimination. It also talks about what is called 'equal opportunities'.
- Hawa and Abdi story talks about stigma. Disabled people have as much right to life chances as others.
- Hamda's story shows how important it is to think about the needs of people with disabilities.
- Musa's story is about discrimination again and about being shut off from society.

ACTIVITIES

- a. If Ahmed, Hawa, Abdi, Hamda and Musa lived in your village. How could you help?
- b. Think about the Primary Health Unit or health centre near your community. How easy is it for people who cannot walk to get into the building without being carried?

Finally, people have the right not to face discrimination and unfairness. They should have access to education, health and rehabilitation services, community events and meetings, and employment. They want to be valued like anyone else. Most want to marry like anyone else.

Referral services

People living with disabilities often need special help and services such as rehabilitation. There are some services in Somaliland that help disabled people such as those run by the Somaliland Red Crescent Society, and a school for deaf children.

ACTIVITIES

- a. Talk with your trainer about the services that exist and discover ones you do now know about. What services exist in your area?
- b. What do these services do?

- c. How do people get access to these services? How do you try to get help for people in your community? Who should you talk to so that they can be referred for help?
- d. If possible, help your trainer to arrange a visit for you.

Finally, it is important to remember that people who live with disabilities may not be sick. They may have been ill in the past but are not now. They just need to find ways to make their lives easier.

The main thing most people need is to be seen as people who can be part of the community like everyone else. They usually want to contribute fully to what happens as far as they are able. It is important to help to think about what they can do, not just what they can not do. The same applies to those around them. People with disabilities need to be as independent as possible and to make their own decisions.

How can we stop ourselves from getting infections?

What is infection?

Infection is when small organisms enter our bodies. An organism is a form of life. Disease organisms are usually too small to see except with a microscope. They are then called micro-organisms.

The organisms that make us ill are harmful organisms. We also have helpful organisms in our bodies. Healthy people can often fight the infection to prevent it causing them harm. This is done by the immune system once the organisms are inside our bodies. You will learn more about this below.

A microscope is an instrument that makes micro-organisms look much bigger than they really are.



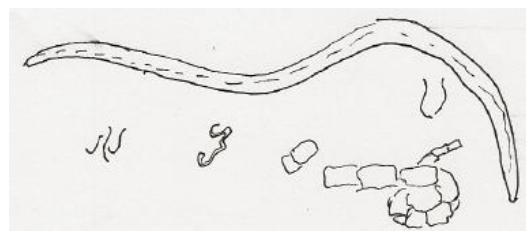
The organisms that cause infection

The main organisms that cause infection are parasites, fungi, bacteria and viruses. Bacteria and viruses are often called germs.

Parasites can often be seen. Parasites depend on the person they live in (or on) for nourishment.

Common parasites are:

- worms:
 - roundworms
 - hookworms
 - threadworms (pinworms)
 - tapeworms
- blood parasites:
 - malaria
- skin parasites (insects): lice, mites (scabies), fleas.



Parasites of some types move around in the body. Others stay in one place once they have reached the place they live in e.g. tapeworms.

Worms and malaria parasites live inside the body. Skin parasites live on the skin but may burrow under it (mites). Others pierce the skin and suck blood (lice and fleas).

Parasites can cause illness. Children with worms can become anaemic and malnourished. Skin parasites can cause tick-bite fever, typhus (lice) and plague (fleas). Bites may get infected.

Fungi can live in the body or on the skin and nails. They can also live on mucous membranes. Mucous membranes are the warm and moist parts of our skin such as the mouth and genitals. Fungi often cause severe itching.

Common fungi are:

- ringworm (skin) makes red rings on the skin
- thrush (mucous membranes. Thrush may cause redness, soreness and a white coating on the tongue, mouth or female genitals. Babies can get thrush on the anus and buttocks.
- athletes foot (scaly, itching and cracking between the toes).

Fungi do not usually make healthy people very ill. Thrush will make people very ill when their immune system does not work so well e.g. pregnant women, babies, people living with AIDS, people who are dying. People can get skin infections from scratching.

Bacteria can be good bacteria (that live all the time in the mouth and intestines) or bad bacteria. Bacteria are smaller than parasites. Bad bacteria can cause infections anywhere:

- skin
- eyes, ears, throat
- stomach, intestines, liver
- lungs, heart
- urinary system
- brain and nervous system
- bones
- blood
- reproductive system (male and female).

Bacteria infections may start in one place and then spread. For example:

- An infection of a cut may spread. If it reaches the blood the person may die.
- A chest infection may spread and infect the lungs (pneumonia)
- A sexually transmitted infection may start with a genital sore and eventually infect the brain (syphilis). It may start in the vagina and cause infertility if it infects the tubes that carry the egg.

Viruses are the smallest micro-organisms that have been discovered. Viruses cause many different infections, some of them very common. Viruses cause:

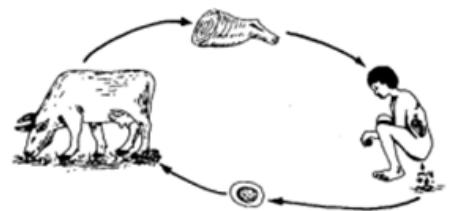
- common cold, influenza
- measles, chicken pox, rubella
- meningitis
- polio
- hepatitis (liver infection)
- HIV.

How do parasites, bacteria, viruses and fungi spread and enter our bodies?

Organisms enter our bodies in different ways. This can be by touching someone or some thing. It can be by swallowing them with water or food, or by breathing them in.

Most infections spread along a ‘chain’ of people. Here are some examples and how infecting others could be prevented:

1. Ahmed has a cold in the head. He is coughing and sneezing. His sister breathes in the cold virus he has sneezed out. She gets a cold. Ahmed touches a ball. His little sister plays with the ball. She gets the cold too. Ahmed needs to remember to sneeze away from people. He should also wash his hands after touching his nose or after sneezing.
2. Ayan is four and has hookworms. She squats to pass stool on the dusty ground. Later another child plays there without shoes. The hookworm enters his skin and goes into his blood. It then lives in his intestines. The whole family should use latrines. Passing stools on the open ground spreads infection.
3. Hassan has tapeworms. He has been infected when he ate meat that was not properly cooked. The parasite had been eaten by the cow after an infected person passed stool on the ground.



ACTIVITY

What do you think the next stories tell us about how infection is spread and how to prevent it?

1. The circumciser uses a knife on several children one after the other.
2. A CHW changes a wound dressing with dirty hands.
3. Mariam has diarrhoea. She forgets to wash her hands and prepares food for her family.
4. Mustapha sleeps with his brothers who have a skin disease.
5. Mariam leaves meat for the family meal uncovered. Flies from the latrine sit on the meat.
6. A man comes back from travelling with a discharge from his penis. He has sexual intercourse with his wife when he gets home.
7. Jamaal feels old and tired. He has been coughing a lot. Sometimes he coughs up some blood. He lives in a small house with his son and six grandchildren. His youngest grandchild starts to cough and lose weight.

The Table below shows the main ways each organism enters. You will learn more about this later, e.g. in Units 5, 10, 11, 12.

Type of organism	How they spread	How they enter
Parasites	infected food	Get into intestines from mouth (tapeworms, roundworms)
	touch	Scabies (under the skin), lice, fleas (live off the blood)
	touch and swallowing	Get into intestines from mouth (threadworms). Children and adults have itching of the anus. They scratch and get worm eggs under the nails. They touch another person. He swallows the eggs.
	faeces on the ground	Hookworms get in through the skin (mainly feet)
	insects bite an infected person then an uninfected one	Parasites enter the blood from bites (malaria, sand-fly fever, dengue, typhus, tick-fever)
	infected rivers and lakes	Through skin, into blood then bladder (Bilharzia)
Fungi	touch	Through mucous membranes (thrush) Through skin layers (ringworm) Through open skin wounds
Bacteria	swallowing	Hands touching mouth (diarrhoea) Drinking or eating infected water or food (diarrhoea)
	inhaling	Breathing in from other people (coughing or sneezing, TB, bronchitis, pneumonia)
	touch / through skin	Through open wounds
Viruses	Inhaling	Breathing in from other people e.g. coughing and sneezing
	touch	Touching objects others who have the disease have touched Touching hands of an infected person
	injection	Pricking by (or using) infected syringe needles Dirty instruments e.g. with FGM Blood for transfusion that is not properly checked for blood-borne diseases
	body fluid splash	Through eyes
	sexual contact	Through mucous membranes, vagina, penis, rectum
	infected animal or person	Through bites (rabies)

How our bodies protect themselves (skin, mucous membranes, immunity)

The body has several ways it prevents disease from entering. The body has even more ways to protect itself once organisms are inside.

Barriers

The skin and mucous membranes are very good barriers. The eyes are protected also by tears which kill some bacteria and viruses. The nose catches some organisms in the hair. The ears catch organisms in the wax. The mouth is protected by saliva. Saliva protects like tears do.

Inside the body

Once inside the body, the immune system starts to fight against organisms. We need strong immune systems for this. This is one reason why good nutrition is so important. It is also why breastfeeding is so important. Babies and children who have weak immune systems will become sick much more

easily. They may also be more sick and more likely to die. Babies born early or too small are in special danger. So are babies fed on milk or formula that is not human breast milk.

When babies swallow breastmilk, they also swallow antibodies made by the mother. Antibodies protect babies from some diseases. As babies get older the protection becomes less. It is important to have babies immunised so they are protected from some diseases. You will learn more about this in Units 10 and 16.

It is also very important that babies should have nothing but breast milk after birth and for 6 months. This is because other things, even water, will damage babies' intestines. They then become ill more easily as organisms can pass into their blood.

Antibodies are special cells the body makes that kill harmful organisms. Antibodies work by reminding the body how to fight infections it has met before. Some protective cells even swallow harmful ones to kill them. Then the body uses these antibodies again to fight the same infection next time the person meets it. Measles is a good example. People rarely have measles more than once.

Each antibody fights one type of harmful organism. Every time a person catches a different harmful organism, the body has to make a new antibody.

How do we know we have an infection?

The body usually tells us when we become infected. Here are some ways this happens:

- feeling sick or being sick
- having diarrhoea.
- feeling very tired
- becoming lethargic. This means being sleepy and unable to respond much if touched or talked to
- looking very pale. Looking very hot.
- having a fever. This can show in several ways
 - shivering or feeling hot
 - sweating or hot, dry skin
 - looking pale or hot
 - feeling cold even when sweating. Sometimes this keeps changing from shivering to sweating. Shivering is the body's way of warming itself up. Sweating is the body's way of cooling itself down.
- coughing and sneezing because of irritation in the lungs, breathing tubes and nose
- skin becoming red and hot around a wound. It may swell up. This is a sign that the body is fighting an infection in the wound.
- pus may be coming from a wound. This is a mixture of dead bad organisms and dead protective cells.

Unfortunately, some very serious diseases do not give signs until much later e.g. tuberculosis, HIV, other sexually transmitted infections.

How can we prevent infection?

ACTIVITY

Can you remember how babies are protected from infection by their mothers? Have a look back to check.

Water and sanitation

Two very important ways of preventing infection are through

- using clean water for drinking and preparing food
- using latrines for passing urine and faeces.

You will learn more about these in Unit 5. This will include ways the community, even children, can join in.

Food storage and preparation

Hand washing is very important to preparing food safely. You will learn about this shortly.

Food preparation and storage is also very important. Food is one of the main ways people become infected, especially with diarrhoeal diseases.

Immunisation

This is very important as well. You will learn more about this in Unit 10 and 16.

Safe sex

You will learn more about this in Unit 12. It is extremely important to prevent sexually transmitted infections (STIs) such as gonorrhoea and syphilis, and to prevent HIV infection. HIV is transmitted mainly by sexual contact as well as by using dirty needles and between mothers and babies.

The most important messages are to avoid multiple sexual partners. Having one partner only is very important in Somaliland. The advice is always use protection during sexual intercourse. The only sure ways of protecting ourselves are protecting by using condoms and not having sexual intercourse. Using condoms is not very acceptable in Somaliland.

Hand washing

Careful hand washing is one of the most important things you can do. It is important:

- after using the latrine
- before preparing food or drink
- before feeding babies
- when we have colds or ‘flu
- before and after treating a wound.

You will be taught how to use protective gloves. If so, it is still very important that you wash your hands before putting them on and after taking them off.

ACTIVITY

Check out how well you wash your hands. If possible, cover your hands with a powder or liquid that stains but that will wash off. Now wash your hands like you usually do (close your eyes). Did the stains come off? Now cover your hands again with the stain. Wash your hands following the

instructions in the drawings below. How stained are they this time?



Palm to palm



Right palm over left back of hand, and left palm over right back of hand.



Palm to palm.
Fingers interlaced



Backs of fingers to opposing palms with fingers interlocked

If you cannot get anything that stains, watch each other to see how well you do.



It is important to wash your hands in the correct way.



You need clean water, soap or ash and a clean towel.

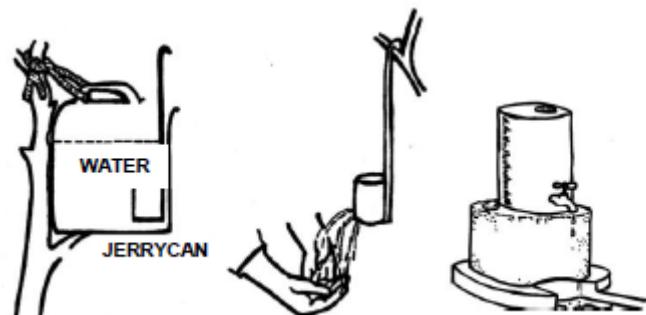


You could use a clean basin of water.

Then throw it away before anyone else uses it. It is important not to use the dirty water someone else has used or to share towels. It is better to let your hands dry in the air than to share towels.

It is best to wash hands under running water if possible but you do not need running water from a tap. These are ways you could have running water:

- Make a tank with a tap that stands on a stool.
- Ask someone to pour water slowly over your hands from a jug or pot
- Hang a bottle or can of water from a hook or something like a tree branch. Make a hole for water to come out and a stopper to stop the water when you have finished
- Hang a bottle with a hole near the top. Use a ladle with a hole in it, tied to a hook or branch.



Universal precautions

'Universal precautions' are ways of working that make sure

- health workers do not become infected by patients who have HIV or hepatitis
- patients are protected from being infected.

'Universal' means you treat everyone in the same way. You always act as though someone might have HIV, AIDS or hepatitis. It is impossible to guess who has these diseases and who does not have them. Here are some steps you should always take when caring for patients:

- Wear something that will protect your clothing from splashes of body fluid. This can be a
 - plastic apron that is thrown away after
 - clean piece of plastic
 - cloth that can be washed in hot water and soap powder
- Wear latex or vinyl gloves when in contact with body fluids or clean plastic bags on your hands. Burn them after use or bury them deep
- Wash hands before and after procedures even when wearing gloves
- Cover cuts and grazes on your skin with waterproof plasters
- Try to avoid having body fluids splashing in your eyes
- Make sure used needles, blades and instruments are disposed of carefully. Your supervisor will tell you what to do if you have 'sharps'.



Preventing accidents in the home and community

In many countries, accidents in the home are the most common ones. More people die in their homes than in other ways such as in road traffic accidents or through violence. The most common accidents are:

- falls, cuts and bruises
- eye injuries
- burns and scalds
- poisoning
- choking, suffocating, drowning
- road traffic accidents
- bites, stings.



Everyone can help to prevent home accidents. Even children have an important role. Of course CHWs have an important role in promoting safety at home and in teaching people how to live more safely.

The most dangerous area at home is probably the cooking area. If there are stairs or steps then these often lead to trips and falls which are probably the next most common accidents.

ACTIVITY

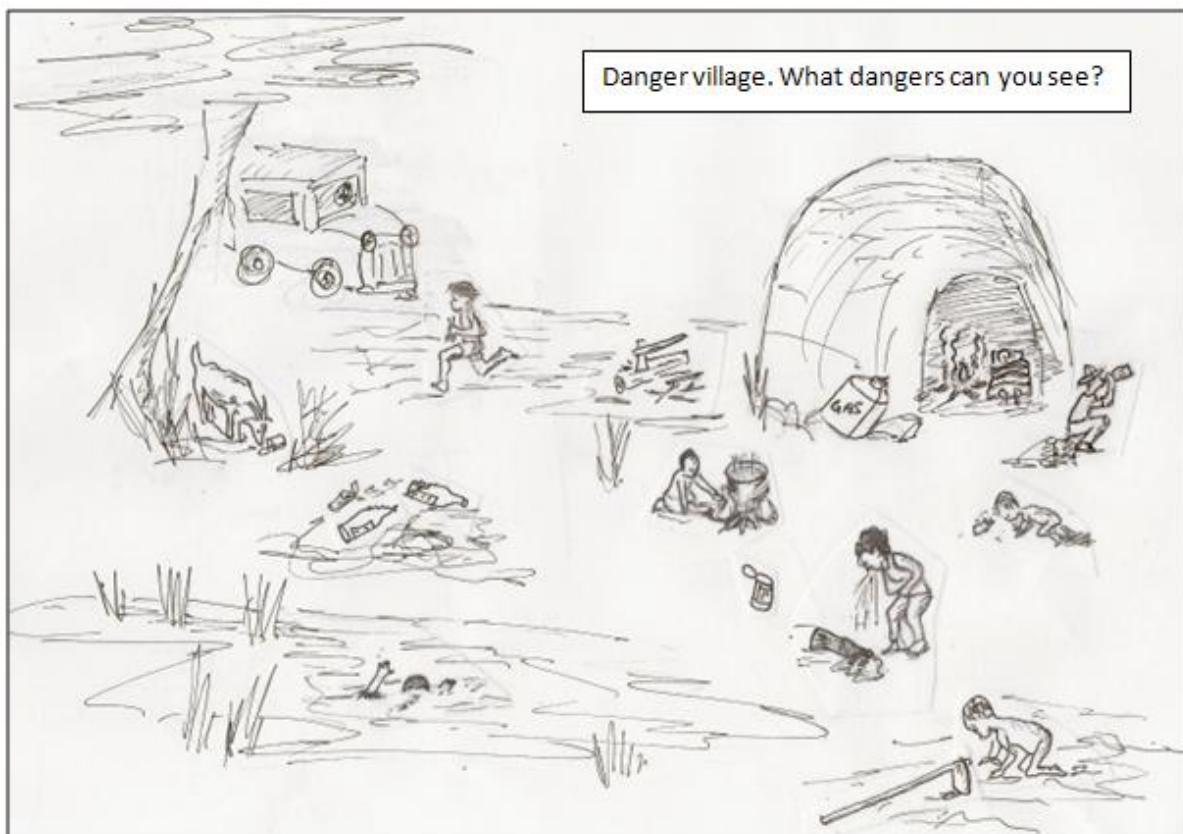
Think about your home and village.

1. Who are the people most in danger from accidents?
2. What accidents do you know about that have happened?
3. Discuss with other trainees about dangers you know exist and how they can be prevented.

ACTIVITY

Now look at these pictures.

1. Pick out any dangers you can see.
2. What is the danger?
3. How could you make sure people are safe?
4. How could children help to keep their homes and schools safe?



ACTIVITY

Now think about the PHU building or your base, and the Health centre near your community.

1. What dangers do you think are there?
2. How could you prevent accidents there?

Remember, you have a duty to cause no harm. No-one will be happy to get injured when they attend PHUs or Health Centres!

You also have a duty to warn people about dangerous activities. For example, you will often give medicines out to be taken home. They are usually very dangerous to children when taken wrongly.

- You MUST tell people how to keep medicines safe from children.
- They must be stored too high for children to reach even if they climb up. Medicines should be kept in a locked box or cupboard with the key stored out of reach.
- Only the dose to be taken at once should be removed.

- Medicines must always be stored in the proper container.

Basic first aid, danger signs and referral

First aid is the help you can give when people first hurt themselves. If the injury is serious, you will then need to call for medical help or arrange for their transport to the health centre. Any injury can become serious and the person then needs to be referred to the Health centre.

A ‘serious’ injury means anything that causes

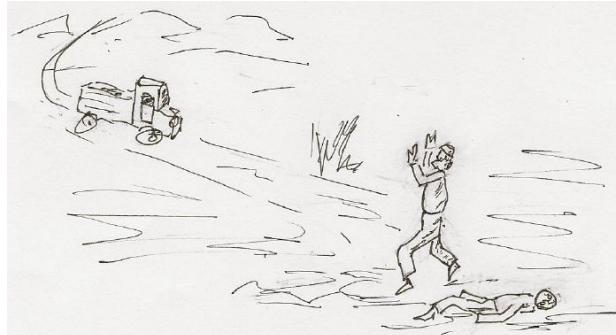
- breathing difficulties
- bleeding that causes people to feel dizzy
- reduced level of consciousness
- severe pain
- collapse.

Note: There are many skills you need to learn so you can give first aid. You will learn these from your trainer. You will not find all the instructions in this manual.

Staying safe while helping

First message – it is very important that you stay safe while providing first aid. Your first action must always be to make sure you and others nearby come to no harm. This will also help to make sure the patient comes to no more harm. For example:

- Shout for help.
- Clear away anything sharp. Don’t kneel in it!
- Throw wet cloths or blankets over a fire if you can.
- Try to get helpers to calm any fighting.
- Protect yourself from traffic if near a road. Ask someone to warn vehicles.
- If there is electricity and the patient has been electrocuted, turn it off before touching him.
- Wash your hands and cover them with clean plastic bags (or gloves if available).
 - Covering your hands is most important if there is blood or body fluids
 - At least try to avoid blood or other fluids getting in cuts or sores you may have
 - If you do get blood or body fluids on your hands, wash well with soap and plenty of clean water
- make sure the patient does not get too cold.



Basic actions to save life

There are some very basic ‘first aid’ actions you can take immediately. You will learn about these more later:

- If the person is not responding, roll them over to their side so they can breathe more easily. This is known as the ‘recovery’ position. You can also make sure they can breathe by tipping the head back
- If they have stopped breathing you may need to breathe for them. This is called mouth-to-mouth. In small children it is mouth-to-nose.
- If the person is bleeding a lot, put a clean pad over the wound and press on it for several minutes to help stop the bleeding. Where possible, get the patient to do this himself so you do not touch the blood. This does not matter so much if you have covered your hands (see above).

Your trainer will demonstrate the skills you need. The diagrams in this manual are only intended to remind you what to do after training. The most important skills are:

- the ‘recovery’ position. This position makes sure the patient’s tongue or vomit does not get in the way of breathing (see above)
- mouth-to-mouth, and mouth-to-nose breathing for someone who has stopped breathing
- how to move someone safely
- stopping bleeding.

Management of main injuries and emergencies (including referral)

Breathing difficulties

People may have difficulty in breathing because they are ill e.g. having a heart attack, asthma or chest infection. It may be because they have choked on something (see below). People who have difficulty breathing may look blue in the face. Their lips and fingers may be blue also. This means they do not have enough oxygen. Remember oxygen is essential for life.

What to do

If someone finds it difficult to breathe, you can help them while you organise medical help:

- Sit them up if they are conscious.
- Make sure the clothing is not too tight.
- Lie them on their side if they do not respond to you. See below for what to do if they are ‘unconscious’.
- Use life-saving skills if the person has stopped breathing. For a child use mouth-to-nose breathing. For an adult use mouth-to mouth breathing.



WHAT TO DO WHEN BREATHING STOPS: MOUTH TO MOUTH BREATHING

A person will die within 4 minutes if he stops breathing.

If a person stops breathing, begin mouth-to-mouth breathing IMMEDIATELY.

Step 1:

- Quickly remove anything stuck in the mouth or throat.
- Pull the tongue forward.
- Try to clean out any mucus in the throat.

Step 2:

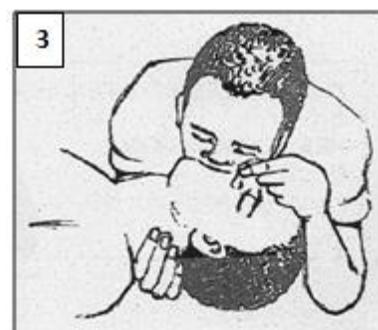
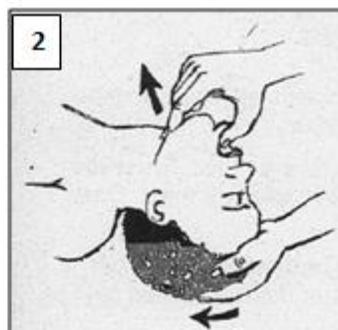
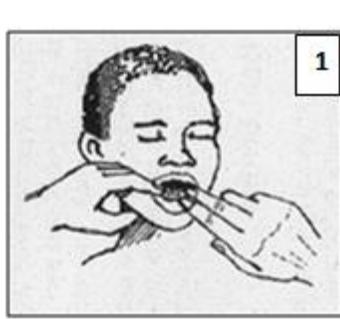
- Quickly lay the person flat.
- Tilt the head well back. Pull the jaw forward.

Step 3:

- Pinch the nostrils closed with your fingers.
- Open the mouth wide and cover it with yours. Keep the jaw pulled forward and the head tilted back to keep the air passage open.
- Blow strongly into the person's lungs. You will see the chest rise if you are doing it properly.
- Pause to let the air come out and blow again. Repeat every 5 seconds.

For babies and small children, cover the mouth and nose with your mouth. Blow very gently. Use puffs of air from your cheeks for babies. Blow every 3 seconds.

Do this until the person breathes alone or it is certain he is dead. You may need to do it for an hour or more. You cannot catch HIV provided there are no open mouth sores or bleeding.



Leave the person in the recovery position until conscious or while you are waiting for help.

Cuts and wounds

Cuts and wounds made by sharp objects e.g. knives, glass, razor blades, must be kept clean. Scrapes and grazes often have dirt from the ground in them. Visible dirt can cause infections of wounds. Even clean wounds can become infected with bacteria and must be kept clean.

Wounds can be skin deep or they may include the flesh underneath. Sometimes bone can be seen. People with deep cuts must be seen quickly by a doctor or nurse.

What to do for people with small or skin deep wounds

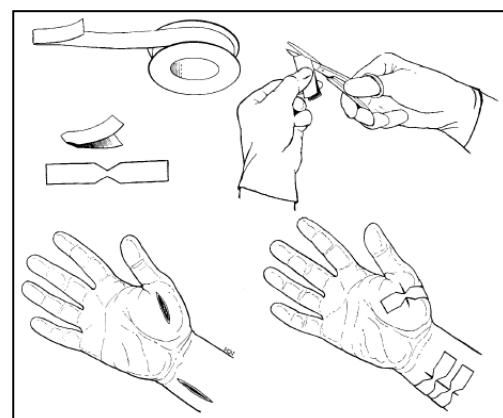
- Stop bleeding using a clean cloth pad. Follow the steps below if the bleeding is severe.
- Wash the wound gently with clean water. Water should be boiled and cooled first.
- Cover with a dressing or clean pad.
- Fix it with tape or a bandage.
- Bandages and dressings
 - must be very clean
 - can be made from cloth.
 - Cloth must be washed with water and soap. Dry it in the sun or with a hot iron if possible
 - Dressings and bandages should be changed every day after cleaning the wound again. The old dressings must be burned.
- The only substances to put on wounds are the ointments you are trained to use for this from the CHW medicine kit. Also, the use of sugar or honey are old treatments which are being used more now in modern medicine.
- NEVER put substances like animal dung, ash, soil or fat on wounds.



What to do for deeper cuts

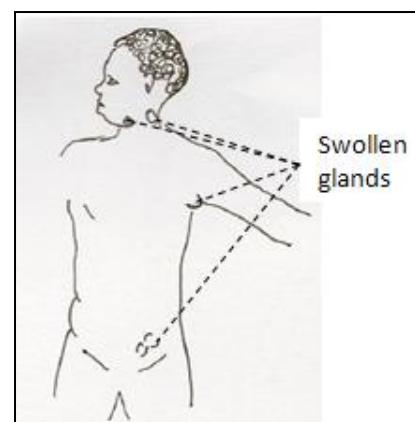
If wound edges will not stay together, then you can close them with strips of sticking plaster. Do this after you have cleaned the wound. The cut must be very clean and less than 12 hours old. The drawings show you how.

If the wound is too big to stay together this way, the person should go to the health centre for stitching. Send them there also if the wound does not heal or it looks infected.



An infected wound

- will look red, hot, swollen
- may be painful
- may smell bad or have pus coming out
- may cause spread of the infection. The person may
 - have redness spreading, perhaps in a line toward the heart
 - have a fever
 - have swollen glands. The glands are under the



arm (arm and hand wounds), in the groin (foot and leg wounds), the neck (head wounds).

An infected wound may lead to gangrene. This is very serious, a limb may die or the person may die. The area may look black, or there may be dark bubbly liquid and the skin may blister.

What to do if a wound looks infected

- Soak the part in hot water for 10 minutes several times a day (not hot enough to scald) or hold a hot wet cloth over it.
- Ask the patient to rest the part and keep it up higher than the heart level.
- Give antibiotics if possible.
- Clean the wound daily.
- Use honey on the wound every day to help it heal and prevent more infection.



What to do for other serious wounds

Very big or deep wounds usually cause shock and heavy bleeding e.g. having part of a limb cut off, gun shot wounds and stabbing. These are very serious emergencies. Take the patient to a health centre at once. Here are some important points:

- Medical help is needed very urgently.
- Do not waste time trying to clean the wound while it is bleeding a lot.
- Let the wound bleed for a minute or two to help wash away dirt.
- Cover the wound and try to stop the bleeding.
- Keep the person still, usually lying down.
- If a limb is wounded, raise it higher than the heart.
- If the wound is in the chest
 - let the person use the most comfortable position
 - if there is air sucking in and out, cover the wound with a thick pad covered with petroleum jelly and bandage.
- If the wound is in the abdomen (belly):
 - cover the wound with clean cloth or dressings and bandages
 - soak the dressings or cloth in cooled, boiled water with a little salt in it if the intestines are hanging out
 - do not try to put intestines back
 - do **not** give anything to drink or eat
 - take the person to a health centre urgently.



- Some wounds are more likely to become dangerously infected e.g.
 - animal and human bites
 - wounds where there has been contact with animal or human faeces
 - puncture wounds e.g. from stabbing and gunshots
 - deep wounds that do not bleed much
 - wounds from crushing.

With these wounds listed above where there is high infection risk:

- Careful washing is very important. Try to remove all dead flesh, blood clots, bits of debris like clothing or dirt.
- Antibiotics will probably be needed.
- Do not close these wounds. They must be left open.
- Take the person to the health centre.
- Tetanus immunisation is very important if the person has not been immunised previously.

With most serious wounds, the patient will be shocked. You will learn about this below.

Wound care and bandaging:

These are practical skills your trainer will teach you.

Bleeding

Most bleeding is from cuts and wounds made by sharp objects e.g. knives, glass, razor blades. People may bleed from other causes e.g. nose bleeds. Women who are miscarrying will bleed. You will learn about this in Unit 15.

When people are bleeding a lot, they can feel faint and become unconscious very quickly.

What to do with bleeding from an injury

- Call for help.
- If the patient is pale and sweaty, treat for shock (see below).
- Before you touch the blood protect your hands with rubber gloves or plastic bags if you can (see above). But be quick doing this and do not waste time.
- If the bleeding is from a hand, arm, foot or leg, raise the limb up high. This should slow the bleeding.
- Use a clean cloth and press hard on the injury:
 - Press hard until the bleeding stops. Be patient. It can take 15 minutes or more to stop.
 - Do not keep looking as this can restart the bleeding.
 - Do not press on the wound if there is glass or other sharp objects in it.



- You may need to put a tie around the limb if you can not stop the bleeding just with pressure. Only do it if the person is becoming ill because of the bleeding and you can not stop it with pressure.
 - Use a strong piece of cloth or a belt. Do not use rope or string.
 - Tie it close to the wound. Tie it on the side nearest to the heart.
 - Make it tight so the bleeding stops.
 - Every 30 minutes or so, loosen the tie to see whether the bleeding has stopped. Do not leave tied any longer without loosening as the limb may die.
- This patient will need medical help so must be taken to the health centre.

What to do for a person with a nose bleed

- Ask the person to sit upright.
- Ask the person to pinch his nose for about 10 minutes. He should pinch where the soft part joins the bony part of the nose.
- He will need to breathe through the mouth.
- Tell the person not to blow the nose for some time after the bleed has stopped.
- Heavy bleeding means the person should see a doctor or nurse.



Bleeding inside the body signs

Sometimes no bleeding can be seen but the person is very shocked (see below). This may be because they are bleeding inside the body. This is also a very serious emergency and the person should see a doctor as fast as possible or they may die. They may also have a lot of pain and be very frightened.

Shock

Shock usually happens with serious accidents and when people are very ill. The main causes of shock are

- heavy bleeding outside or inside the body
- severe pain, serious burns or scalds
- having an allergic reaction to something e.g. insect stings, foods, snake and scorpion bites
- losing a lot of body fluid (dehydration).

Shock is very serious. The patient may die. They may

- have a weak and very rapid heart beat (more than 100 beats every minute). Your trainer will tell you how to count the heart beat or pulse
- look very pale
- have cold damp skin
- feel very weak
- be confused
- lose consciousness
- have a very low blood pressure.

What to do

- If there is a risk of shock or you believe the person is shocked you should take these actions:
 - Lie the patient down with the legs higher than the head unless there is a head injury (shock position). You could raise the foot end of a bed.
 - Use the recovery position if the patient is unconscious or at least turn the head to one side to prevent choking on vomit or the tongue..
 - If there is a head injury, sit the patient up halfway or raise the head end of the bed.
 - Loosen tight clothing.
 - Keep the patient warm with a blanket if cold.
 - Stop bleeding (see above).
 - Give the patient analgesic tablets if he is in pain (not codeine).
 - Reassure the patient and keep him calm.
 - Give sips of water if conscious
 - Use the recovery position if unconscious (see below).



Loss of consciousness

When someone loses consciousness it means that they do not respond to you. This might be to your voice or to touch. The biggest danger is that the patient will choke on vomit or the tongue. The tongue can slide back across the opening to the throat (the airway) if the person is on his back.

Common causes of unconsciousness are

- a blow on the head
- fainting
- stroke (may have paralysis)
- shock
- large blood loss
- heart attack
- being drunk from alcohol
- heat stroke
- poisoning.
- diabetes.

What to do

1. Clear out any objects or vomit from the mouth.
2. Pull the tongue forward with a finger if it is preventing him from breathing.
3. Roll the person into the recovery position (see above). You need to be very careful not to cause more injury. Do this very carefully if his neck or back may be broken. This is common after road accidents and if someone falls from high up. Your trainer will show you how to do this.



4. You must never give anything by mouth to an unconscious person.
5. Get help from a nurse or doctor immediately.

Convulsions

A convulsion is also called a ‘fit’. The person may jerk violently, roll his eyes, bend backwards. Some people (and children) just twitch. They may be noisy or quiet.

Usually they are unconscious. Common causes are

- epilepsy. The fits may be frequent
- high fever, especially with children
- meningitis and tetanus.



What to do with someone who is having a convulsion:

- Protect the person from harm such as rolling into a fire or cutting herself on sharp objects.
- Use cool water to lower the temperature of someone with a fever.
- Keep the person quiet until recovered.
- Do not try to force the jaws open if they are clamped shut. Do NOT put your fingers in.
- Roll the person into the recovery position once she is quiet. Let her sleep.
- Give nothing by mouth until the person is conscious again.
- If the person is known to have epilepsy you do not need to get medical help unless she injures himself.
- Send to the health centre anyone who has never had a fit before and has no high fever.

Heat stroke and exhaustion

Too much heat can make people ill. Some people just get cramps if they sweat a lot. There are two types of emergency that are very serious and people may even die. These are called heat exhaustion and heat stroke. The table below shows you the differences and what to do.

	Causes	Signs and symptoms	What to do
Heat cramps	Working hard in heat, sweating and not enough salt	Painful muscle tightening 	Rub the muscle Rest Give salt solution*
Heat exhaustion	Working hard in heat, sweating and not enough salt	Feels weak and faint Is very pale Cold and damp skin Fast, weak heart rate Temperature usually normal 	Rest in shade lying down Give salt solution when no longer fainting
Heat stroke	Especially older and overweight people	Very high fever, may be above 42°C. Hot and dry skin all over including under arms Fast heart rate May be unconscious May die 	Cool down in the shade: Wet him all over and fan him until his temperature drops

*Salt solution is 1 teaspoon (small measure) of salt in one litre of cool, clean water

Burns and scalds

Scalds are made by very hot liquids e.g. water or milk.

Burns can be made by dry heat or by chemicals. Even the sun will burn, especially if people have pale skins. Burns can also happen from having an electric shock or from friction e.g. if someone grabs a rope that is being pulled.

One of the most common places for burns and scalds to happen is in the cooking area. Hot liquids can be spilled. Children can grab hot cups and pans. They can even pull them over themselves. They may touch the fire or fall into it. They may trip over a stove while running around. Clothing can catch alight. These can all be very serious.

Small children and people with epilepsy are most in danger. People with epilepsy may fall in a fire or roll into one when having a fit.

Burns and scalds are divided into three types. The Table below shows these.

Types of burns and scalds

Appearance of skin	Type	Damage
Red skin No blisters May be sore	First degree	Surface of skin
Red skin May be hot and swollen Skin blisters may be large Skin may peel off Will be painful	Second degree	All layers of skin Some scarring
Skin looks white or blackened No pain as nerve endings are burned away.	Third degree	Burn is deep Muscles, tendons and bones may show Will scar badly. May cause deformities.

The size of burns and scalds is important to decide. People with most burns need medical care at least from the health centre staff. Children and adults who have large burns may need special help in hospital.

How can you decide who needs to go to the Health centre?

- Send everyone with burns or scalds deeper than the surface of the skin.
- Send everyone with a burned or scalded area larger than the person's own hand.
- Send everyone who looks shocked (pale, sweaty, dizzy).

It is important to understand that the 'hand' size is a total area. The burns or scalds may be in several places. People with several small burns or scalds that add up to the size of the hand should be referred.

Small burns and scalds are not normally dangerous unless they become infected. Large burns and scalds are very dangerous and medical help is essential. Deep burns are also very dangerous. This is because

- large burns and scalds may cause severe shock as well as pain
- the person may lose a lot of body fluid through the wounds
- serious wound infection is difficult to avoid
- limbs may become deformed.

Younger children and old people are in the most danger of being seriously ill after burns and scalds.

What to do for small burns and scalds

- Cool the part immediately using clean cold water. The burn will be less bad if you cool it.
 - If you must use a bowl, change the water as soon as it loses its coldness.
 - Even better, run cold water over the part that is burned. Keep doing this for 10 minutes to cool the skin
 - Get help from other people to keep bringing cold water.
- Give tablets for pain if needed.
- If the skin blisters, do not prick the blisters.
- If the blisters break, wash with cooled, boiled water and soap.
- Leave the wound uncovered if small with no skin broken.
- If the wound might get dirty or damaged, then put on a clean dressing. Use a non-stick dressing next to the skin. To make a non-stick dressing you could
 - boil some petroleum jelly to sterilise it if you can
 - spread this on a clean dressing when cool enough to touch
 - tell the person not to take off the dressing and to keep it clean
 - look at the burn after one week.
- DO NOT USE fat or substances like animal dung and herbs on the burn.
- You can use the inside of a small Aloe Vera leaf (dacar). Split the leaf and hold the inside over the burn if it is small. You could also spread the inside part over the burn.
- Antibiotic treatment at the health centre may be needed if
 - the burn smells bad or has liquid coming out
 - the patient has a fever
- Make sure the patient has plenty of protein and fresh fruit and vegetables to aid healing.

What to do for someone with severe burns

- Comfort and reassure the person. She may be very scared.
- Someone with severe burns will need special care in hospital. She must be taken immediately for treatment.
- Cool the burn or scald the same as for minor burns.
- Wrap the burned part with a clean wet cloth or clean plastic bag. This keeps the air out and reduces the pain. Do not wrap plastic or cloths too tightly. Watch that the part does not swell or go blue. Keep using cold water to cool the area during travel.

- If medical help will be delayed you should do the following actions.
 - Give the person plenty to drink. Use 1 litre of clean water + $\frac{1}{2}$ teaspoon salt + $\frac{1}{2}$ teaspoon bicarbonate of soda if you have it. (Teaspoon is a small medicine measure).
 - Give aspirin, paracetamol or codeine for pain if needed.
 - Give antibiotics.
 - Bathe open wounds with cooled, boiled salty water.
 - Use honey (or sugar) on the wound. Clean the wound and change the honey or sugar twice daily if medical help is not possible.
 - Use dressings soaked in petroleum jelly (see above). This is very important if burned areas like fingers might stick and grow together.
 - Ask the patient to move burned parts several times a day. This is most important if the burn or scald covers a joint e.g. fingers or elbow. This is to prevent scarring that may stop movement in future. It is best to do it after changing the dressing. Give pain medicine 30 minutes beforehand as changing dresses can be very painful.
- Remember to make sure the patient has plenty of protein and fresh fruit and vegetables to aid healing, and plenty to drink.

Eye injuries

Sometimes people can bruise or cut their eyes. They may have something like a small piece of stone or stick in it.

If it is small like dust or an insect you can help the person remove it this way:

- Wash hands with water and soap
- Turn back the eye lid
- Remove the object carefully with a small piece of clean soft cloth
- Tell the person to blink hard.



You must send the person to the health centre if

- the eye is cut or badly bruised
- hot liquid or sparks from a fire have gone in the eye
- the object can not easily be removed
- the object is sharp or has gone into the surface of the eye.



You may need to protect the eye with a clean pad e.g. sterile gauze especially if there is a wound.

Broken bones (fractures)

It is important to refer all people with broken bones to the health centre. This is so that they can be set and heal properly. This helps to avoid long-lasting disability.

Broken bones can be very painful. You can give medication for the pain. People need a lot of comforting and reassurance. They also need to keep the broken part still if it is an arm, hand, leg or foot. This is so that no more damage is done.

Your trainer will teach you ways of keeping the break still while the person travels to the health centre. It is very important to make sure that any ties are not too tight. The blood supply can be cut off if they are too tight. Check the fingers (for arm and hand splints) or toes (for leg and foot splints) to make sure they are still pink. Broken bones may be of different types. They may be simple or complicated. The drawings show these.

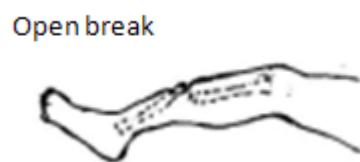
Simple break

The break is closed. The skin is not broken.



Complicated break

The break is open. The broken bone sticks through the skin. If this happens, it must be covered with clean cloths until the person reaches medical help.



Back and neck

A broken back or neck (the spine) is very serious. Usually you cannot tell whether or not there is a break. Sometimes the person may not be able to feel parts of the body e.g. legs.

- It is best to treat the person as if there is a broken spine after falls from a height. Do the same after road accidents.
- If you think this may have happened the person must stay very still. If there is movement, she may never be able to walk again or may die. This happens if the main nerve in the spine is damaged.
- There is a special way of moving this person if you have to move her before medical help arrives. **Your trainer will teach you this skill.**



Rib breaks

These are painful but heal on their own.

1. Do not bind the chest.
2. Give paracetamol.
3. Encourage the person to breathe deeply, several times in a row, several times a day.
4. If the person spits up blood, then refer them to hospital immediately. The lungs may be damaged.

Broken skull

This is very dangerous and the person must be referred at once. You may not know they have a head injury. They may have bruises. They may bleed from ears, or nose. They may become unconscious or have a fit.



They should be kept quiet. If they become unconscious or have a fit, make sure they do not choke on vomit or the tongue (see above).

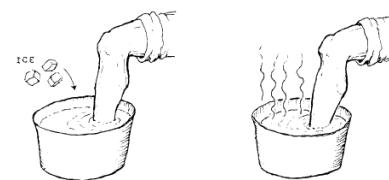
Broken bones take a long time to heal. Children heal faster than adults. Make sure there is good food, plenty of rest and give medicines for pain

Sprains and strains

These are very common when someone twists a joint e.g. wrist, shoulder, foot. The joint will become swollen and painful. It might be hot to touch. It will not usually look twisted.

If the person can use the joint then it is probably not broken. If the person can not put weight on a foot, or use an arm or hand, then treat as a break. The best way of making sure there is no break is an X-ray if this is possible.

- Raise the swollen part up high and rest it until the swelling goes down.
- Keep very cold wet cloths over the swollen joint (ice if available) or soak in very cold water.
- Then use hot water soaks.
- Give paracetamol.
- When the swelling is less, use hot cloths or soak in hot water several times a day.
- A stick or crutch will make walking easier if the foot is hurt.
- Bandage an ankle or wrist to make it more comfortable. Remember the advice above about making sure ties and bandages are not too tight. **Your trainer will teach you this skill.**



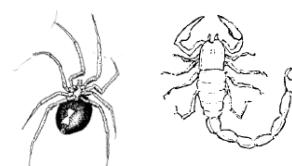
Stings and bites

This section looks at stings and bites from insects, scorpions, snakes, and other animals.

Stings - What to do

Stings can come from scorpions, some spiders, some plants, bees and other insects and caterpillars. Some can be very dangerous as well as painful. People may become shocked or have problems breathing.

- If the sting is known to be dangerous, or it is a child or very elderly person
 - take the person to a health centre at once
 - use life-saving skills if the person stops breathing;

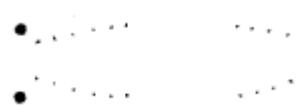


- If not serious
 - put very cold water (or ice if possible) on the sting
 - give paracetamol
 - keep stings clean like any wound as they can become infected
 - scrape the stinger off carefully if the sting is visible e.g. bee stings.

Some people can react badly to stings that are not normally dangerous. This is an allergic reaction. They may become swollen up. They may have problems breathing. Get them to the health centre straightaway.

Snake bites – What to do

Snake bites will look like this. See the fang marks of poisonous (venomous) snakes. Most snakes do not inject venom when they bite. They are not poisonous. The wound should be kept clean.



Some snakes do inject venom. How dangerous a bite is depends on:

- the type of snake. There may just be pain and swelling near the bite. The venom may spread and cause serious illness
- how much venom is injected
- where the bite is. Bites on the head or body of the victim may be more dangerous than on limbs
- the age of the victim. Bites are more dangerous for children and very old people.



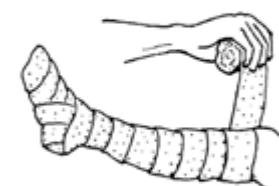
The effect depends on the snake. If the venom spreads, it can cause

- pain and shock
- swelling and blistering
- weakness and paralysis
- breathing difficulties
- bleeding from the gums and bite wound
- rapid or slow increase in problems (even several days)
- sudden death.



For a poisonous snake

- send for medical help or carry the victim to the health centre immediately
- keep the person quiet
- keep the bitten part still to slow the spread of the venom
- take off any jewellery e.g. rings in case of swelling which can happen quickly
- if it is a limb, bandage from the hand or foot upward as far as you can to slow the spread of the poison. Loosen the bandage if the fingers or toes are not pink
- put a splint on the limb to prevent movement



- take the snake to show the doctor if it can be killed safely. Dead snakes can still be dangerous.
- DO NOT put on a tourniquet. This can make the limb die.

Animal bites

Animal bites can become infected very easily. You should

- stop the bleeding
- wash the wound carefully
- cover with a clean dressing and observe for infection daily
- leave the wound open. Do not stitch it up or use plaster strips
- send the victim to the health centre for tetanus immunisation if not already done and antibiotics if needed.

Wild animals e.g. hyenas and jackals may bite domestic dogs or cats and give them rabies. The domestic animal may then bite people. Rabies is a very dangerous illness that usually kills the victim. If you think an animal that has bitten e.g. dog or cat has rabies

- the person will be very worried
- he will have a bite wound
- stop the bleeding
- wash the wound with soap and running water
- use antiseptic, iodine or ethanol on the wound
- give antibiotics
- repeat the treatment every three days
- send the patient to hospital at once if rabies is suspected in the biting animal. The person must be treated if the animal is rabid or he will die. It may be possible to receive rabies injections if they become available.



If not sure, watch the animal. Tie it up for 7-10 days and watch for:

- foaming at the mouth
- refusal to eat
- trying to bite other animals or people
- behaving in strange ways.

Shoot and bury the animal if it seems rabid.

Poisoning

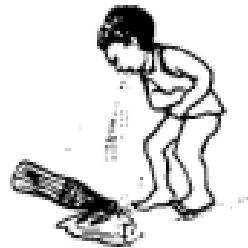
Poisoning can happen in several ways such as by

- eating poisonous plants e.g. children may be attracted to bright berries, or someone harvesting makes a mistake
- taking medicines intended for someone else. They must be kept where children can not get them

- drinking chemicals by accident e.g.
 - someone puts a chemical (e.g. bleach / Jik) in something like a soft-drink bottle. Others can drink it by mistake. Children are at special danger
 - drinking water that has been contaminated with pesticides and weed-killers
 - water that gets in to water sources from factories is poisoned
- breathing in poisons during crop spraying, or eating unwashed crops that have been sprayed.

Some common poisons are

- medicines when too much is taken, or a child takes adult medicine (especially iron)
- rat poison
- insecticides, weed-killers
- poisonous seeds, berries, fruits, leaves, fungi, castor beans
- bleach, caustic soda, disinfectants, iodine
- gasoline, kerosene
- too much salt
- bad food.



What to do if you think someone has been poisoned

- Is the person conscious? If not use the recovery position.
- Is the person breathing? If not, use mouth-to-mouth breathing.
- Is the person awake and alert? If so
 - make the person vomit if he has swallowed non-burning substances like berries or medicines. Do this by putting a finger down his throat or giving very salty water to drink
 - give plenty of water or milk to drink. Give about one cup every 15 minutes. This helps to dilute the poison.
 - Give charcoal crushed in a warm drink if possible.
- Do NOT make the person vomit if
 - he is unconscious
 - he has swallowed burning fluids like acid, caustic soda, kerosene, gasoline
- Make sure the person stays warm.
- Get medical help very quickly if
 - the person is unconscious
 - poisoning is severe
 - the throat or mouth is burned.

Choking and drowning

Choking

Choking happens when someone swallows or breathes in something that sticks in the throat. The person may also choke on vomit. Usually this happens because they are unconscious. The tongue

can also make an unconscious person choke. Choking makes it difficult or even impossible to breathe and the person may die.

Children are the most at risk of choking if they

- are given something to eat that is too difficult for them
- are given fluids or food too fast
- swallow or breathe in small objects.

What to do if someone is choking

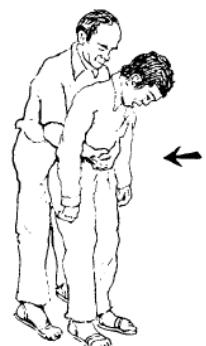
This is a serious emergency. You need to act fast. People die within four minutes when not breathing.

If the person has vomited, put him in the recovery position.



These are ways you can try to make an object come out of the throat or windpipe.

- Can you see the object in the mouth or throat?
 - In the mouth – hook it out with a finger
 - In the throat – leave alone and try the next thing as if you can not see it. DO NOT POKE as this may make it go down further.
- Is the person a small child?
 - Hold him upside down or over your knee and pat him hard on the back
- Is the person an adult or older child?
 - Stand behind him
 - Hold him around the waist and make a fist with your two hands below the ribs
 - Press hard and quickly into the belly and upwards to make him cough out the
 - Repeat several times if needed.
- Is the person unconscious on the ground?
 - Turn him on his back
 - Sit over his body
 - Put the heels of your hands on his belly under the ribs
 - Push upward hard and quickly, repeat if needed
- Has he stopped breathing?
 - Try mouth-to-mouth breathing.
 - GET HELP FAST.



Drowning – what to do

Drowning is a serious emergency too. You need to get out any water and start breathing for them within four minutes of breathing stopping.



- Start mouth-to-mouth, or mouth-to-nose, breathing as soon as

you can and it is safe to do so. Do this even before they are out of the water if possible.

- If the person vomits - turn the head to one side.
- If breathing does not start at once, try pushing on the belly (as above for choking).
- Once breathing starts, leave the person on the side until conscious or while waiting for help.
- Take them to the Health centre even if breathing and conscious. They may still die without treatment.



UNIT 5 HEALTHY ENVIRONMENTS

These are the things you should know and be able to do after studying this learning unit

- Know what a healthy environment is like
- Help communities with making sure water and water sources are clean
- Help communities with making sure there is safe sanitation
- Advise about waste disposal
- Advise about pest control
- Help school children to keep their schools clean
- Help to prevent accidents in the home, school and surroundings
- Help communities to access outside support
- Be a good role model at home and at the PHU post if there is one.

What is a healthy environment?

‘Environment’ means the place around us. This may be the place we live in, work in, or go to school in. It can even mean the place where we get health care. So the PHU post is an environment also that needs to be clean and safe.

People have many different ideas about what it is to have healthy a living environment.

ACTIVITY

What do you think is important for a living space to be healthy?

Most people think that living spaces need to be healthy to make them a good place to live. They might include:

- having low infectious disease rates
- children grow well
- there is good food available that people can afford
- there is clean water
- there is good sanitation
- houses are good
- there is health care available not too far away
- people feel safe
- people live together peacefully.

Why does good housing matter?

People need to know that the place they live in keeps them safe and healthy. Keeping safe is especially important for women and for children. A good house should:

- give shelter from sun and rain.
- be a safe place for people and their property.
- give space and air for everyone.

- be clean.

The best houses have

- strong roofs
- are cool in hot weather
- plenty of natural light and air from high roofs, and windows and doors that open and close.
- mosquito netting over the window openings and any gaps e.g. where the roof meets the walls
- good lighting for night-time
- doors can be secured
- smooth floors. Smooth floors are easy to keep clean and help to keep insects and snakes out.
- smooth walls that are easy to clean.

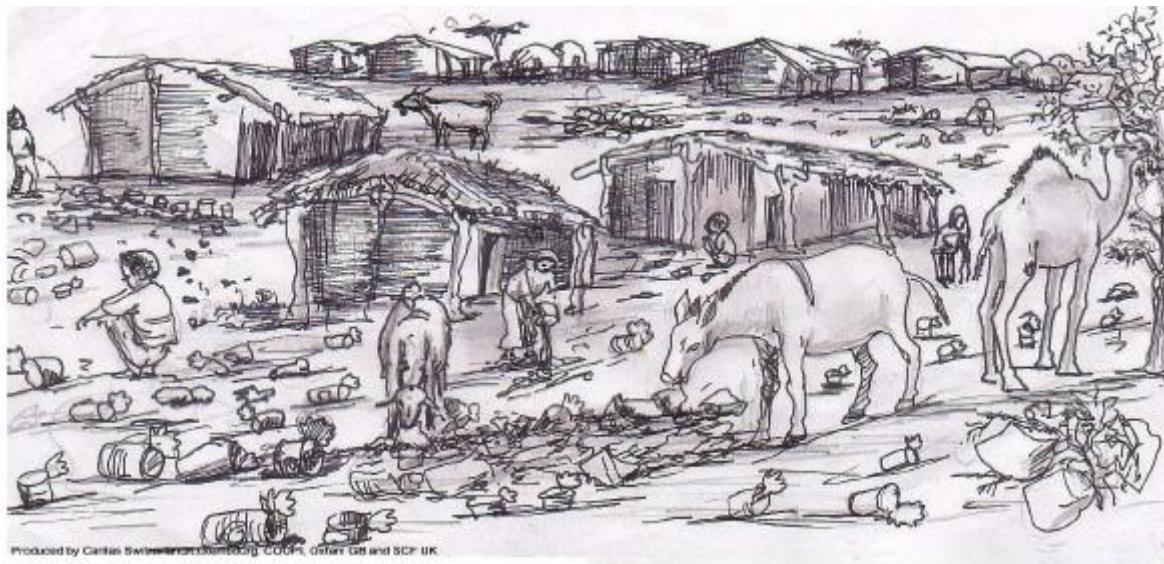


The surroundings are important too. Good houses have

- cleared and clean areas around them with the grass and bushes cut
- safe water sources as near as possible
- safe cooking fires out of the reach of children, separate from the house or with a chimney to stop people breathing in smoke
- clean places for cooking and eating
- places to dry dishes and cooking pots
- family latrines at least 20 metres from the house and 50 metres from the water source
- places for people to wash
- refuse pits at least 10 metres from the house.

ACTIVITY

Look at this drawing below. What would you advise the people who live here to do to make the environment outside their houses more healthy?



Why do the places we live in need to be clean?

People need to have clean places to live in so that they can stay healthy and not get sick. Many people get sick from

- drinking unclean water
- eating unclean food
- human waste (stools) on the ground. Even children's stools are dangerous
- dirt in their houses
- flies, mosquitoes, rats and snails which carry diseases.



You can help them stay healthy by showing them how to

- get clean safe water
- get rid of household garbage
- prepare food in a clean way
- protect food from flies and dust
- build rat-proof food stores
- keep houses clean
- make sure children have safe areas near their homes for play.



You will learn about these in this learning unit.

Barriers to a healthy environment

There are many reasons why people may live in unclean places. There are also many reasons why people do not have clean water supplies and poor sanitation. They may also live with their waste. Sometimes this is because the people are lazy. Sometimes there are other reasons why people live in unhealthy places.

Activity

Look at this drawing of the inside of a house. How could this house be made cleaner and safer for the people who live there?



ACTIVITY

Think about communities you know, or walk around your home village or one near the training centre.

- What unclean things have you seen?
- Why do you think the people live this way?
- How do you think you could help make things better?

You might have listed things like poverty, not knowing that unclean places are unhealthy, no knowledge of how to improve things.

d. You can find out what it is like in your own community. Try answering these questions:

- Water
 - Where is drinking water collected from?
 - Is the water clean?
 - Is there enough water all through the year?
- Food
 - What foods do people eat?
 - Is the food clean?
 - Are the food-stores rat-proof?
- Houses
 - What are the houses made of?
 - Are the walls and floors clean?
 - Are the walls and floors easy to clean?
 - Is there rotten food or human waste on the ground around the houses?
- Latrines
 - Do people have latrines?
 - Where are the latrines?

- If they have latrines, do they use them?
- Do children use latrines?
- If not, are their faeces thrown into the latrine after?
- Rubbish
 - Is there rubbish on the ground or in houses?
 - What do people do with their rubbish?

ACTIVITY

Now think about your own environment.

1. Do you and your family have safe clean water?
2. Do you have safe storage for your food?
3. Is your house clean?
4. Is the ground around your house clean and free of rubbish?
5. Do you bury or burn your rubbish?
6. Do you have a latrine that all your family uses?
7. Now answer these questions again, thinking about the PHU.

Remember you are a role model. People will copy you. If they see you cleaning up they may do the same. If you live in an unclean way they will probably do the same.

Water supplies

We all need water. We need it for

- drinking
- preparing food
- washing cooking pots, dishes and cups
- washing our bodies, washing clothes
- cleaning our houses, the ground and the PHU building if you have one
- giving to animals
- growing vegetables and other crops.

It can be difficult to find safe clean water. Rivers and streams are dirty. Ponds and swamps are always dirty. The word 'contaminated' is used when dirt has got into water. It is difficult to know the difference between clean and dirty water because contaminated water may look clean. Safe water can be contaminated during collection. It can also be contaminated when being transported and stored.



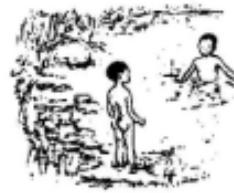
The only really clean water is water from

- the sky when it rains
- the earth when water comes out as a spring.

How contamination happens

Here are some ways in which water can be contaminated:

- People pass urine or stools in water or near its source
- Animals pass urine or stools in water or near its source
- People wash their bodies and clothes in the water
- People throw rubbish into the water
- Bodies of dead animals may get in the water or on the ground nearby
- People put water into dirty containers
- Poisonous chemicals get into the water from farming, or nearby factories and workshops
- Water is contaminated while being transported.



ACTIVITY

What sort of things do you think you need to tell the people in your community?

Why does contamination of water matter? Water-borne disease

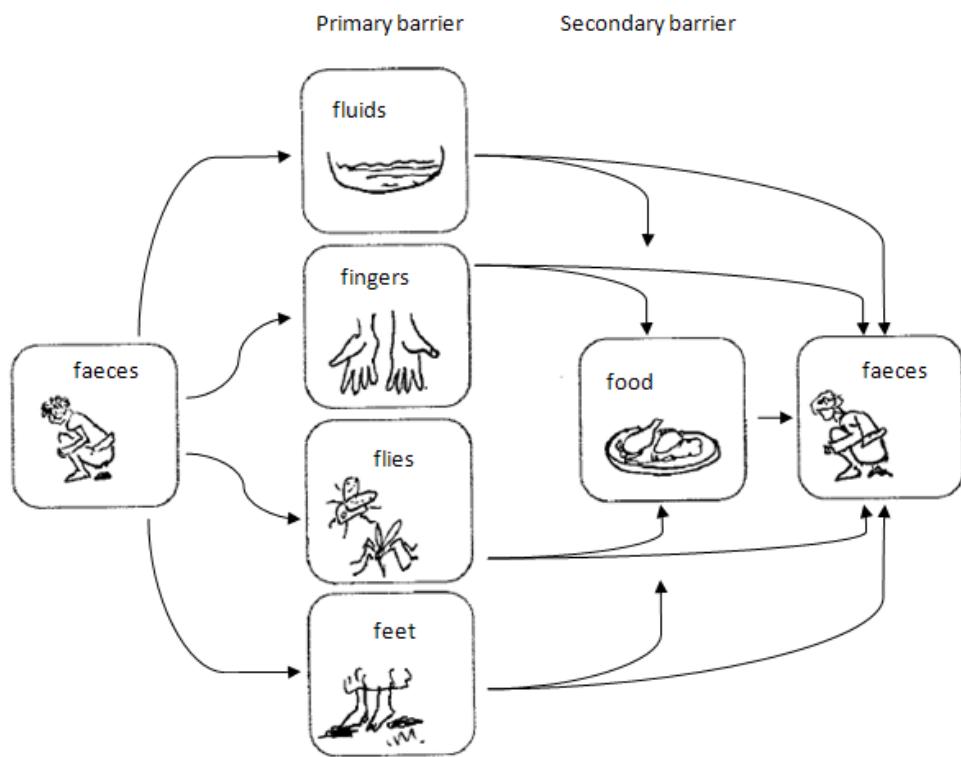
Dirty water is one of the main causes of diarrhoeal diseases. These diseases can make people very ill or even kill them. Young children are the people most at risk. These are the most common diarrhoeal diseases:

- acute watery diarrhoea (shigellosis)
- bloody dysentery
- typhoid
- cholera
- amoebic dysentery

Bilharzia (schistosomiasis) is also spread in water that people have urinated in. You learned about this in Unit 4.



These diseases are all caused by water contaminated with germs from faeces. The diagram below shows how this happens. It is called 'Five Fs' in English because the five important points begin with the letter 'F'. Look at the barriers. Primary barriers are the first chance for contamination to be prevented. Secondary barriers are the second chance to prevent germs getting from faeces to people.



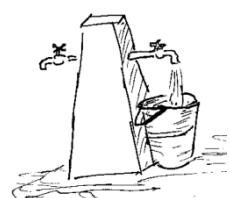
You will learn more about this below when you think about protecting ourselves from faeces.

How can we get clean safe drinking water?

Everyone should drink water that is collected, transported, treated and stored correctly.

The best way of getting clean safe water is from a deep protected well or safe piped supply. This may have a hand pump, or even a wind or electric pump. Electricity can

come from a generator or from the national supply in towns.



Most people in Somaliland do not have piped or deep well water. People in villages can do a lot to make supplies clean. Here are some of the ways.



Protect water from dirt

- Protect the place where water is collected. Build a fence or barrier to keep animals and people out. The place may be a shallow well or deep well.
- Provide a cover and use it.
- People should wash their bodies and clothes downstream if it is river
- Keep animals away from the water for people
 - Make sure animals drink downstream from the source



- Tether animals away from the collection place so they do not defecate there.
- Keep children away from the well
- Make one person or a group of people responsible for keeping the water collection place clean. They should
 - remove mud and refuse
 - check waste water drains away
 - check fences
 - check pumps if they have them and replace worn parts.

Clean the water and make it safe

Here below are some of the ways this can be done.



Boil strongly for 1 minute to make drinking water safe. It will taste better if you shake it in a clean bottle to put air back in. It is expensive because fuel is needed.

Sun method: The water needs to be clear so filter it first if cloudy. Put it into clear plastic or glass jars or bottles and leave in the sun for 6 hours. Leave for 2 days if the sky is cloudy. This works well and is very cheap and simple. A piece of corrugated iron makes a useful holder for several bottles. Remember to take all labels off the bottles.



Use water purification tablets bought from pharmacies. Use 1 teaspoon (small measure) of bleach e.g. Jik in 25 litres or 1 bucket of clear water, or 2 drops in 1 litre. Stand it for 30 minutes.

Use a filter: If the water is muddy or cloudy, allow the deposits to settle out or use a filter. It is a good idea to filter all drinking and cooking water before treating it in these other ways. Remember this does not remove the germs and worms on its own.

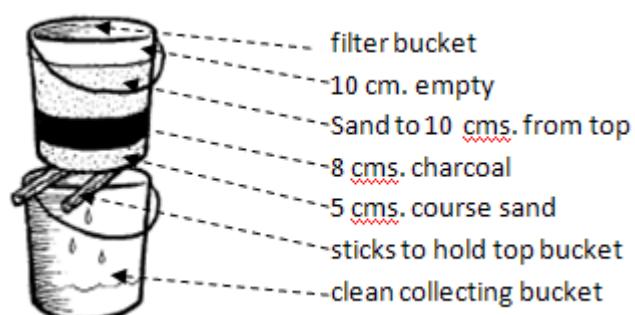


A filter made of cloth will remove some dirt. This drawing shows the simplest type.

Water can be filtered better using simple equipment. Filtering like this will remove many germs and parasites. Here are the instructions below for making and using a charcoal filter.

How to make a charcoal filter for water

This filter is easy to make and use. It removes most germs and parasites from small amounts of water.



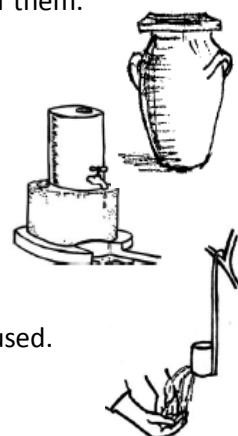
You will need 2 buckets, a hammer, 1 or 2 large nails, a bucket of coarse sand (not sea sand), a quarter bucket of wood charcoal.

What to do:

1. Make small holes in the bottom of one bucket using the nails and hammer. This will be the filter bucket.
2. Wash the sand by rinsing it in clean water until clear. Let it drain.
3. Put a layer of washed sand 5 cms. deep into the filter bucket.
4. Pour water over it. Water should run through the holes
 - If no water runs through, make the holes a little bigger
 - If sand runs through, remove the sand, put a layer of cloth in the bottom of the bucket, then replace the sand.
5. Crush the charcoal into small pieces. Place a layer about 8cms. deep on top of the sand.
6. Fill the bucket to 10 cms. from the top with more sand.
7. Place two sticks on top of the collecting bucket and stand the filter bucket on top.
8. Pour water through the filter until it runs clear into the collecting bucket. The filter is now ready to use.
9. It is best to let the water stand before filtering it to allow the worst of the dirt to settle out. The filter will work better and last longer.
10. It is safest to use other methods to take the last germs out from the filtered water e.g. boiling or using sterilising tablets.
11. Germs from the unfiltered water will grow on the charcoal. So remove and clean the charcoal every week or if the filter is unused for several days.

Keep drinking and food preparation water safe at home

- Keep water in the containers it was treated in if possible provided it can be covered tightly.
- Cover containers so flies can not get in and animals can not drink from them.
All water must be in clean, sealed containers.
- Containers with taps are best.
- Scrub out water containers often with soap or burn them out.
- Narrow-necked bottles are difficult to clean. An old way is to use grass and water and shake the bottle well.
- Replace drinking water daily.
- Pour water out or use clean ladles to take water out of water pots.
This is safest. If there is no ladle, a clean dipper and clean hands can be used.
- Teach children how to take water safely from containers.
- Do not share cups or glasses when drinking.



It is important to remember that water from safe, protected sources can become unsafe again. It can be contaminated through unsafe storage and poor ways of using it. Household water treatment and safe storage is very important.

Wise people look after water in the ground, at the collection point, and in their homes.

Five golden rules for safe water. Always

- avoid urinating or passing faeces near water sources.

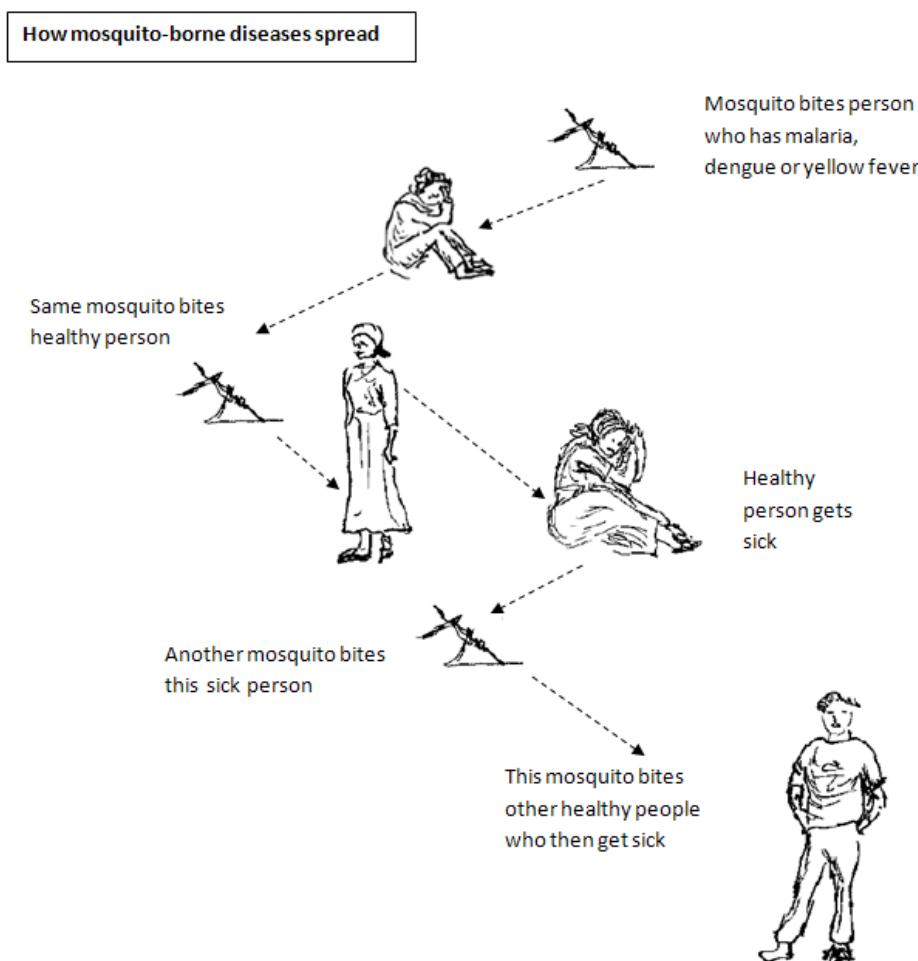
- keep animals away from water collection points and sources.
- treat drinking water properly to destroy germs and parasites.
- keep drinking water in a clean covered container
- wash hands with water and soap or ash
 - before preparing food
 - before eating food
 - before feeding children
 - after defecating
 - after touching the nappies or faeces of babies, or faeces of someone you are caring for.

Water and prevention of malaria



Malaria is caused by a small parasite. The parasite lives in a mosquito called the anopheles mosquito. Parasites are injected when the mosquito bites. The mosquito starts its life in water as a tiny worm called a larva. Mosquitoes can not develop without still or very slow-moving water. This is often called stagnant water. You will learn later in this Unit how to control mosquitoes.

This drawing below shows how malaria parasite spreads from person to person.

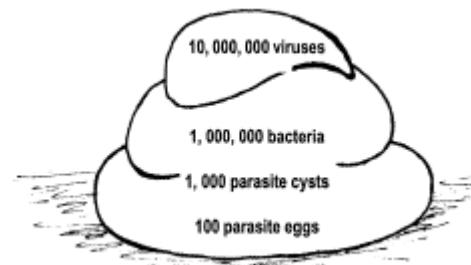


Sanitation

Human waste is dangerous. A key message is that everyone must use a latrine including for the disposal of children's faeces. There must be no open defecation.



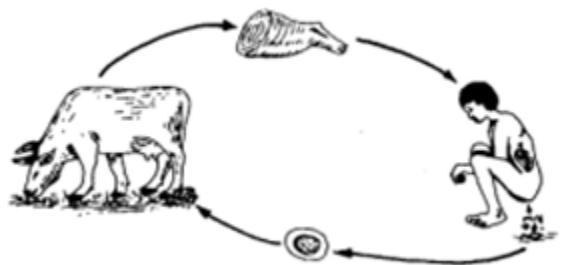
Why is human waste dangerous?



Human waste is the urine and stools passed by human beings. It is the waste material the body can not use. Human waste has germs in it so should not be left

around. It may also have parasites in it that other people can catch.

Healthy homes should get rid of human waste in clean ways.



It is very important to explain the dangers of human waste to your community. Helping your community make these changes is one of the most important things you can do. Teaching children to do this is also very important.

Human and animal waste, flies and food should never mix. This is how germs and parasites are passed around. The biggest enemies are faeces and flies. Look back at the diagram above that shows (in English) the Five F's of hygiene. It shows how germs from faeces are carried to people's mouths.

We need to dispose of waste carefully to make sure we keep flies away from faeces and from our food.



We need to be careful about hand washing after using the latrine, before preparing food or eating.

How can human waste be disposed of safely?



Human waste should be passed in latrines. Pit latrines are good if properly placed, designed well and kept clean.

Flush toilets are best but this is only in places where there is plenty of running water. Latrines and flush toilets must be kept very clean. The floors need to be swept and washable areas cleaned with water. Surfaces should be cleaned with bleach (Jik) if possible. Dilute 1 part of Jik to 9 parts of water.



Every household should have a latrine (or flush toilet). So should every PHU building and every school. Schools need one latrine for every 25 pupils. School children can be taught about hygiene using the CHAST approach. You will learn

about this in Unit 7.

People who work in the fields and need to pass faeces should be advised to dig a hole and cover them well with soil. This stops people treading in the faeces. It also stops flies from spreading germs from the faeces. This is the same for when children pass faeces on the ground. Their faeces should be buried far away from houses and water sources if not put in a latrine.



ACTIVITY

1. Walk around your village or one near the training centre.
2. Make a map of where latrines are placed.
3. Now add water sources and collection points.
4. Are these well-placed or are they too near each other?
5. Ask the women if these are in the right places for them to use easily.

Guidelines for the safe disposal of faeces

Safe disposal of faeces can be made into six main recommendations:

- Do not urinate or defecate in the open.
- Always dig a hole and cover it if defecating outside.
- Children should defecate into a chamber pot or near the latrine. Then dispose of the faeces in the latrine.
- Bury children's faeces at least 80cms. deep if there is no latrine.
- Never defecate into water, ponds, streams or dry gullies.

Why is hand-washing very important?

Hand washing is one of the most important healthy living activities. A key message is '**Everyone must wash their hands with water and soap or ash**'

- before preparing food
- before eating food or drinking
- before feeding children
- after defecating or touching faeces from others including babies or their nappies.

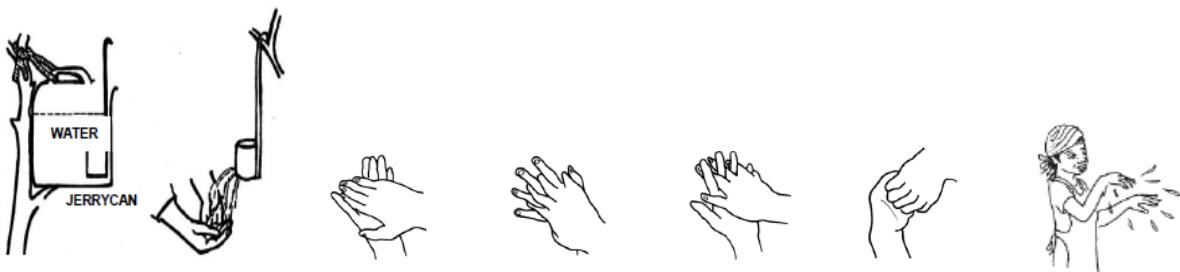


After people pass faeces they will have germs on their hands from the stool and from their bodies. If they do not wash properly the germs will stay on the hands. Next time they touch food, a person or an object they will pass the germs on. Touching and swallowing these germs can make people very ill, especially children.

Pots or used cans can be used to pour water over the hands. Soap should be used if possible, or even ash. It is a good idea to put water and soap or ash outside of latrines. Hang soap on a string to stop it falling in the dirt. You learned about proper



hand-washing in Unit 4. These drawings will remind you.



ACTIVITY

In your groups:

1. Prepare demonstrations of proper hand washing.
2. Demonstrate this to the other groups.
 - Listen to comments from other trainees on how well you did your demonstration.
 - Was it clear?
 - Would village people understand it?
 - How could you do it better?
3. How could you find out how much community members had understood?

Siting and building safe latrines

Latrines need to be

- downhill and at least 30 metres away from water supplies
- dug at least 2.5 metres deep
- be closed once the level reaches 1/2/metre from the top
- have
 - a slab cover, concrete if possible
 - with a hole in the middle large enough to pass urine and faeces without risk of falling in
 - easy to clean floor, walls and door
 - a separate broom and bucket is used for cleaning with bleach or ash
 - water for washing, or paper or leaves for cleaning the anal area should be in the latrine
- Water and soap for hand washing is outside.
- Separate latrines for men and women in public places e.g. markets and schools.





Privacy, dignity and personal safety for women and girls

Most women and girls want privacy when using latrines and when washing. They may not want to be seen entering or leaving a latrine. They may also be worried about their safety especially if they need to use latrines at night. When deciding where to dig a latrine, it is important to think about their safety and their dignity. The fence around the latrine can be designed to make it private, or some sort of closing door or gate can be provided.

How can food be protected from dirt and germs?

Clean food is very important for preventing all types of diarrhoeal diseases.

- Food must be prepared and eaten with clean hands. Wash hands before preparing the food or eating it.
- Cook meat and eggs properly. Under-cooked meat can carry parasites and both can carry germs.
- Eat cooked food as soon as possible. Cook enough for one meal at a time.
- Store dry food in containers that keep mice and rats out.
- Cover food to protect it from flies. Flies carry germs on their feet from human and animal faeces they have visited. Perhaps have a cupboard with a screen to protect food from flies.
- People who are sick or have sores on their hands should not prepare food for others. They may pass the illness on.
- Keep cooking pots, dishes and spoons clean. Wash them carefully after using them. Dry them in the sun away from where animals can touch them including rats and mice.
- The traditional ways of burning or smoking out food containers can help to avoid contamination of food.
- Do not eat seeds and grains that are bought for planting. They may be dirty and may have poison on them from insecticides or fertilisers.



The way food is stored is very important.

- Make sure rats and mice cannot get to food. Store it in containers they cannot get into. Remember they can chew holes in many containers e.g. plastic and wood. Metal tins or clean drums with lids are good.
- Large quantities of food are stored in special grain stores in some places like the one in the picture below. These keep out rain as well as pests.
- Pits dug in the ground can be used for grain e.g. millet and maize. Lining pits with ash helps to keep out pests. The heat will stop weevils from developing.



- Preserve food so it does not go bad. Drying is the best method of preservation. Vegetables, fruit, fish, meat and grains can be dried in the sun. They can then be eaten later when fresh food is not available. Make sure flies are kept away when drying food.

People who prepare food for others must be very clean, clean clothes, clean hands, clean utensils, clean preparation area, clean kitchen, clean food storage. This includes shopkeepers, butchers and fish-sellers as well as the person preparing the family food.

Personal hygiene

It is important for men and boys, women and girls, to keep themselves clean.

- Most people like to have full body wash every day.
- The anal area needs to be kept clean using water and soap or ash;
- Men and boys should be taught to keep their genitals clean.
- Women and girls should be taught to
 - clean the genital area with clean water or clean cloths from the front toward the back. This helps to avoid infections e.g. urinary infections
 - wash frequently when menstruating
 - change protective menstrual cloths or sanitary products frequently and burn them.

Refuse disposal

What is dangerous about refuse?

Refuse can be dangerous.

- Food and human waste can cause infection, especially diarrhoeal diseases.
- People and animals can injure themselves on sharp refuse like tins and broken glass. Flies and rats are attracted to food refuse.
- Refuse looks bad and encourages people to leave more refuse around. People are more likely to keep the area clean if it is obvious that the community cares about it.
- Animals might eat refuse and be harmed. Plastic bags can cause an animal's death.

Methods of safe disposal

Disposal facilities need to be away from houses, schools, markets and the PHU building. It is important that the environment is not harmed.

A pit is needed for burning of refuse. Children should be kept away from it. A fence is good.





Refuse that will not burn, like tins and glass, should be buried where no-one can tread on it and injure themselves.

Used dressings and bandages from the PHU must be burned as they are very dangerous. All CHWs should have good facilities for incineration. Special facilities may be constructed for a PHU building.

Pest control

Animals and insects can carry disease to people. These are called 'vectors'. These are some of the common vectors and why they cause problems:

- Flies carry germs from faeces to food. They may also carry germs to eyes, the mouth or open wounds when they land on them and cause infections.
- Mosquitoes carry malaria and dengue fever to people.
- Cockroaches carry diseases on their bodies.
- Rodents e.g. rats and mice infect and destroy food. Rats also carry fleas which can pass the plague on when they bite people.
- Fleas, lice and bedbugs cause itching and scratching of bites that can then get infected. Some people may be allergic to them.
- Ticks suck blood and carry tick fever, relapsing fever and typhus.
- Snails in water carry Bilharzia (also known as schistosomiasis).

Snakes and scorpions do not carry disease but may have poisonous bites or stings.

How can these pests be controlled?

Flies:

- Keep refuse and human waste away from houses and food in latrines (see above).
- Always cover food.
- Wash face and hands regularly. Children's faces should be washed after eating.
- Keep animals e.g. goats and chickens away from houses.



Mosquitoes:

- Use insecticide-treated mosquito-nets. Cover arms and legs in the evenings
- Treat anyone with malaria and get rid of any still water where they breed shown in the drawing below e.g.
 - uncovered water containers (cover them and scrub them weekly)
 - ponds and bogs (fill them in)
 - buckets, old tyres, old tins (bury or cover them)
 - puddles and small pools that stay around after it rains (fill them in with dirt)
 - long grass near houses (cut it)
 - if taps or wells leak water, fix them
 - if water runs away from the well, build a soak-away pit filled with stones and rocks to collect it. Keep drainage ditches clear.





Cockroaches:

Cockroaches live in dark places in houses and stores. Keeping them out of houses is difficult but filling gaps and holes in walls may help. Also

- cover food
- clean up water drips and spills that may attract them.



Lice:

Lice live mainly on dirty bodies and clothes. People can control lice by

- washing their bodies every day and checking them for lice
- washing clothes and bedding often, drying them in the sun to kill lice and their eggs
- avoiding close contact with people who have lice
- put lice powder in bedding.



Rodents:

Rats and mice can be controlled by

- storing grain and food in rat-proof jars or tins
- clearing grass and bushes near houses to destroy hiding and breeding places
- filling holes and gaps in houses with stones and earth
- using traps if available. Put them in places where other animals cannot get injured in them.



Fleas:

- Animals should live in separate shelters from people if possible or wash them every week
- Keep the house clean
- Fill in cracks and gaps where fleas can hide.



Bed-bugs:

- Put bedding in the sun every month
- Spread insect powder in beds and cracks in floors and walls to kill adults and eggs.

Ticks:

- Keep areas near houses clear of weeds and grass
- Check for ticks after walking in grass
- Keep animal bedding clean or replaced often
- Insecticide sprays can be used around houses.



Water snails:

- Discourage people from urinating in water.
- Discourage people from swimming in infected water, or standing or bathing in it longer than they have to.



Healthy villages, markets, schools and health facilities

It is just as important that markets, villages, schools and health facilities are clean.

Villages also need

- clean and protected water sources
- clean PHU
- clean market
- latrines at market places, schools and PHU. A market latrine should be at least 20 metres from the market, and 50 metres from the water supply
- clean food in schools. The people preparing school food should be as clean as when preparing home food.

In public places such as markets and schools, food needs to be protected from flies. Rubbish should be collected every day and burned in a pit outside the village. Waste food will attract rats and insects.

Food stalls in markets should be inspected and so should butchers shops and places where animals are slaughtered for meat. The animals and the meat should be inspected. Butcher's knives and hands should be washed frequently each day. If an animal for slaughter is tied up to a tree, then people can see how healthy it is before it is slaughtered.

The role of community health committees

Community health committees have a very important role in improving the health of places people live in. CHWs can work with the committees to promote good health and make changes. Some ways committees can help are:

- Supporting you in educating people about how to keep the places they live in healthy.
- Developing new water sources that will last for a long time. This is called 'sustainability'.

- Campaigning for people's rights to clean and reliable water sources.
- Organising cleaning and clear-up campaigns.
- Organising the digging of pit latrines and building shelters.
- Organising the digging of safe refuse pits.
- Making sure people take responsibility for cleaning around water sources, latrines etc.
- Repairing broken equipment e.g. water pumps if you have them.
- Find ways to save water.
- Encouraging groups e.g. women's groups or farmers' groups to work together.
- Getting help from outside agencies.

It is very important that the whole community is included in planning for a healthy environment. It is particularly important to involve women in making decisions. If you leave women out, children and the whole community suffers as well as the women themselves. It is very often women who

- teach children how to use water and latrines
- take children to latrines
- clean the latrines and water sources.



UNIT 6 COMMUNITY ASSESSMENT AND DEVELOPMENT

These are the things you should know and be able to do after studying this learning unit:

- Get people interested in improving the health of their community
- Work with the health centre staff to
 - look at the health needs of your community
 - work out what is needed with your Community Health Committee
 - seek help from agencies where available
- Help to make changes.

How can you get people interested in improving the health of the community?

The first thing to do is to talk to people. They will usually know what is good about their community. They will also know some of the things that could be made better. You may have some good ideas yourself about what need to change. You will persuade people to listen to you better if you listen to them first. It is very important that you involve the people and the Community Health Committee from the start. It is important to use the support of health centre staff and your supervisor or manager.

If you do not already have a Community Health Committee you could help to start one.

ACTIVITY

Who do you think would make good members of the Community Health Committee?

A good group might be made up of

- representatives from important groups of people
- people who have a special job in the community
- the head or leader
- a religious leader
- a school teacher
- a woman and man chosen by the people just because they are respected
- traditional birth attendants if you have them
- other CHWs and yourself.



It is important to have good representation from women as well as men. You could also include representatives from the younger people in the community.

This way everyone has a fair chance to give their opinions. It is also important that people are included not just because they think they are important. It is important that people who are on the

committee are well-respected and are good role models. Without this, no-one will want to cooperate with the community projects they choose.

It is a good idea to invite a nurse or midwife from the health centre to some meetings. They can advise on health issues and tell the CHC what help is available. Other people with special knowledge and skills who can help might be WATSAN or agriculture specialists.

It is important that

- the CHC plans and agrees the work
- the people in the village should do the work.

If people are involved all the way through they will be happy that the effort is their own. The project is more likely to be successful if people own it themselves and can see what they have done well. It is not helpful for people to believe that the project belongs to the CHW or an outside agency.

The CHW role is to:

- explain what community development means
- help to organise the CHC if it does not already exist or does not work well
- give them ideas about what can be done
- ask for help from people who know more about a topic e.g. water and sanitation, or growing crops, or caring for animals.

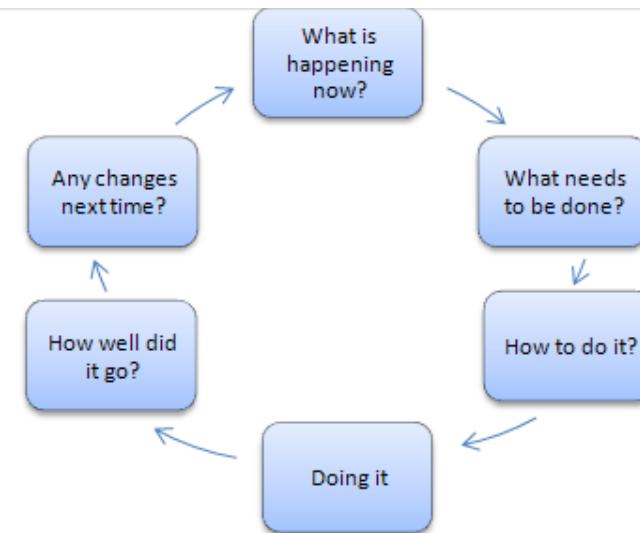
Many communities have never thought about doing things for themselves. They may think making changes is the role of the government, or of NGOs. You can help them to see that it is possible to have things like

- better food if they use good farming methods
- clean homes and healthy people if they have good latrines and use them
- safe water by digging wells and looking after them
- schools and a secure shelter for the CHW by building and maintaining them
- roads to make getting places easier.

Planning and development

The whole process of planning and development is like a cycle. It is like a 'cycle' because you go through a process and back to the beginning. It is often called an 'action cycle'. You can see this on the next page.

1. You start by looking at what is happening now (*assessment*).
2. Then you decide what needs to be done (*diagnosis*).
3. Then you plan how to do it (*planning*).
4. After that you carry out the change (*implementation*).
5. Once the change has been carried out you need to decide how well the project went (*evaluation*).
6. Lastly you decide whether things should be done differently next time.



Community assessment and diagnosis

It is important that you understand the community and what is important to them. So the first step is to find out all you can about

- what people think is important
- how they like to live
- what facilities they have
- how they would live if they could do so
- what facilities they would like if they could have them.

Remember, doing all this WITH the community is better than doing it FOR the community

Community assessment means looking at what the situation is already in the community. Community diagnosis means deciding what is needed. To do these steps you need to go through the assessment and diagnosis process:

- deciding on what information you need
- collecting the information
- recording the results
- deciding what the results mean
- identifying problems and issues
- presenting what you have found out to the CHC.

It might help to think about the ‘human needs’ triangle you learned about in Unit 4. This will help you to ask the right questions.

To get started, let us look at steps 1-6 of the action cycle above.

Assessment

There are different ways you can carry this out. The important thing is to get people talking and interested. It is also important that everyone has their fair share at saying what is important to them. The methods need to be interesting and fun. Here are some of them:

Talking: Just talk to the people and the CHC about their needs. Make sure different groups, young, old, men, women, young people, children are involved.

Transect walk: Ask people to walk through the village with you. Together, observe what people do and where they do it. Talk to them about what they do, and their needs and priorities.

Daily activity charts: How do people spend their days? This could show times when people are at extra risk e.g. women collecting water or children walking to school in the dark. It could show the difficulties people meet if the PHU is only open when they are busy cooking meals or going to the fields.

Problem ranking: People list their problems – perhaps 6 to start with. Then everyone works together or in small groups to put them in order of importance.

Seasonal calendar: Ask people to describe or draw what they do at different times of the year. They can draw on paper or on the ground, use sticks and stones or other objects. They can show times when, for example,

- they are extra busy
- more people are sick
- tracks or roads are impassable etc.
- there is no CHW or TBA, or the health centre is closed.

Diagnosis

The CHC should meet with you to decide what needs to be changed. It might be something that will happen slowly like encouraging more children to be immunised. It might be something the people can do themselves like build latrines in a better place. It might be something where outside help or advice is needed e.g. digging a well and installing a pump.

It is probably best to start with something fairly easy, and something that will help a lot of people. It is even better if the village can do it for themselves. This helps people feel they have worked well together and done something useful to them all. It motivates them. It helps them to see they can be independent. They do not always need to rely on others.

Planning

Setting objectives

The first important step is to decide on what the solution is to the problem or diagnosis.

The next step is to decide what needs to be achieved, how, and by when. The people involved need to set some objectives. Objectives can be SMART. This means they are:

Specific	Exactly what needs to be done e.g. build two new pit latrines
Measurable	It is possible to measure or count what has been done
Achievable	It really can be done and finished
Relevant	It matters to people
Timed	A time is set in which it will be done

Here is an example of a SMART objective where the diagnosis is that the old latrines are in a bad state and too close to the well:

'By the end of three months, six volunteers from the village will dig two new pit latrines 50 metres from the well and put up shelters'.

What skills and resources does the village have?

- Do you have all the skills you need? Can you do this yourselves or do you need outside help?
- Do you have the resources you need? Or do you need outside help? How are you going to find the materials you need? How are you going to raise money if it is needed? Who will do the work? Who will supervise the work? Can you help each other e.g. taking over each others duties like child care, feeding the animals or watering the crops while someone works on the project?

Making detailed plans

Everyone involved needs to know just what they need to do. They also need to know who is coordinating and be happy with the choice. Planning how to gather resources is important e.g. cement or wood for building, tools for digging and making the shelter.

There is a good way of thinking about your plans. This is called SWOT analysis. You think about the:

Strengths	What is good about the plan?	e.g. everyone wants it to happen
Weaknesses	What could cause difficulties?	e.g. you are planning to do this in the heavy rains
Opportunities	What could make it easier?	e.g. the community has saved some money already, or young people are home from school and can help
Threats	What may damage the whole idea?	e.g. some people are against the idea, or there is to be a road built through the village

Implementation

Doing the work! Carrying out the plans. Keep watching though that the plans are being followed and people are working well together. It is better to realise now that the pit is too shallow or too close to the well than to wait until it is all finished. It is better to spot now that two people are refusing to work together than wait until they go on strike!

Evaluation

Everyone involved needs to be involved in deciding how well the project went. You might want to think about:

- Were the plans good ones?
- What was best and what was not so good?
- Was anything forgotten e.g. no-one thought about buying cement?
- Did you meet any problems you had not thought about e.g. the diggers found water or met a rock layer as they dug down?
- Did people work well together?
- Did the other community members and the CHC support and encourage the workers?

- Are there any groups that raise issues e.g. are the people who clean the latrines happy that the surfaces are hygienic? Are users happy that the latrine is safe for them and their children to use?

Overall, what worked well, what did not? What lessons have you all learned?

Future plans

What is your next priority?

You learned some lessons from the evaluation of the project. How will you use these with this next community project, will you do anything differently?

ACTIVITY

You will probably do a community assessment activity as part of your course when you are back home. You can try out some ideas first in your training group.

1. In your group, ask your fellow trainees what the most important issue is for their own villages. You might choose one issue each or more, perhaps three. It is best to set a limit!
2. Decide on some interesting ways of getting people talking and providing ideas.
 - One way of trying this would be to write or draw the ideas on pieces of paper
 - Sort them out in piles, one issue for each pile.
 - Count how many pieces of paper are in each pile.
 - Decide which issues are the most common and which are the least common.
 - You could get everyone to use pieces of paper that are of different sizes. Use one set for each community. You could cut out different-sized circles.
 - Use bigger pieces or circles for important issues, smaller pieces for less important ones.
 - Lay the pieces out on a flat surface.
 - Decide together how similar the issues and priorities are for each of your communities. Or see how different they are.
 - Think about these issues and the priorities. If they are different, why is this? If they are similar, why is this?

Understanding how your community works

It is important that you understand how your community works. You need to understand how people communicate and work together. You need to understand who holds the power. This may not be only the chief or religious leader. Knowing this will help you work with people better and use these groups for community projects. This activity will help you think about this.

ACTIVITY

1. Make a list of the groups in your community. There might be a Community health committee, a religious organisation, a farmers' group, a WATSAN group, a women's forum, a leaders' council, a youth group, a football club, a market traders group. What else is there?
2. List places like schools and the PHU and the people who run them.

3. Who talks to each other? Does the teacher talk to the leaders? Does the women's forum talk to the WATSAN group? Do the leaders talk to the young people?
4. Who is the most powerful person in each group? Do they talk to other leaders?
5. Do the same people control several groups? Are there a small number of powerful people involved in a lot of things. Does the same person always get chosen to lead or to do things? Why do you think this is so?
 - a. Are they very popular people – everyone likes them?
 - b. Are people of the community scared of these powerful people so always choose them?
 - c. Are they wealthy people who will always help with their money?
 - d. Are these the people those who can be relied on to get things done?
6. Decide how you could help people to work together.

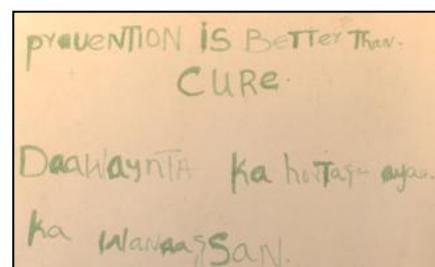
UNIT 7 HEALTH PROMOTION, EDUCATION AND COMMUNICATION

This learning unit links strongly with Unit 6.

These are the things you should know and be able to do after studying this learning unit:

- Understand the meanings of health promotion and health education
- Understand the local culture and how it affects what you do
- Understand the meaning of behaviour change
- Be a change agent
- Discuss important issues for behaviour change
- Use good skills of communication including for sensitive issues
- Understand barriers to communication and behaviour change
- Use the ‘stages of communication’ idea in planning health promotion and education activities
- Use different ways of promoting health
- Work with Community Health Committees and health centre staff for planning health promotion and education
- Work with different groups in communities to plan, carry out and evaluate activities
- Use ready-made teaching aids and make your own.

This Learning Unit is important because prevention is better than cure.



What do these words mean?

Health promotion and health education: These are so closely linked that it is often difficult to tell the difference.

- Health promotion is encouraging people to understand the importance of healthy living. It involves helping them to develop the skills to make change. This is called ‘empowerment’.
- Health education is giving information so people can understand. It also means helping them to find information for themselves.

Behaviour change: This is the reason for health promotion and education. It means

- understanding why a change is needed and making that change.

Communication: This is part of being a person – that we communicate with each other. It is essential for carrying out health promotion and education, and for behaviour change.

- Communication is the way we exchange information, ideas and how we are feeling.
- Communication happens in many different ways, listening, talking, hearing, looking, touching, even the way we move.
- How we communicate may vary between different groups of people.

'Information, education and communication' is a phrase that is often used as well. It is often called IEC. IEC combines all these meanings we have looked at already.

This shows how important it is that people have help to understand information they are given. They may need help too with information they find themselves. It shows the importance of communicating well when we want people to think about their health.

Community mobilisation: This is about getting people to change, but with the change coming from among themselves. They are not told to change. They are helped to develop the knowledge and understanding to motivate themselves. The community develops its own aims and targets, looks at problems and solves them. This is far more sustainable. They are more likely to continue with this long-term than if change is imposed.

There are many reasons why people do not change what they do to protect their health. We will look at most of these later. First we will look at communication, as getting this right can help us succeed. We may fail if we get it wrong and do not communicate in good ways.

An important note to remember at the beginning of this Learning unit

You are not alone in working on communication and the other activities described in this Learning unit. You should be planning and carrying out activities with the support of the health centre staff, or other agency staff.

Important issues like communication for behaviour change around child immunisation will be at the centre of everyone's efforts. There may be local outreach campaigns that you will link into. There may be national campaigns e.g. for encouraging people not to practice FGM on girls. What you do should always fit with the bigger efforts and activities. If you 'go it alone' you may do harm to national and local campaigns.

You need to use the same message, in the same way. What you do needs to be timed to fit with what others are doing. You are much stronger together than you are alone.

Communication

How do people communicate?

ACTIVITY

1. Think about how you communicate in these situations. Then think about whether this is good or could be better. Think about why you communicate this way in these situations:
 - You want to tell someone they have done well.
 - You want to chastise your child for running off in the market.
 - Your sister is angry with you because you have shouted at her son.
 - You want to ask your husband or wife to do something for you.
 - You have to send a message to the health centre about a sick child.

- You talk to the Community Health Committee because you are worried about the number of children getting diarrhoeal diseases
 - One of your mothers wants to give porridge to a newborn baby.
2. Now think about how you show the emotions below. Act them out in twos in your group.
- anger
 - pleasure
 - worry
 - disgust
 - fear
 - excitement. You can probably think of many more.

Do you show these emotions when talking to a client?

Should you show the emotions or should you hide them?



- Now pretend you are angry when you tell the mother about the dangers of giving porridge.
 - What does it feel like for the person pretending to be the mother who receives this communication if the CHW shows anger?
 - How does this person respond to you?
 - How do you think the client may respond to you?
 - Try acting out a better way.
3. Now: in your group, think about the different ways people used to communicate in the past in Somaliland. Try listing them.



These activities will remind you of the many ways we communicate. It will also get you thinking of how we need to communicate in the right way. We need to think about how we speak, how we talk, how we look at people, how we move. We also need to think carefully about how well we listen and pay attention:

- Do we listen while doing something else at the same time?
- Do we talk to one while listening to someone else?
- Do we try to walk away?
- Do we move our bodies impatiently?
- Do we avoid looking at or listening to the person we are talking to?

Good listening is very important. Here are some Do's and Don't' of listening in the Table.

Do	Don't
Avoid physical barriers between you	Sit behind a desk or table
Keep a respectful distance	Get too close
Show interest	Lose interest, show boredom
Use good body language: eye contact, smile, gestures, nodding, leaning forward	Use disrespectful or dismissive gestures, avoid the person's eyes
Be understanding, show empathy	Be unsympathetic , or dismiss ideas or concerns
Listen for the reasons for what is being said	Argue
Talk in turn or when asked	Interrupt
Ask questions that need proper answers	Ask simple 'yes' and 'no' questions
Listen to the answers	Ignore answers to questions
Stay silent if necessary	Talk more than you listen
Listen for hidden causes of a problem	Make up your mind or jump to conclusions too soon
Give advice only if it is requested	Feel you must always say something

An American writer called Mark Twain said "If we were supposed to talk more than listen, we would have been given two mouths and one ear".



Some of the things we have discussed are called non-verbal communication methods. Non-verbal methods can say as much as verbal ones, but without words! Just think about a time when you knew that someone who was saying something to you was lying or was bored. How did you know?

I expect you used observation skills. You were watching and deciding what the person really meant as he talked. He may not have been thinking quite what he was saying. Good observation skills are also important to CHWs. With good observation skills, CHWs can learn how well their messages are being received and understood. They can discover people who don't want to listen or who cause trouble. They can find the people who are not confident enough to speak. They can spot the person who wants to talk to you alone.

Somali ideas about ways of communicating.

In the traditional Somaliland society, messages were passed by word of mouth. This might have been about grazing land for livestock, opportunities for finding water, about harvesting, about security. This helped the whole community to act appropriately and work together. This was vital for survival. As well as just telling, communicating may involve singing, dancing, poetry and stories.

The CHW role as communicator

The way you communicate health messages is as important as when messages are passed on that are needed for the survival of the family, village or clan. You need to communicate good messages as clearly as you can. This is one of your most important responsibilities and skills. Communicating well is essential for fulfilling your role as a change agent. If you do not use good communication skills, or your attitudes are not right, people may:

- fail to understand the message properly



- refuse to believe you
- think it is not important
- think you are treating them like children.

Methods of communication for CHWs

CHWs may use many different methods of communication when doing health promotion and education. We will learn about some of these in more detail later.

You may need to

- give talks
- show posters and drawings
- make these yourself or borrow them
- get people talking together and listening to each other
- help them to learn by asking them questions
- encourage them to ask you or each other questions
- demonstrate practical tasks and skills
- ask people to join in dramas and role plays, stories, songs, poetry, dances
- use mass media: radio, TV, videos, newspapers, magazines
- use printed materials e.g. leaflets (in Somali and with pictures).



Talking to people can be in a large or small group, or one-to-one. One-to-one can be the best when you need to find out about the worries people have but it takes more time. You are more likely to find out the barriers they expect to meet. Many people will not share worries in public.

Group discussions can be very useful so that you can hear the views and concerns of many people. They can also share ideas and hear each other's views. One way of doing this is through a method called 'community conversations' or 'dialogues'.

Community conversations¹

Community conversations help people to discover what they care about as a group.

With community conversations and dialogues, you get people talking in the community about a particular issue. It can be something that concerns everyone like water and sanitation. It can even be about something sensitive like abuse within families. The conversation or dialogue may involve groups and people chatting in small groups or with individuals. You get everyone talking.

People talk about things that matter and come up with new ideas. It encourages people to take new actions to take care of issues they believe are important. It has been said that a community that discovers what it cares about, and talks about it, can change their world.²

Here are some ideas to help communities to talk:

¹ http://www.bankofideas.com.au/Downloads/Guide_Hosting_Community_Conversations.pdf accessed 11.12.12

² <http://www.turningooneanother.net/> accessed 11.12.12

- Find somewhere suitable to meet where people will be happy to talk. An open space near their houses is good. They may be scared in the PHU building.
- Make it welcoming and fun.
- Encourage talk by asking some questions that make people think such as:
 - What makes our community a good place to be?
 - What other good things could happen in our community?
 - How can we make this happen?
- Encourage people to listen to each other and respect each other.
- Expect that people will not all agree with each other.
- Listen out for good ideas and helpful thoughts.
- Close the meeting by asking
 - what you have all learned about the community?
 - what you could do together to make change happen?
 - how you could use the ideas that have been raised?
 - what you want to do or talk about next?



In any group sessions you need to make sure that everyone has a chance to speak. It is easy for some people to dominate the session. Other may feel too scared to give their ideas especially if they are not respected. Men, women, adolescents and children may all have concerns and useful ideas.



Feedback and body language

It is important to look for feedback when you are communicating with someone. Feedback lets you know what others are thinking. It might tell you whether they agree or disagree. It may tell you whether they understand your message or do not understand. People may give you feedback in a direct way e.g. by telling you. They may tell you in a more hidden way. This may be by

- failing to attend a health education session next time;
- talking through a session;
- not taking part properly in a session;
- using their body language e.g. refusing to look straight at you.

Body language can show a lot about what someone thinks. Some things are the same in all cultures. Some are different. Most of us learn to 'read' the body language of others in our own culture. It helps to understand it well enough to be aware of the signals people are sending us. It also helps to understand the signals we are sending to other people.

ACTIVITY

1. Talk together how people show their feelings in Somali culture e.g. boredom, feeling unhappy, being angry, not believing you, being aggressive.

2. Talk about body language and gestures that are acceptable or not acceptable in Somali culture e.g. Is it acceptable for a woman to look directly at a man when he is talking to him? What difference does this make to your work as a CHW?
3. Now look at this drawing. What do you think is this man's attitude to the people he is talking to? How would you feel if someone talked like this to you?



Barriers to communication and overcoming them

A barrier is something that gets in the way of sending, receiving or understanding a message.....

ACTIVITY

In your group:

1. Make a list of things that you believe can be a barrier to communication.
2. Act out some of these things.
3. Try acting out the better ways of communicating.
4. What did you find? You may have included some of these or you may have had other ideas:
 - can not be heard
 - speaks too fast
 - speaks facing away from the audience e.g. looking at a poster
 - reads from notes or a book and does not look up often enough
 - is rude or bossy
 - too nervous, not being sure of what to teach, lack of confidence
 - too difficult, too easy
 - can not see things like posters from a distance
 - people do not like or respect the speaker
 - speaker does not listen to others
 - speaker is a poor role model. He does not do as he says others should do.
5. Now try acting out better ways of communicating.
6. Finally: try the game called 'Chinese whispers'. Stand in a ring. One person starts a message going round the ring. See what the message is when it gets back to the start. Now – what have you learned?

Communicating around sensitive issues

Some issues that concern people are very sensitive. These need to be handled carefully, respectfully and avoiding offending people.

ACTIVITY

1. Which issues do you believe will be difficult to talk about in your community?
2. Which issues do you find difficult to discuss even perhaps with your colleagues?
3. Share ideas about how you could
 - overcome your own reluctance to talk about difficult issues?
 - help community members to talk freely?
4. Here are some examples. How could you try to change the way things are done:

- Ahmed called people to pray for his pregnant wife because she was bleeding heavily. Hamda was 32 weeks pregnant. He finally agreed to take her to the health centre after she had been bleeding for 12 hours. She was now becoming weaker and the fetus had stopped moving.
 - The older ladies in the village insist that colostrum is not enough for newborn babies and that they must be given other things to drink. You know that the colostrum is very important for newborn babies and giving other drinks is very dangerous.
5. Use a role play to try out how you could address a topic like these with members of your community.
 6. How else could you communicate sensitive information?
 7. How would you make sure you do not upset people's emotions?

What is communication made up of?

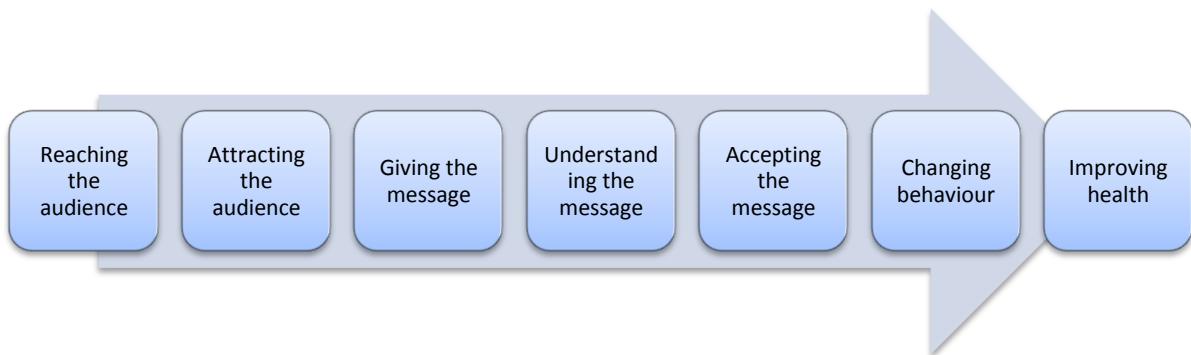
For communication to happen you need an audience + a source + a message + understanding.



If any of these are missing, then communication fails. Without an audience, the CHW will become discouraged. Without a message the audience will become disgruntled. If you do not know what your message is, or do not give it clearly, then the audience may not come back next time!

Stages of communication

There are six stages of communication. They are shown in the diagram below.



To sum this all up. Some steps to communication that works

- Make the message clear and don't try to say too much
- Make the message fun and entertaining so you attract attention
- Use simple clear language
- Use traditional ways of communicating e.g. songs, drama, poems etc.
- Repeat messages using different methods to make them stronger
- Provide opportunities for talking together about it
- Ask for feed-back so you can check their understanding
- Emphasise immediate benefits as well as future ones



- Finding out people's concerns is important for encouraging them to change their behaviour
- Always be aware of when issues are sensitive and need to be addressed extra carefully and with great respect.
- Be a good listener and accept questions, challenges and doubts.

Two final issues to think about:

- Who has influence in the village? Who do people listen to? Who is good at communicating? You could ask them to help you.
- Change is more successful when it is change that people want to see. Their own issues will usually motivate them to change behaviour more than ones you tell them they should address.

Human behaviour

Good communication alone is not enough. People have different ideas about their health. They may have different ideas about healthy ways of behaving too. They may think they can't change things. They may also act very differently from each other after hearing exactly the same health message. It is important for you to think about this so that you can understand people better.



Why do people behave the way they do?

There are many reasons for people behaving the way they do. Here are some examples from Somaliland and around the world:

- A nurse knows her obesity makes her at risk of diabetes and heart disease. She continues to eat too many fatty foods and cakes. She continues to avoid walking whenever she can.
- A teacher knows that he is HIV positive. He forces sexual intercourse with a young girl who is his student because his friend tells him this will cure him.
- An 18 year old boy has a father who has a very bad chest from smoking and an uncle who died of lung cancer. The boy hides away with his friends to smoke anyway when they can find some money to buy them.
- A man is told by the midwife that his wife may die in labour if he does not agree to a health centre birth for her.

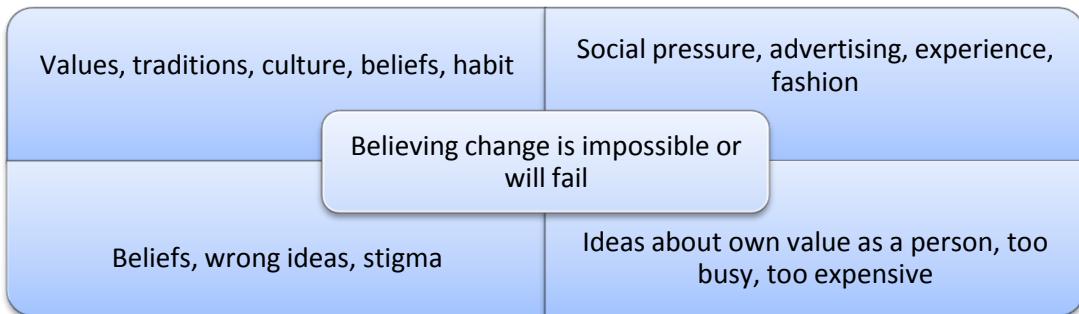


ACTIVITY

1. Think about these examples. Why do you think these people acted in this way?
2. Try to describe some more examples that happen in Somaliland.
3. Think about the reasons for unhealthy behaviours.

4. Think about the last example. The boy may not know smoking is dangerous or he may not care because he is strong, or he wants to gain respect from friends, or does not want to get old anyway. How do these ideas affect young people's behaviour?

Some of the reasons may be related to these ideas in the diagram below. Try to fit the reasons you found into the boxes. You may have some others too.



The Health Beliefs Model

The way beliefs affect behaviour is called the health beliefs model. This looks at four questions:

- How dangerous is this? Will it really happen?
- How serious is the problem if it happens? Does it matter?
- What are the benefits of changing? Will it really make a difference?
- What barriers might get in my way? What are the difficulties? How much will it cost me in money or time? What will my friends say?

You can see from this some of the reasons why people do not change even if they understand the message. We can look at three examples:

- The nurse who needs to lose weight may think:
 - 'I might not get diabetes or have a heart attack'.
 - 'I will make sure I stop eating so many cakes if I get diabetes'.
 - 'I don't want to get old like some of my patients anyway. I have to die of something'.
 - 'It will be expensive to eat well and what will I do about the tea parties with my friends? I enjoy them a lot and they may laugh if I refuse an extra cake'.
 - 'I'm too busy to bother anyway'.
- The man refusing a health centre birth for his wife may say:
 - 'I don't believe she is in real danger. She has always given birth OK before. Anyway I think the midwife just wants more money. If my wife dies I can marry another one'. (Don't be surprised. A few people do think that way in some countries).
- A woman who has had three children die from diarrhoeal diseases may say:
 - 'This child will be safe. She is strong. It will not happen again'.
 - 'Washing my hands will not make a difference. I can't see any dirt on them'.
 - 'The drinking water looks clean. It will take me too long to go to the safe well or purify the water'.

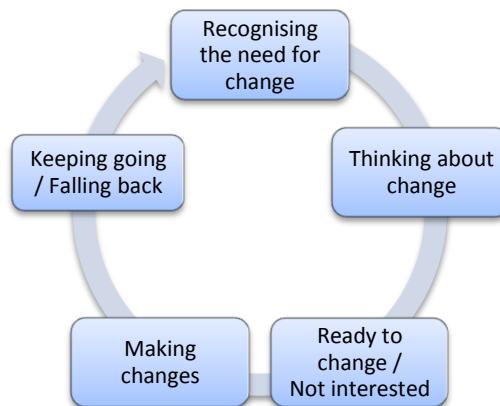


- ‘There’s nothing wrong with my children squatting outside the house to pass stools. My husband is too busy to dig a latrine anyway’.

Changing behaviour

Health workers have thought a lot about how behaviour change happens. Is like a continuous circle or cycle. This is because the first time people start to make change, they may not keep it up. They may move around the cycle more than once before they make changes that last. The diagram below shows this.

The behaviour change cycle



When you do health promotion and education it is important to understand how people behave. This way you can help them to make changes more easily. You need to understand where they are on the behaviour change cycle. If you ask them whether they have thought about doing something, you can then find out how they are progressing.

ACTIVITY

Think about the three people above and work out how you could help them.

To help people to change their health behaviours you need to

- **focus on change that will make a difference.**
- **be realistic.** You might need to start with small steps. Small successes are better than big failures.
- **help make it easier.** What is needed to help make the change? How can this be provided?
- **think about pressure people may be under.** This might be lack of money, it may be pressure within the family or community, it may be lack of time. You may need to work first with the people who lead opinion. This might be a religious leader or the chief, a husband or a grandmother .
- **look for beliefs that may influence behaviour change.** Is the change important enough that they need help to change their beliefs?
- **be an advocate for individuals families or communities.** You may need to speak up for them e.g. with another family member, with community leaders, at the health centre, with local government.

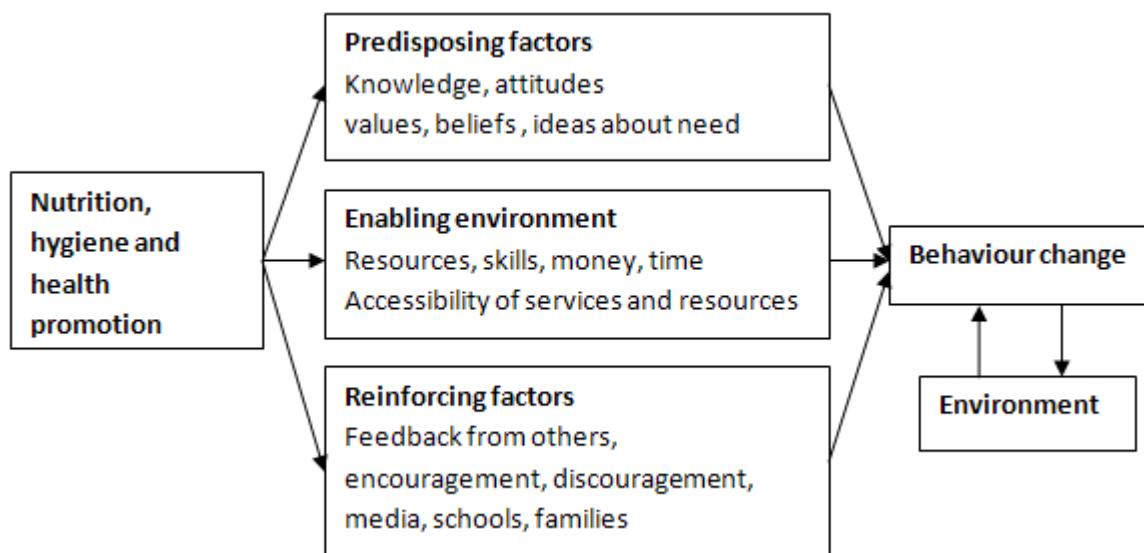
What needs to happen for people to change?

You have already thought about above about how you can ensure change happens e.g. about understanding the pressures people are under. Here is another way of looking at it.

People do not usually make changes just because they are told to. They may not be able to make changes. There are three things that are needed for behaviour to change. These are

- knowledge of what is needed and attitudes that are ready to change e.g. understanding the danger of leaving faeces on the ground. These are known as '**predisposing factors**'.
- resources to make change e.g. water and soap for hand washing, good latrines, nutritious food can be grown or bought. These are known as the '**enabling environment**';
- suitable conditions for making change e.g. husband, mother-in-law, family members are supportive, the local Imam agrees, the change is accepted by the culture. These are known as '**reinforcing factors**'.

You can see how this works in the diagram below.



ACTIVITY

Talk together about how these 'factors' (things that happen) may make a difference to how successful you are with health promotion and education activities.

People usually need a good reason to change. This may just be understanding why change is needed. It may be other things (called 'incentives') e.g. wanting to

- live in a clean place
- look attractive
- spend less money on medicines
- be healthy enough to earn good money
- avoid another child dying.

ACTIVITY

Think about incentives to change. What others are there?

Here is a real story about someone changing her behaviour. Why do you think she did so? What was the incentive for her to change?

A nurse was talking to a woman who had brought her child to see her. The nurse was trying to persuade the woman to have her child immunised. The woman was very unsure about what to do. Another woman sat nearby with a sick and malnourished child. She joined in.

"I didn't have my son immunised" she said. " He got really sick with measles three months ago and he has hardly put any weight on since. I wish I had agreed to the injections". The next woman on the bench replied "Yes you are right. My son had his injections and look how healthy he is now. He didn't get measles when his friends did, and he is growing really fast".

Ethical issues in behaviour change

Remember, in the end, it is up to people to make choices for themselves and their families. As a CHW you can not force people to give up a behaviour even if it harms them. A man is free to smoke himself to death, or chew khat with his friends all day so he has no money left. However, if people depend on him, or he is affecting the health of other people, then some people may say he has a duty to change.

ACTIVITY

Look again at the stories above and think about your role as a health promoter. You may wish to think about what your guidance you can gain from your own beliefs.

Health promotion and education

Think back to the beginning of the Learning Unit. We looked at the difference between health promotion and health education.

- Health **promotion** is all about getting people to think about healthy ways of living.
- Health **education** is about making sure they have the information they need to make healthy choices.

In the end, they are so closely linked that people often talk of IEC (Information, Education and Communication). We will look at health education shortly. First we will consider some important points about health promotion.

The CHW role in health promotion and education

Health promotion and education are the most important things that a CHW does. You can spend one hour helping someone who is sick. But spending an hour on health promotion and education may prevent many more people from becoming sick. The difficult issue can be that people in the

community see results immediately if you help a sick person. The results of health promotion and health activities take much longer for the good results to show.

Health promotion

There are two main ways that health promotion can be done. These are by persuasion and by empowerment.

- **Persuasion approach:** This tries to influence people to change
- **Empowerment approach:** Empowerment means becoming stronger, more able to do things independently. This approach helps people with the information and the skills they need to change. The skills needed are
 - making decisions
 - solving problems.

In fact decision-making and problem-solving are linked together. People need to do both.

ACTIVITY

1. Think about these two approaches of persuasion and empowerment. Which do you believe would work best? Why do you think this is so? You could use the examples above again if you wish to help you think about this question.
2. Now think about problem-solving and decision-making. How do you believe people can be helped to solve problems and make decisions?

Here is an important 'ethical' point about health promotion.

It is important to make sure a service is (or will soon be) available BEFORE you create a demand for it. It is no good encouraging everyone to demand a deep well or a full-time nurse in the village if there is no way this can be achieved in the near future! It is important to be realistic.

At the same time, communities hopes need to be encouraged. Ways can be found around many difficulties. Change does not often happen without people dreaming and hoping. This is where advocacy is important. Here is an example:

Your village would love to have a deep well, electric pump and safe water piped to the homes. This might seem impossible to achieve. But what could be done to get nearer this dream? You would need to look for help from experts, or maybe yourself seek special training. You might need outside help for some of the work. Outside help may be advice, help with funding, equipment.

ACTIVITY

In your trainee group, 'brainstorm' ideas about how CHWs could help a village get nearer achieving this dream. Try not to just decide to ask an outside agency to do it for you!

In this activity you will have needed to work out how to solve the problem. 'Doing it' is the best way of learning problem-solving skills. You cannot learn them just from listening to your trainer. Here are three more examples you could try. You will be able to think more up



easily. Then you will be able to help your communities to solve problems.

- Women in your village are giving untreated river water to their children and many children are getting diarrhoeal diseases.
- The out-patient clinic at the health centre takes place at the busiest time of day for women in your community. Many do not take their children to the centre because of this.
- Everyone agrees you need new latrines in the community. There is a big argument about where they should be dug.

You could try looking at these problems by using role play. Give one role to each person and get them to act out the situation. This is called ‘simulation’.

As we said before, people need information and knowledge to be able to make healthy changes to their lives and communities. We will look at health education next.

Health education

Remember that people need to know ‘why’ they should do something as well as knowing ‘what’ is the healthiest action to take. Knowing ‘why’ will bring more action than just knowing ‘what’. This is health education.



Think back to the examples you read before. A mother may know she should wash her hands before preparing food. She may not do so if no-one tells her why she should do so. She knows *what* to do but not *why*. This is why health education is important.

What + why = behaviour change.

Remember there may be barriers to giving, receiving and making effective use of information. You always need to be thinking about what these barriers may be. If you do not do this, the information you give may fall on deaf ears. There are certain conditions that need to be in place for success:

- willingness to communicate, learn, change and work together
- access to facilities, money, time
- support e.g. support from husbands or community leaders.

It is also important to build on what already exists so you can reach and motivate people. You need to understand

- existing ways of communicating
- local behaviour and ideas so you can build on good practices
- issues in the community e.g. distance from facilities, roads etc.
- existing knowledge so you can build on it
- community structures and groups so you can work with them e.g. young people, older people, women’s and men’s groups, children and schools.

What is health education for?

Health education has two main purposes. These are to help people to

- choose healthy ways of living. This is mainly about e.g. good nutrition, good housing, exclusive and prolonged breastfeeding, hand washing, food hygiene, water and sanitation.
- avoid particular illnesses. This is mainly about e.g. immunisation, safer sex, and hand washing again.

Health education can do something else also. It can create awareness where there was none before. For example, children in a community may be malnourished. If the families are not used to seeing healthier children, they may not even realise there is a problem. The community may be so used to some of their babies dying of pneumonia that they believe this is just the way things are.

When people have no experience of having a healthier life it can make health education slower to do. It can mean that people are reluctant to accept health messages and to change. The CHW needs to be very patient. It can be good to use others in the community who perhaps have families in other places where people are healthier. If they speak up it can help people to take interest.

How can health education be carried out?

You could just stand up in the centre of your village and talk to everyone who gathers. This can bring some good results. It is probably better though to target your message and audience.

- Targeting the message:*** what information is needed?
- Targeting the audience:*** who needs the information?

There are many ways of helping people to understand. First we need to think about how people learn.

How do people learn?

A lot is known about how people learn. This can be used in health education. There are some differences between the way children and adults learn but mostly they are the same. Here are some ideas. Both adults, adolescents and children like to

- be respected
- be valued for what they already know and have done. Even children have some knowledge and experience they can use to help them learn more
- have their feelings and needs taken into account
- learn in a relaxed way
- feel comfortable with the teacher and other learners. They will not be laughed at or reprimanded
- learn about things that matter to them
- learn with people who have similar lives
- learn with people of a similar age, and maybe the same sex
- have the chance to talk and discuss things
- participate in their own learning.



Children especially learn best when playing games, singing songs and acting things out. But many adults like this too. It is not just for children.

The information we help people to learn is important. How we do this is probably even more important.

We all have been taught by just being told something. This may be how you learned at school. The teacher writes on the board, or reads something. You have to learn it. This can work for learning simple facts. It is not so good for learning to understand. For one thing, the teacher may not realise that you have not understood something even if they explain well.

A little better is to be shown how to do something instead of just being told.

Remember also earlier you read that people understand better if they understand why something is so. If she understand about germs and diarrhoea, the mother is more likely to wash her hands before preparing food. If she is just told to wash her hands she might forget or not bother at all.

Even better is to do it. People learn best from their own experience. If you do something you usually remember it. Try this out.

ACTIVITY

Divide yourselves into three groups. Choose one person as a teacher. She must teach a skill that is new to most of you but she can do. This might be proper hand washing, it might be a way of bandaging that you have not done before, it might be cooking some nutritious food.

- Group 1: The teacher tells them what to do.
- Group 2: The teacher shows them what to do.
- Group 3: The teacher gets the group to perform the skill. She will need to demonstrate first.

Now find out which group can do the task the best.

In Somaliland, the methods used Groups 2 and 3 are often called ‘demonstration’ and ‘return demonstration’.

Demonstrating. People learn best if you

- show them the whole task first
- then show them again bit by bit
- then get them to do it in front of you.

Remember the saying ‘practice makes perfect’.

There is another old saying:

‘Tell me and I forget; show me and I will remember; let me do it and I will learn’.



What methods can be used for helping people to learn?

In the previous section you read about how people learn. You tried out some different techniques. Here we will learn more about methods you can use to help people learn. You will also look at how to help them be active and involved in their learning.

There are three areas of learning that CHWs help people with. These are of:

- knowledge / information / what they know
- skills / what they can do
- attitudes / how they do things / how they behave.

Knowledge can be learned in many of the ways described in this unit.

Skills can best be learned by doing things. We looked at this with the section on demonstration.

Attitudes are more difficult to change. Discussion is important. Activities can make people think about their health and their behaviours. They may then change their attitudes. Drama and role play are very good for this. Sometimes you just have to make people really think about what they are doing.

ACTIVITY

Think about these scenarios.

- Abdul has six children. He is a busy farmer and has a lot of livestock to look after. When he comes home he goes straight to the latrine. Then he goes to greet his children. He sometimes helps to feed the children. He never bothers to wash his hands because he doesn't believe it will do any harm. How could you help him to change his attitude?
- Mariam is pregnant with her fifth child. She has had three children die at birth. She does not plan to use the health centre for the birth as she believes she cannot control fate. How could you help her to change her attitude?

Involving people

It is much better to involve people than to just give information. We will look at both of these. In fact, you will find you need to use both, perhaps at the same time. Involving people is often called 'participatory education'. You will learn about this next.

Listed below are some of the projects you may hear about in Somaliland. You will need special training to take part fully in these projects. but

Community participation and participatory techniques include PHAST, CHAST and CHAP (see Unit 5)

- Participatory Hygiene and Sanitation Transformation (PHAST)
- Child Hygiene and Sanitation Transformation (CHAST)
- Community Hygiene Awareness Promotion (CHAP).

PHAST and CHAST are almost the same. They mainly differ with some of the methods and learning materials. CHAST uses the fact that children and young people can be the best ambassadors for health because

- Children are eager to learn
- When they learn good habits young, the lessons tend to last through their lives.
- Children can influence other people in their families, both young and old.

Children helping other children to learn is often called the ‘Child-to-child approach’. This is another approach that you would need special training for. However there are a lot of things we can discover from these approaches and projects. The main things we can notice are about:

- involving people
- making learning relevant, interesting and fun
- making sure learning and teaching methods are
 - right for the culture
 - right for the age group
 - right for the level of experience and understanding
 - not too expensive
- the importance of good preparation
- the importance of using well-made and appropriate visual aids.

The CHAST approach uses particular methods. These are shown in the Table:

The CHAST approach

Facilitation	There is always a team of facilitators. They <ul style="list-style-type: none">• work with the community leaders including elders, primary and Quranic school• help to run the programme. They make sure everything is organised and runs smoothly• are there to help, not to direct. They inspire rather than give information• help children to talk together. They help if the children get stuck• encourage younger or shier children to take part;• sit with the children, not at the front
Tools	Posters, card games, puppets, a stage of some sort (see pictures below for simple ideas)
Methods	Puppet shows, drama, role plays, traditional songs, new songs, discussion



CHAST uses five steps that can also be used with other age groups as well as children. You can see these in the Table.

CHAST five steps

1	Introduction	Participants and facilitators introduce themselves
2	Identifying the problem	What are the good and bad habits to look at?
3	Looking at the problem (analysis)	Learning about the issues and how they make people sick
4	Practicing good behaviours	e.g. hand-washing, tooth-cleaning, food hygiene, latrine use
5	Monitoring and evaluation	How much difference has it made? Surveys before starting and later.

This process can involve the whole community, not just children. The different groups can then talk and learn together. They can listen to each others and understand each other better. They can come up with solutions that everyone agrees with. Working together means changes are more likely to last.

Activities e.g. songs, poems, stories, role play, drama, short talks, visual aids

All these methods need to be thought about carefully. You need to think about which one is the best for the topic or situation you want people to learn about.

Songs, poems and stories

- may be old traditional ones that give important messages. They may be written just to give people the message you want them to understand.
- are often used to help people remember what they have learned.
- can make people think about difficult issues in their lives.
- can make learning enjoyable and fun.

Drama

- always has an audience.
- is carefully planned. It has a script.
- may include more than one important topic or issue.
- needs to be practiced or rehearsed before doing it for an audience.
- can be used to

- teach about an important issue.
- get people to think about their lives.
- help people remember better what they have learned.
- can lead to discussion with the audience after it is finished.

Role play

Role play is not the same as drama. Role play does not normally have an audience. It is done to help those taking part to learn about a topic. It helps them to learn what it is like to experience something. It makes them think about it.

- Role play looks at one main topic. The topic chosen may be a very private one.
- Make it short. 10 minute is long enough
- People taking part do not rehearse it. There is no script.
- People taking part are given the topic or issue. It may be a scenario. They are asked to act it out as if it is happening to them.
- When the role play is finished, those taking part should stand up and state who they are in real life. This is because role play can be painful. It can make those taking part feel like the situation is really happening to them.
- It is important to talk about the experience afterwards. What have they learned?
- Role play must always be supervised by a trainer (during the course) or by the CHW (in the community).

Here in the box are two examples to help you understand the difference between role play and drama. You could use these in your course or in your communities.

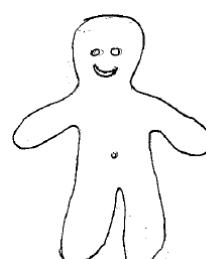
Drama	People want to learn about preventing STIs and HIV. With a small group of people you write and rehearse a drama to act in front of all those who want to attend. The drama helps them to learn about HIV and STIs.
Role play	Some women talk to you about their fears of being infected with an STI or HIV. You use role play to help them to understand how to talk to their husbands. You get them to work in twos. One pretends to be the man, one pretends to be the woman. They do this in private.

Some other activities

These activities all ask the people to do something.

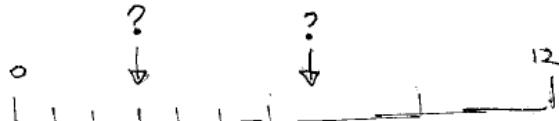
Body mapping

1. Ask the group to draw a child on paper or on the ground. They could draw around a child lying down.
2. Get them to point out places that would benefit from a health activity e.g. immunisation or breastfeeding. They could mark areas where a malnourished child would have signs and symptoms.
3. Get the group to talk about the problems and how they can be prevented.



Life line mapping

1. Choose a person or child to think about e.g., a child under 5 or a pregnant woman.
2. Draw a line on paper or the ground.
3. Divide the line into years (for a child) or months (for a pregnant woman).
4. Mark the points where different things should happen e.g. for a child immunisations, introducing complementary foods, crawling, walking, speaking.
5. Talk about the reasons why these do not happen, and how to make sure the person stays healthy.



Health and disease calendars

1. Draw a line for the year.
2. Mark out the seasons.
3. Mark when diseases are more common e.g. malaria, diarrhoea, malnutrition.
4. Talk about why disease are more common then.
5. Talk about how to prevent disease at that time.

Road blocks

1. Choose a health topic that may be made more difficult by barriers e.g. reaching hospital for an emergency , keeping exclusive breastfeeding going for 6 months.
2. Ask people to identify possible barriers to doing this.
3. Ask people to work on solutions.

Using and making health education aids

There are different aids that can be used in health education. Here are some of them:

- Models and dolls
- posters and flip charts
- card games
- puppets

If you have access to electricity, perhaps using a generator, you can also use audio-visual aids e.g. films and slides. This manual does not teach you about using these or about the equipment needed. Your trainer may do so if you have access to them. Radio programmes only need a battery-powered radio so most people can use them. Someone must produce them of course e.g. by the radio station, government or NGO. Radio programmes are good for getting groups of people talking.

Most people like to see visual aids. It is important that they are suitable for the topic. They also need to be suitable for the age group and education level.

Getting visual aids right is not always easy. Anyone used to books will be used to pictures drawn in two dimensions. So will those who have seen media like films. Some people find it difficult to know what a drawing is saying. You may need to check what they see or understand. Some people have

problems with colours. They are ‘colour blind’. This might make it difficult for them to understand properly what a picture is saying.

Models and dolls

Models can be very useful. There are some ready-made ones but they are very expensive. Examples are models of human anatomy. You may see some in your course. It is possible also to make some models from old materials and waste such as cardboard and boxes. Here are some examples:

- A cloth doll for teaching baby care, weighing, breastfeeding positions etc.
- A model of a good pit latrine made of old cardboard boxes or tins.



Card games

You will probably need to make your own unless you are given games to use. You could draw or write on small pieces of card or paper. Some ideas:

- Drawings of different good and bad habits. Then you ask people to sort them out.
- If people can read – write questions about health on each one. People pull a card out in turn and try to answer the question.

You could then get the group to talk about the answers.

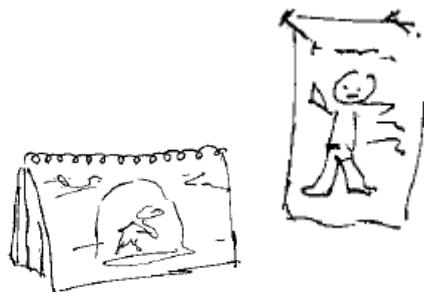
Posters, flip charts and flash-cards

Pictures are good for making learning easier. You can attract people’s attention. You can give information about things that can not be seen nearby e.g.

- a well-designed latrine
- food that is not in season
- a child or adult with a particular disease
- inside parts of the body
- germs and parasites that are too small to see easily
- steps in a task like hand-washing.

It is possible to buy ready-made posters, flip charts and flash cards. They are very expensive but you may have some given to you. It is very important that posters and flip-charts are relevant to what you want people to learn. A hand-drawn or hand-written poster may be much better. They will be aimed at this group and this topic. People may take more notice of them. Here are some examples.

- Posters are single sheets and are usually big.
- Flip-charts are smaller sheets of paper. They are usually bound or clipped together. You could even sew the top edges together if you make your own. The pages can be turned over as you talk to a small



group.

- Flash cards are small, maybe the size of a small envelope. Each card has one picture or word on it. They can be used to show people single facts or pictures. They are best used when talking one-to-one or in small groups. Number the cards if it matters that they stay in the right order. You might drop them!

Posters and flip-charts must be visible to everyone. All the people in a group must be able to see them well-enough to make out what is pictured or what the words say.

- You will have to write or draw much bigger than you expect.
- Use a few words or drawings only on each sheet.
- Test that people understand what a drawing is trying to show them. Do this before using with a big group.

Puppets

Puppets are not just for children. They can make learning fun for everyone. Making them can be part of the process. You can use old rags, clay, paper and cardboard, old socks.



ACTIVITY

Choose a health education topic:

- a. Make a large poster.
 - Use a thick pen and sheet of paper from a flip-chart pad.
 - Stand in front of your training course group. Can they tell you every word or picture?
 - If not, write or draw larger and try again!
- b. Make two or three pages for a flip-chart for using with a small group, say three people.

Using colour: if you have coloured pens it is a good idea to use them. BUT do not use too many colours at once. Two or three is usually enough. If you are writing a list you can alternate two colours to make it easier to read. Or use different colours for different ideas or facts.

Using what you have.

You may not have paper and pens available. You can draw in the dirt with a stick. You could use stones, seed-heads, old fabric, pieces of wood, twigs or other objects. Household objects are good for using as 'props' for demonstrations. Puppets can be cheap to make and are popular with children and also with adults.

ACTIVITY

Choose a health education topic.

1. Make a puppet out of bits and pieces to use in a talk or to get people talking about the topic.
2. Show the other trainees how you would use the puppet.
3. You could make several as a group.

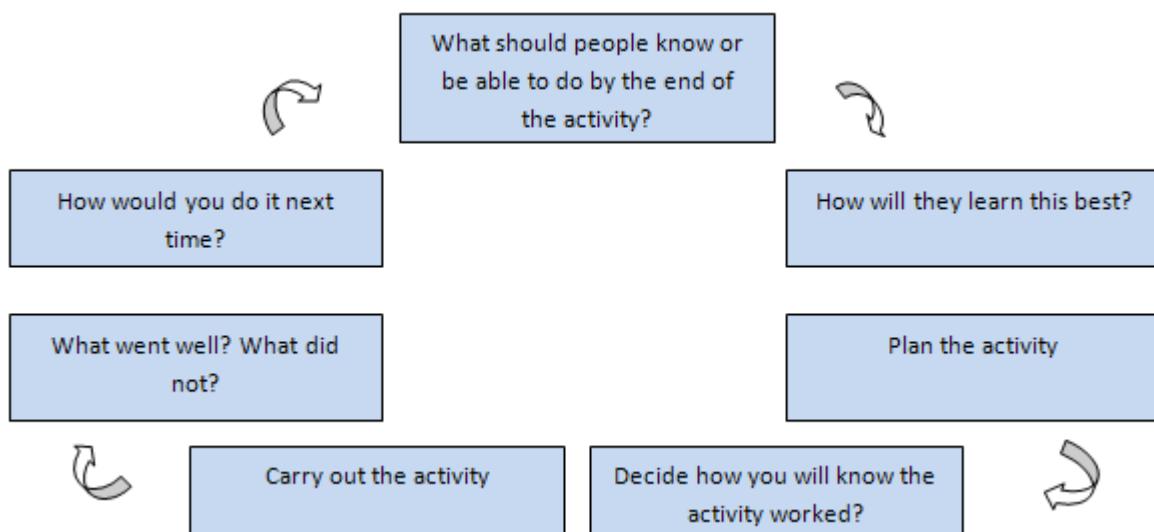
Always think about how useful the learning aid is.

- It should be right for the topic
- People can understand what it is for
- It is interesting and fun
- It gets people talking
- It is cheap to make
- It is easy to use.

Planning health education: a summary

There are some important steps in planning health education. These will help to summarise what you have learned from this Unit . They are shown here as a cycle in the diagram.¹

The planning cycle



http://www.bankofideas.com.au/Downloads/Guide_Hosting_Community_Conversations.pdf accessed 11.12.12

¹ <http://www.turningooneanother.net/> accessed 11.12.12

UNIT 8 INTEGRATED COMMUNITY CASE MANAGEMENT OF CHILDHOOD ILLNESS

These are the things you should know and be able to do after studying this learning unit:

CHWs will be able to support families in identifying illness, caring for their infants and children at home when sick, particularly with diarrhoea, pneumonia and malaria (in malarial areas), and referring them when necessary

- Explain your role in supporting families with sick children
- Explain the main causes of serious childhood illness in Somaliland
- Explain how illness can slow the growth and development of children
- Teach families and communities how to prevent serious childhood illnesses
- Classify common childhood illnesses
- Refer children with danger signs to the health centre
- Teach families how to identify danger signs and seek treatment and referral
- Teach families how to identify and manage minor illnesses and support them
- Provide medicines approved for CHW use where needed
- Make follow-up visits to monitor children and support families
- Keep records of actions taken and report to health centre staff.

What does 'Integrated community case management of childhood illnesses' mean?

Integrated community case management of childhood illnesses is often shortened to ICCMCI. It is a newer way of looking after children. It is similar to Integrated management of childhood illnesses (IMCI) but focuses more on teaching parents to identify serious illness and care properly for their children. It is not just for health care workers.

ICCMCI is a way of saving the lives of infants and children who have common illnesses. ICCMCI is a system where families

- receive support from specially trained people like CHWs so that they can care for their own children
- learn about danger signs and when children should be referred to nurses and doctors
- learn how to care for children at home when they are less sick.

The whole health care system is involved in ICCMCI as well as parents.

It is especially useful in areas where parents can not get easily to health centres with qualified nurses and doctors. Families learn to

- know when their children are ill

- manage the illness at home supported by the CHW
- decide when to take them to the health centre.

In this unit you just begin to learn about some diseases that are the most important for children. In Unit 11 you will learn more. That Unit is about adults but much of it applies to children too. In particular, the medicines list will help you with children as well.

Role of CHWs

You know that the role of CHWs in Somaliland is mainly to promote health and mobilise people to take the right actions. Your work with children and their families is the same. At the same time you need to recognise when a child is becoming seriously ill and take the right action.

This can be difficult as they may not be able to tell you in words what they are feeling. There are many ways children do tell you something is wrong. They may be restless and irritable, cry a lot, rub or bang the part of their body that is hurting, want more attention than usual.

You also need to support parents in looking after children who are ill but do not need to be referred to a health centre. ICCMCI makes your teaching role very important. You teach and support families. The families care for their children with your help.

In this Learning Unit, you will be reminded how to help parents prevent illness. You will learn about the danger signs and how to act. You will learn about helping parents to care for children at home who are less sick. You will also learn more about a few illnesses that are common in Somaliland.

Preventing illness in children

You have already learned a lot about preventing illness in earlier Units. You have also learned about health promotion and educating people in your community. The best way to remind yourself of what you have learned is to think about particular topics and how they are important to children. Here is an activity to help with this:

ACTIVITY

In your groups

1. Each group choose a separate topic from the list below.
2. Talk about the topic and remind yourself about it using the previous Learning Units.
3. Choose what you believe are the most important points.
4. Prepare a presentation and give it to the whole trainee group.
5. Note: ask your trainer for guidance on choosing topics. Some topics are very big. Others are smaller. You may need to choose just one big topic. You may need to choose more than one shorter topic.

Here is the list:

- exclusive breastfeeding to 6 months

- the importance of good nutrition after 6 months (just the basics, you learn more about this in Unit 9)
- avoiding FGM
- home hygiene especially hand-washing
- public health especially safe water and faeces disposal
- how infection is transmitted
- importance of immunisation
- parasites including malaria
- the link between serious or frequent illness and delayed growth and development.

Common childhood illnesses

It is very important to remember that children may have more than one health problem at a time e.g. they may have measles and worms. They may have malaria as well. This can happen with any illness. Children are more likely to suffer from another illness when they are already sick. This is because the first sickness makes them weaker. They are not so able to fight other illnesses. Worms and under-nutrition can be at the centre of all child health problems. Malnutrition often follows other illnesses e.g. measles as the child has not been able to eat properly. Also the child's body may not use food properly when ill.

The most common conditions that make children sick and cause death in Somaliland are

- diarrhoea
- breathing difficulties
- malnutrition
- malaria (some areas only).



Newborn problems are another common cause of death. You will learn about malnutrition and newborn problems in learning units 9 and 16.

Before we look more at which diseases cause these difficulties, we will concentrate on the danger signs. You will learn about which children need to be referred and which can be cared for at home. You will learn to 'classify' them. To 'classify' means to decide whether a child is in danger or is less ill.

To classify the illness you need to assess the child. This helps you to decide quickly which child needs to be referred and which child can be cared for at home.

When you assess the child and classify his condition, it is very important to remember that a child may have more than one illness at one time. For example he may have measles and malnutrition, or breathing problems and malaria. It is very common for fever and serious breathing problems to happen together. These children are more likely to die than others and should be referred immediately.

It is always important to think about how well-nourished a child is as well as looking for danger signs. Remember the well-nourished child can fight illness better than can a malnourished child.

There are 6 steps to take:

1. assess the child
2. decide how severe the condition is. 'Classify' the condition of the child
3. identify what needs to be done
4. refer or treat the child
5. advise the parents
6. give follow-up care.

Assessing children and classifying danger signs for serious illnesses

The whole process of assessing children is included in a training aid produced by UNICEF. Your trainer will have it. It is called 'Maarcyanto xaaladaha isku dhatan ee heerka bushada Somalia' (2012).

You need to
ASK – LOOK – TOUCH – DECIDE – TREAT or REFER

ASK the mother or other caregiver:

- what are his problems? Please describe them.
- does he vomit everything or have diarrhoea?
- has he been seen before for this problem?
- what treatment was given?
- is he feeding or eating and drinking? – breastfeeding, complementary feeding, family food;
- his age?
- how long has he had these problems?
- has he had other illnesses?
- has he been immunized?

LOOK at the child. You need to look at the whole body. What can you see and hear? You might see or hear:

- skin that is very dry. This is called dehydration.
- his eyes are sunken



- his chest pulls in each time he breathes
- his breathing is difficult
- his breathing is fast
- he is coughing
- he has watery stools (watery diarrhoea)
- he passes blood with his stools (bloody diarrhoea)
- he is sleepy and does not move much (this is called 'lethargy')
- he is restless and irritable
- he is jumpy or his neck looks stiff
- he does not respond to you
- a rash on the skin
- skin that looks blue or has not much colour.



TOUCH the child.

- Does he have hot or cold skin?
- Does he have dry or moist skin? (See the skin pinch test above).
- Does he respond to your touch?



Danger signs for serious illnesses

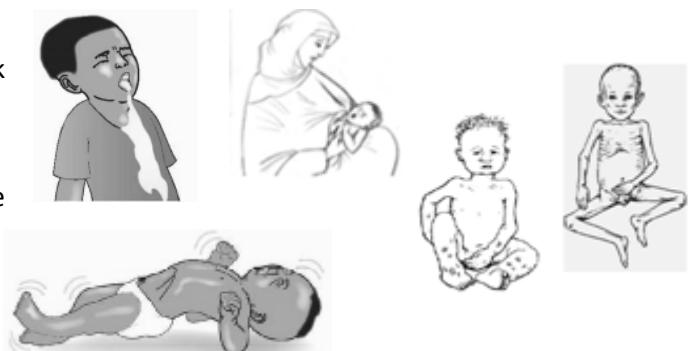
The main danger signs can be divided into:

- general danger signs (signs that a child is very ill that can happen in any illness)
- diarrhoea danger signs
- fever danger signs
- difficult or fast breathing danger signs.

We will look at the danger signs in more detail now, then we will look at how to detect them afterwards.

General danger signs

- not able to breastfeed or drink
- vomiting everything taken
- having fits (convulsions)
- unusually sleepy or cannot be woken up (unconscious)
- very pale skin
- ill more than 15 days
- acute malnutrition.



Diarrhoea danger signs

- bloody diarrhoea
- watery diarrhoea
- dehydration



- abnormally sleepy
- restless and irritable.

Fever danger signs

- fever: child feels hot to touch
- stiff neck.



Difficult or fast breathing danger signs

- cough
- fast breathing
- difficult breathing.

The child who has these signs needs to be taken at once to the health centre. He has very severe illness. There must be no delay. The child is too ill to be treated only by the CHW, he needs a doctor or qualified nurse.

Remember to ASK, LOOK, TOUCH, CHECK that he really has the symptoms, and CHECK how long for.

Key points for detecting danger signs and classifying illnesses

In this section you will learn more about how to detect the same danger signs.

Your trainer will help you with practical exercises that help you learn what to do and the skills you need. She will also take you to see sick children. You will see sick children when you visit your local health centre. You should ask to be allowed to practice assessing children.

General danger signs

Not able to breastfeed or drink

- The child can not eat or drink anything at all. The child may be unable to suck or swallow. He may be too weak. He may vomit everything back immediately.
- You may need to ask the mother to offer the breast (or clean water if older). Watch to see if the child swallows.
- If the child has difficulty breastfeeding, check his nose is not blocked. If it is, clear it and try again.



Vomiting everything taken

- The child can not hold food or drink down in his stomach.



Having fits (spasms, convulsions)

This is a danger sign only if it happens during this illness. This is what happens:

- The child's arms and legs stiffen
- The eyes may move around or turn upwards
- The child may become unconscious or not respond to speech
- He may pass urine
- He may bite his tongue.

Unusually sleepy or cannot be woken up (unconscious)

- Is the child asleep when the carer expects him to be awake and alert?
- Does the child wake up if he is undressed or the carer talks to him?
- Clap your hands near his ears. Does he wake up?
- If his eyes are open:
 - Does the child look around normally or stare as if he sees nothing?
 - Does he look interested?

Restless and irritable

The child cries a lot. The cry may be high and does not sound right. He does not want to be touched.

Stiff neck

- Does the child bend his neck or look around?
- If not, ask him to look at his toes or abdomen. You could tickle the skin to make him look;
- If he does not look, ask the carer to lay the child down on his back. Gently bend the head up. If he does not want to bend it, or he cries, or it feels stiff to you, then it is a danger sign.

Ill more than 15 days

Very pale skin

The child looks very pale. You can check

- his skin e.g. palms of the hands and feet
- inside his eyelids and mouth
- his nails may look pale.



Acute malnutrition

You will learn about assessing a child's nutrition status in Unit 9.

Diarrhoea danger signs

Diarrhoea is the passing of at least three stools in one day that are more watery than normal. If a child passes several normal stools, this is not a sign of illness. Children die of dehydration when they do not have enough fluid left in the body.



Bloody or watery diarrhoea

You should ask:

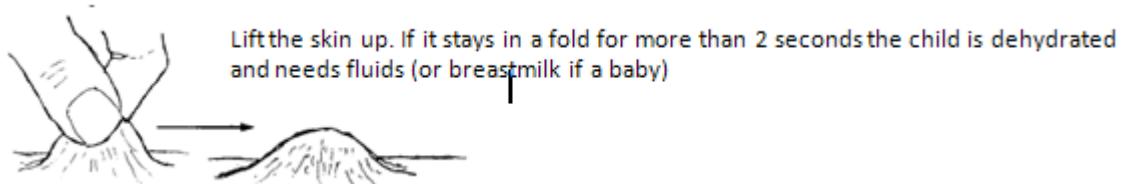
- how often has the child passed stools in the last day? If three or more, then this is diarrhoea.
- how long has the diarrhoea lasted? If more than 2 weeks, then this is a danger sign.
- is there blood? If yes, this is a danger sign;

If the stools are like rice water and the child is vomiting you must notify the health centre. It may be cholera which is very infectious.

Dehydration

Look to see if the child has

- dry skin: pinch the skin on the abdomen between your fingers for one second. Do not use your nails. This will hurt. When you release the pinch, count. Does the skin go back slowly (about 1 count or 1 second) or very slowly (about 2 counts or 2 seconds)?
- dry mouth
- sunken eyes; Do the eyes look sunken into his head
- sunken soft spot on a young baby's head
- no tears when crying, or not many
- Not able to drink or breastfeed properly; offer the child some fluids or breast milk. It is a danger sign If he
 - is not interested or drinks nothing
 - drinks very little and refuses more.
- A dehydrated child will not urinate very often and the urine will look dark yellow in colour.



Other danger signs e.g. abnormally sleepy, restless and irritable, stiff neck.

Fever danger signs

Children often have a fever. It may just be a common cold. It may be malaria. It may be pneumonia or another infection. Danger signs are

- fever: child's body feels very hot to touch
 - lasting more than 7 days
 - higher than 38.4°C
 - with stiff neck
 - with diarrhoea or breathing difficulties



- when the malaria (RDT) test is negative. Your trainer will teach you about the RDT test if you have these supplies
- with other general danger signs.

How to measure a child's temperature

Digital thermometers are safer and easier to use than old glass ones.

- Wash the thermometer in cold water.
- Switch the thermometer on. Your trainer will show you how.
- Place the silver end of thermometer under the child's arm, in the armpit. Hold the child's arm across his chest or ask the mother to do so.
- Remove the thermometer when the alarm sounds.
- Read the temperature and write it down.
- Wash the thermometer.

Body temperatures

Body temperature: The normal is 37°C. This is for the temperature in the mouth used in adults. The under-arm temperature reads about 0.5°C less than in the mouth.

- Higher than 38.4°C is a danger sign. This is high fever. The higher it is, the more dangerous.
- Lower than 35°C. is a danger sign. This is too cold. This is often called 'hypothermia'.

Difficult or fast breathing danger signs

Difficult breathing includes any unusual breathing. It may be noisy, fast, interrupted, or the child may look like he is working hard to breathe. Cough and breathing difficulties may be a sign of pneumonia. Most children with these signs do not have pneumonia. But it is a serious infection of the lungs and many children die without proper treatment.

Cough

- Cough for more than 2 weeks is a danger sign.



Fast breathing

Fast breathing shows that a child is sick.

Count the breathing rate. This is the number of breaths per minute.

- You will see the chest moving. Count the times the child breathes in. You will need a timer.
- Ask the carer to lift the child's clothing if you cannot see the breathing well enough.
- The child needs to be calm, not crying and not feeding.
- You can count for 30 seconds and then multiply the result by two.
- Remember to write it down.

Breathing rates for children

The younger the child, the faster is the normal breathing rate

- Normal breathing is 25-40 when the child is quiet and not crying or active.

- Fast breathing danger sign is
 - 60 breaths per minute or more for a baby under 2 months
 - 50 breaths per minute or more for an infant under 1 year
 - 40 breaths per minute or more for a child from 1 to 5 years.

Difficult breathing:

- Chest draws in when the child breathes in.
- You can only see this properly with the child's clothing lifted. The child must be calm, not breastfeeding, not crying. Watch the lower ribs while the child breathes IN.
 - 'In-drawing' is when you see the ribs easily and they move OUT at the same time as the stomach moves IN.
 - A healthy child moves his stomach OUT at the same time as the ribs move OUT. You can see this on the drawings.
 - The child may raise his shoulders and move his nostrils out.
- Noisy breathing.
 - A child whose nose is blocked may have difficulty breathing. The breathing may be noisy. Young babies breathe through their noses, not their mouths. Try unblocking the nose. This is not a danger sign.
 - If the nose is clear but breathing is difficult, then this is a danger sign. The baby will show other danger signs too.



Care of children with danger signs

Local referral systems including planning for transport

It is important that you know exactly how to refer a child to the health centre. You must know about how to communicate with the health centre and how to help with transport.

ACTIVITY

You may do this while you are at home or visiting the health centre that serves your community.
Find out

1. exactly where the health centre is
2. how to get hold of staff from the health centre
3. when it is open
4. how to contact the health centre staff from your own community
5. how travel can be organised. Does the community have plans for transport in emergencies?
If so, what are they?

Immediate care while waiting for referral or when travelling

There are some easy rules for when families take children to health centres:

- Avoid separation from the mother
- Keep the child warm, or keep them cool if feverish
- Breastfeed or give fluids frequently;
- Write a referral card
- Explain to the parents what you have done and why you have done it. Explain what may happen at the health centre
- Start ORS if the child has diarrhoea or is dehydrated and give some to be used on the way.

Children must always be kept close to the mother or other carer who they know. Carers should go with the child on the journey. They should stay with them at the health centre or hospital.

Children must be treated gently. Rough voices and rough touch will make them afraid. They may also be difficult to assess and treat when afraid.

Children must be kept warm but not over-heated. Even in hot weather, sick children can lose heat and get cold quickly. But children with fever may need to be kept cool to try to reduce the fever. Use light covers or clothing.



Skin-to-skin contact is best for babies. This is the Kangaroo Mother position. The baby is carried naked against the mother's skin between her breasts. The baby may wear a head covering, and a napkin if used. A wrap is tied around both mother and baby. The mother can have the baby under her clothing and does not need to expose her skin.

It is important that the mother continues to feed the child on the journey if he will take the breast, or try to give fluids if he is no longer breastfeeding. They need frequent breast feeding, or fluids for older children.

You may be permitted to give a first dose of medication to a child if the journey will be a long one. Your trainer will advise you about this. The flowchart at the end of this Unit also gives instructions.

The chart below summarises the important points about travel:

- Explain why referral is important
- Keep the child warm unless hot with fever
- Give fluids on the journey, breast milk if possible
- Write a referral note
- Arrange transport.



Home care of children not having danger signs for serious illness

Children who do not have danger signs still need to be treated for illnesses. They can become more ill very quickly and may then develop danger signs and die. You will need to follow the child up until they have improved. This may be every day or more often if needed. They can be seen at home or at the PHU. Try not to make a child travel to you if really unwell. It is better to visit them at home.

It is important that you teach danger signs to parents. You should also teach the basic skills of caring for a sick child. Parents can look after their own children if they

- know the danger signs and how to identify them
- know how to make and use Oral Rehydration Salts (ORS)
- know how to care for a child who is unwell
- know how to get help if danger signs begin.

The most important danger signs to teach are

- difficult breathing or cough that does not go away
- diarrhoea
- fever
- dehydration.

These are the most important signs because diarrhoea, malaria and pneumonia are the main illnesses that kill babies and young children.

Children who do not have danger signs can be cared for at home by the family. You may need to support them even if you have taught them beforehand about it. These will be children with

- mild diarrhoea but child is not seriously dehydrated
- minor breathing problems
- mild fever, and fever proven to be malaria
- mild dehydration.

Emergency care at home for children with danger signs

You may sometimes have to care for a child who has danger signs at home if travel to a health centre is impossible or badly delayed. You will need to see the child after 6 hours and at least every day until he or she is better or taken to the health centre. The flow charts tell you what treatment to give.

Advising families about home care

All sick children need to be watched carefully. Parents need to be advised about watching for changes and reporting them to you.

- If the child gets worse he must be brought to you at once.
- If the child is no better 48 hours after becoming sick he must be referred.

Food and drink

Sick children need plenty to drink (breast milk if still feeding). They need to eat what they want if weaned. They need energy and good nutrition so a balanced diet is important. Good food is important in preventing and recovering from illness. You will learn more about the link between illness, malnutrition and disease in Unit 9. A child who has diarrhoea, fever or diseases like measles or malaria may not feel like feeding. Even children with minor illnesses may not be hungry. If he is still taking breast milk it is very important to continue this. Breastmilk is the safest food and drink for young children.

Parents need to understand that breastmilk will NOT give diarrhoea to a baby even if the mother has it too. The mother will not catch illnesses from the baby through breastfeeding either. It is hand-washing with soap or ash and water that matters. A child with watery diarrhoea needs breast milk.



Older children need clean safe water and nourishing food that they like and that is easy to eat. Children who do not want to drink well can usually be persuaded to take a little at a time. A small spoon at a time is enough for a small child. This should be offered frequently, every 5 minutes at first.

Give fluids even if the child is vomiting. Just give them more slowly.



Children can have other fluids like soup, fresh fruit juice, coconut water if obtainable. Do NOT give very sugary soft drinks. This will increase the diarrhoea.

It may be best to offer soft, mashed food even to older children. Many children act more like younger ones when they are ill.

Treating the child with fever and no danger signs at home

Fever with no danger signs:

- Breastfeed more often and for longer than usual or
- Give plenty of fluids such as water with a little sugar in if no longer breastfeeding
- Keep the child cool if very hot. Use a damp cloth over his head to cool him down
- Keep him warm if shivering
- Use a child dose of paracetamol tablets or elixir. Children must NOT have aspirin. It is dangerous for them. See the Table for the dose.

Paracetamol elixir doses

Medicine	Age of child	How much to give
Paracetamol	2- 6 months	One 2.5 ml. spoonful = $\frac{1}{2}$ teaspoon or small measure
	6-24 months	One 5 ml. spoonful
	2-4 years	One 5 ml. spoonful and one 2.5 ml. spoonful = $1\frac{1}{2}$ teaspoons
	4-8 years	Two 5 ml. spoonfuls
	8-10 years	Three 5 ml. spoonfuls
	10-12 years	Four 5 ml. spoonfuls
Do not give more than 4 doses in 24 hours		
Leave at least 4 hours between doses		
Do not give paracetamol to children for more than 3 days.		
Older children can be given tablets instead. (see Unit 11 for the dose).		

Malaria is a disease that effects people in some areas of Somaliland. You may be allowed to treat some children with malaria at home. Your manager / supervisor will advise you about this.

First look back at Learning Unit 5 to remind yourself about malaria.

The way it is detected and the treatment is described in ‘Maarcyanto xaaladaha isku dhatan ee heerka bushada Somalia’ (2012).

Treating the child with cough or difficult breathing and no danger signs at home

Children often have simple colds. They are virus infections. They may have

- runny or blocked nose
- sore throat
- sneezing and coughing
- fever less than 38°C.

A cough may happen when secretions from the nose drip down the back of the throat. The child does not need antibiotics. Antibiotics do not work with viruses infections. Use antibiotics only if the child has danger signs of pneumonia or pain in the ears and cannot be referred. In some remote places you may be permitted to treat children with danger signs.

Children may have flu (influenza). Antibiotics do not work with flu either as it is also a virus infection. They may have signs the same as a cold AND

- fever that rises quickly and chills
- headache
- aches and pains in the muscles and joints
- not hungry
- no energy
- diarrhoea
- dry cough.

Paracetamol elixir will help to reduce the fever and make the child more comfortable. Elixir has 120mgs.od paracetamol in 5 mls. of the medicine. The dosage to give is in the Table above.

Children with fast breathing may need treatment but not need referral. See below.

Treating the child with diarrhoea and no danger signs at home

The most important actions are to prevent dehydration, and rehydrate.

- Prevent dehydration with ORS or breastmilk if still feeding.
- Urgent rehydration with breastmilk or ORS for children no longer breastfeeding.
- Continue to give breastmilk or food and
- Breastfeed the child for longer than usual and more often.
- Keep the child clean and dry.
- Wash your hands and the child's hands with soap or ash and water every time you deal with faeces or soiled cloths.
- Burn or bury faeces or put them in the pit latrine. Burn soiled cloths or wash them with plenty of soap and water.
- Give the child ORS. ORS is special mixture of salt and water that can put fluids back into the body. The body loses these salts as well as fluid when there is diarrhoea and they must be replaced. ORS will not stop the diarrhoea but replacing lost fluid and salts can save someone's life. The treatment is described in 'Maarcyanto xaaladaha isku dhatan ee heerka bushada Somalia' (2012).
- Give zinc supplement unless ORS is available with it in. Zinc helps to reduce how long diarrhoea lasts. It also helps to prevent it coming back. The table shows the dose and how to give it. It is also in the picture guide at the end of this Learning Unit.

Zinc supplements

Medicine	Age of child	Dose of zinc supplement
Zinc supplement	Less than 6 months	10mg. a day
	Over 6 months including adults	20mg. a day
Give zinc for 10 days even when the child is better.		
Tablets can be <ul style="list-style-type: none">• dissolved in ORS or breast milk• chewed whole if the child is able to• crushed and dissolved in a spoon of safe water		

Using ORS to rehydrate a child

ORS can be bought as a powder in a packet ready to mix in cool water, boiled if possible. It can be obtained from pharmacies, PHUs and health centres. It can also be made at home. The Table shows how.

Note: Babies can die while the mother finds firewood and makes a fire to boil the water. They need fluids FAST. Even water that is not very clean is better than waiting long.

Using ORS

How to prepare ORS from a packet

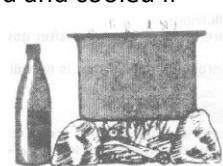
ORS exists in two different sizes of packet. One has to be diluted in 1 litre of water. The other has to be diluted in $\frac{1}{2}$ litre.

- Check which size you have
- Check the expiry date has not been passed
- Wash your hands with soap and water
- Pour all the powder into a clean container e.g. jar, bottle or bowl
- Use the cleanest water you have, boiled and cooled if possible
- Pour 8 glasses of water into the container for a 1 litre packet, 4 glasses for a $\frac{1}{2}$ litre packet
- Mix well until the powder is dissolved



How to prepare home-made ORS

- You need
 - $\frac{1}{2}$ teaspoon or small measure of salt (or a good pinch. The amount you can pick up between your fingertips)
 - 6 teaspoons of sugar (or 2 handfuls. A handful is the amount you can hold with four fingers)
 - 1 litre of the cleanest water you have, boiled and cooled if possible
- Mix these together in a clean jug
- Stir until the salt and sugar is dissolved
- Use in the same ways as ORS from a packet.



How to give ORS

- Give to the child in frequent small sips. Use a small spoon or cup
- Throw away the solution after one day and make up more in a clean container
- If the child vomits, try again 10 minutes later but give more slowly
- Give extra fluids and breastfeeds until the diarrhoea stops.

Managing children who have no danger signs or cannot be referred but need medicines

Many children do not have danger signs but still need treatment from you to help them recover. You have some medicines in your kit. These are medicines approved for use by CHWs. This may change from time to time. See the picture guide at the end of this Learning unit for charts of the medicines and when and how to give them.

Bloody diarrhoea (dysentery)

Bloody diarrhoea: as well as ORS and zinc, the child may need antibiotics. The child with diarrhoea but no blood does NOT normally need antibiotics. The dosage of antibiotics is shown on the pictures below.

Breathing problems

You may need to treat children who have the danger sign of fast breathing at home. This is probably pneumonia. They need antibiotics given by mouth. The dose of tablets and how often they should be given is shown in the picture below.

Remember children with virus infections such as colds and coughs with no danger signs MUST not be given antibiotics. Antibiotics do not help, and children with colds and flu recover within a week or two anyway.

Give the child with pneumonia the first dose of amoxicillin. Then give the mother the remaining doses to give the child at home. Remind her that she should give the child all the tablets even he is better. Remind her of the danger signs and when she should call you.

Fever

Malaria is a main cause of child illness and death but is rare in Somaliland. If a child with fever does not improve in a few days. He should be referred. Hospitals are able to test and treat.

You may also need to give paracetamol elixir to the child with fever but no danger signs. This helps reduce the fever, or tablets for older children.

Other illnesses you may need to treat at the PHU and in the home

You may also need to treat children who have other diseases with medicines from the kit provided for CHW use. Some of these other problems are listed in Table < below. The medicines named are the ones recommended for PHU kits. These may change. After this table there are some important points you need to understand about medicines.

Table < Other childhood illnesses and treatments used.

Condition	Main signs	Treatment
Intestinal parasites (see Unit 4).	See Unit 4	Worm treatments Albendazole tablets 400mg.
Skin parasites	Scaly patches on skin, burrows of the mite may be visible Head lice and scabies	Worm treatments and paints Miconazole nitrate 2% cream Permethrin shampoo or solution
Skin infection	Simple redness and swelling	Gentian violet paint
Skin rashes including nappy rash	Simple redness, there may be some spots and skin breaking	Zinc oxide 10% cream Miconazole nitrate 2% cream for infected nappy rash
Eye infection	Eyes may be red, may have yellow fluid oozing out.	Antibiotic ointment Tetracycline 1% eye ointment
Ear infection	Pain, head shaking or banging. unwell, fever, runny ear if left untreated.	Paracetamol for pain Antibiotics by mouth if <ul style="list-style-type: none">• child is less than 2 years old• fever is high• does not improve after 3 days
Mouth infection in babies (thrush)	Sore mouth May not want to feed White patches on tongue and inside mouth, or throat May have sore skin on buttocks	Thrush treatment Nystatin 100,000 IU Oral suspension

Throat infection, tonsillitis	Fever Sore throat, painful swallowing Throat red with maybe white spots at the back May be swellings outside under the jaw (swollen gland)	Antibiotics Phenoxycephalpenicillin tablets 250mg. Paracetamol elixir if needed
Urine infection	Frequent passing urine Burning pain in lower belly	Urinary antiseptic Nitrofurantoin
Anaemia	Pale, no energy	Iron and folic acid child supplements Nutrition advice
Side-effects of FGM	Bleeding, shock, fever, unable to pass urine	First aid (see Unit 4) Refer immediately
Childhood infectious illnesses of measles, chicken pox, whooping cough Note, measles is very dangerous and often followed by pneumonia, malnutrition or TB	Fever, rashes, cough with measles and whooping cough <i>Chicken pox</i> Mild fever Joint pains Rash starts on body, then arms, legs and face, possibly mouth and nose. Comes in 'crops'. Rash changes to blisters. <i>Measles</i> Starts as a cold White spots in the mouth Dark red skin rash spreads over face, neck, body. May be difficult to see if child dark-skinned Fever Red eyes, runny nose, sore mouth Diarrhoea and vomiting possible Fits possible <i>Whooping cough:</i> • Starts as a cough and cold for 1-2 weeks than recognisable 'whoop' starts; • coughs all the time; • vomiting after cough	Watch for danger signs. Refer if danger signs occur. Refer child with measles under 6 months. Treat as fever and respiratory problems. Plenty of fluids. Use cool wet cloths to soothe itching. Use paracetamol for fever Vitamin supplements for children with measles. Antibiotics only if a second infection happens e.g. pneumonia or infected spots. These are very infectious. Most children in the village will catch them from each other if not immunised against measles and whooping cough. Children who get another infection as well may need antibiotics or referral.

Medicines and how they work

Medicines work in many different ways. They work on different illnesses. Some medicines are useful for one illness only. Here are a few of these types. There are many others.

- *Worming medicines* kill parasites and push them out of the body, or kill them on the skin. There are different medicines for different parasites e.g. malaria, and pin worms.
- *Antibiotics* kill bacteria. Different bacteria cause different illness. They need different antibiotic medicines. Most of these have to be given by doctors, or by qualified nurses.

Antibiotics do not kill other organisms like viruses or parasites. They must only be given properly, the right medicine for the right illness.

- *Analgesics* help with pain. They are often called pain killers. They work on the brain and block off the pain the patient is feeling or reduce it. Some can be very dangerous. Some can not be given to children as they can cause harm e.g. aspirin.
- There are many medicines made for using with problems like heart disease, diabetes, high blood pressure, mental illnesses, or problems with other parts of the body.
- *Vaccines* help to prevent some diseases by teaching the body how to fight them.
- *Antiseptics* kill bacteria on the skin.
- *Disinfectants* and bleach kill bacteria on surfaces like PHU tables or latrine floors.

Medicines may be made for use by mouth, by injection, on the skin or eyes, into the anus or vagina. Some medicines are made in more than one way e.g. thrush medicine may be made as drops for a baby or pessaries (tablets for the vagina) for women. Antibiotics may be for taking by mouth, by injection or as a cream for the skin or drops for the eyes. They must always be used in the right way or they may cause damage or fail to work.

Some medicines have different effects in children and adults. Also the doses are very different. They usually depend on the child's weight or age. This is one reason why medicine obtained for an adult must never be given to a child.

Most medicines have to be given at the proper times. Some may be once a day, others may be more often. This is because the body uses different medicines at different speeds. It is very important that this is correct. Too much medicine can be dangerous and is wasteful. Too little medicine may not work.

There is a lot more to learn about medicines. You will return to this later in the Unit.

Management of medicines for children (also see Learning units 11, 13)

There are some important points to remember when giving medicines to children. This section looks at how to advise parents.

Advising parents about giving and storing medicines at home

Storing medicines safely at home

All medicines must be stored where children can not get at them. Here are some rules to keep them safe:

- Store medicines high up or in something like a locked box that children in the family can not get into. Children become very ill or die from eating the wrong medicines, or taking too much even if it was given for them.
- Store medicines in a dry and dark place.
- Always use the container they were supplied in. Do not store medicines in something different like a cup or soft drink bottle.
- Make sure the right size spoon or measure is used to give a child liquid medicine.

- Do not use medicines intended for someone else. Take unused medicines back to the PHU or burn or bury them where they can not be dug up. Some people empty containers of unused medicines in the pit latrine.

Administering medicines to children

You need to inform parents about giving medicines. Here are some key points to teach them:

- Give medicines only to the child for whom they are intended. It is dangerous to share them with other children
- Give the medicines at the right times as instructed
- Give the medicines in the right dose as instructed
- Give the full course of medicines. It is dangerous to stop medicines before the right date. Children can get sick again. Medicines can work less well in future if people stop too soon.
- Give the medicines in the right way. Make sure the parents understand the route e.g. by mouth or into the eyes or anus. The medicine may do no good or do harm given in the wrong way.

It is easiest to remember the FIVE RIGHTS:

Five rights of giving medicines:

Right patient	Right medication	Right dose	Right route	Right time
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Make sure the parent understands how to give or use medicines. Show them ways of persuading children to swallow liquids and tablets. Make sure they know that they should not force medicines into children. You can see more about this in the Table below.

Liquids by mouth	Use the spoon or measure provided to be sure it is the right size. Give slowly. Be patient if the child is reluctant. Forcing it down can cause the child to choke.
Tablets by mouth	If tablets need to be crushed, do this between two spoons. It is easier if you put the tablet into a spoon of clean water first to soften it. If tablets are 'dispersible' or 'soluble', dissolve in a spoon of clean water. Do not open capsules. To divide a tablet: <ul style="list-style-type: none"> • If there is a dividing line, break the tablet. This is easier from the back. • If no line, carefully use a sharp blade and hold your hand or a cloth over it while you cut it so you do not lose a piece.
Rectal medications	Suppositories: dip in water to lubricate slightly. Wear examination gloves or a plastic bag over the finder. Insert gently through the anus.
Eye drops	Hold down the lower eyelid gently. Slowly squeeze dropper to release a drop into the lower lid. If an eye is infected, and you are told to treat both, treat the uninfected one first. This helps to prevent infection spreading.
Eye ointment	Hold down the lower lid gently. Squeeze ointment into the lower lid. Treat the uninfected eye first as above.
Skin paints and ointments	Pour a very little paint into a clean dish. Use a small piece of gauze or clean cloth to dip in and spread across the skin. Use a clean piece each time.



	Use a clean finger to spread ointments. Use a clean finger each time you take some from a bigger pot.
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Here are some more important points to teach parents:

- Medicines must be the right ones designed for children. Adult medicines are not all safe for children. Even medicines that are safe for children need to be given in special smaller doses.
- Parents often buy medicines themselves at a pharmacy or local shop. If in doubt about them they should speak to you. It is a good idea to persuade them not to buy medicines this way except for simple pain-killers like paracetamol. Ordinary shopkeepers do not usually know much about the medicines they sell. Even some pharmacy owners sell the wrong medicines for a condition. This is very dangerous. Another danger of medicines bought from shopkeepers or markets is that they may be fake. They may do no good and even be made of harmful ingredients. They may look just the same as real medicines.
- Medicines to stop diarrhoea are especially dangerous to buy from an unqualified person. It is also very dangerous to give too much or too often. The medicines can stop the bowels from working at all. Children often die from this.

Safety in using medicines

Remind yourself about the rules for storing medicines (Unit 13) and what you learned to teach parents earlier. The same rules apply at home and in the PHU.

Some CHWs give injections using medicines brought to them by patients or parents. This is very dangerous

- If the injection is given in the wrong place, the child can be paralysed
- Infection can be introduced. This can cause big abscesses
- If the parent has bought the medicine from a shop or even a pharmacy it may not be good for this illness. It may be dangerous.

It is also dangerous to give medicines that are 'out-of-date'. Most medicines have 'use by' dates on the pack. An old medicine can

- work extra strongly and harm the child
- fail to work properly as it has become weak. The child will not benefit from it.

Medicines can harm children and adults if wrongly used. The person deciding to use them must know what they are doing. This is why medicines must only be obtained from properly trained health workers only.

Some children (and adults) react to medicines they take in unpleasant or dangerous ways. You need to advise families that if the child becomes ill in unexpected ways e.g. a rash or swelling, or breathing difficulties they should

- stop the medicine
- return at once
- carry the medicine with them to show you.

If the child has a severe rash, much swelling or breathing difficulties, you need to send them at once to the health centre.

Child mental health problems

The illnesses you have learned about so far have all been physical illnesses. Children can also have mental health problems or difficulties with their emotions. Often they are not recognised by families or by health workers. Problems that adolescents and adults experience can be caused by what happens in childhood.

You learned previously that play is important to children. They also need plenty of love and attention. They need to get used to one main carer even if it is not the mother or father. They need to have someone who will take notice if they cry. They need to be listened to as they get older. Feeling loved and secure is important for children to develop into normal healthy adults.

Common causes of mental health difficulties in children

- Neglect which may be physical or emotional
- Abuse: this may be physical or mental. Mental abuse may be someone often being mean to them, bullying, emotional neglect, telling them they are useless, or no-one wants them. Physical abuse can be beating or it can be sexual.
- Displacement and violence: Children who are IDPs often witness violence towards others or even toward themselves. They may have lost family members. They may have experienced violence first-hand. Sadly, even child rape happens in times of conflict.

Some of the possible effects of these experiences

- Behavioural problems
 - being over-active and unable to concentrate
 - not learning or behaving properly at school
 - being withdrawn – not taking part in activities or lacking interest
 - aggression
 - bedwetting and not learning control of faeces
- slow development, delayed speech
- difficult relationships
- anxiety and fear
- being unhappy
- eating disorders: refusing to eat, or overeating.

Getting help

There are few services available for children with mental health problems but this is improving in Somaliland. The health centre staff may be able to advise you about how to get help for a child or family. It may even be enough to support the family to make changes. If they understand what is happening to a child, they may be able to see for themselves what they need to do.

Sexual abuse is often more difficult to deal with. Families often do not want to talk about it. They may not be able to admit that it is happening. They may not even recognise it when it is trusted friend or family member who is abusing a child. They may refuse to believe the child. They may blame the child.

Physical abuse can also be difficult to deal with. People often do not agree about what is acceptable punishment or discipline. They may not want to agree about excessive punishment being abuse.

What can parents do about behavioural problems?

Children need to know what to expect from their families. They need to know the limits and boundaries. They need discipline and rules that do not change all the time. They can be confused if a parent punishes for a bad behaviour one time, then laughs or encourage it another time.

Children may copy their families. Sometimes an aggressive child is just copying what they see at home. When parents understand this they may be able to make changes.

Delays in development

There are some other disorders that people may think of as mental health problems. These can be physical but show as mental problems.

Slow learning or unable to learn: This can happen as a result of damage before or during birth. It can happen when a baby is born very early. Some children who have damage may be physically disabled. They may be learning disabled too, or they may be able to think and learn like everyone else.

Speech problems: Children may not learn to talk properly. They may actually have hearing difficulties (deafness) so can not learn from others. They also may have been damaged around the time of birth but still are able to think and learn as well as anyone else. Other children may talk with difficulty e.g. stammering and unable to speak words properly.

Problems communicating: Some children find it difficult to talk or be with other people. They may not want to look at others. They may be more active than usual, or hide themselves away. They may be unable to concentrate, or get angry easily.

What can the CHW do?

The CHW can

- refer the child and family to see if any help is available
- provide information to families and the community
- encourage the community to include children who have mental health problems or other disabilities to take part in what is happening
- get the family talking about why children may have difficulties and what can be done to make improvements
- persuade families not to expect too much, too quickly
- encourage families to be gentle and patient with these children.

Final reminders

Follow-up visits

Remember that you need to follow up the patients you have seen. They may be children who you have treated at the PHU or at home. They may be children you have referred to the health centre. You should check up on them all until they are completely recovered. When you refer a child, it is best to ask the parents to let you know when they return home.



Monitoring growth following illness

Part of follow-up is to make sure the child who has been sick continues to grow properly after he recovers. Remember you learned how illness can lead to malnutrition and poor growth. Even if the health centre does not ask you to monitor his growth, it is a good idea to do so using the MUAC strap.

Recording and reporting

You will remember you have learned about the importance of recording and reporting. If you do not record what you do, no-one will know what has happened and what you have done for the child. The child could be in danger if a treatment is repeated because you have not recorded it. He could also be in danger if a treatment is missed because your records are bad.

There will be special record cards used in your region. Your trainer will show you these. She will also help you to get used to using them.

There are many diseases that you will learn about in Units 11 and 12 that can also be suffered by children.

UNIT 9 NUTRITION AND MALNUTRITION

These are the things you should know and be able to do after studying this learning unit:

- Provide information to families about essential nutrients needed by children
- Inform families about early and exclusive breastfeeding
- Inform families about safe complementary feeding after 6 months
- Suggest appropriate local foods that will provide essential nutrients
- Assist staff with outreach campaigns
- Mobilise your community to improve the nourishment of children
- Monitor children for under-nutrition and malnutrition
- Report findings regularly to the health centre
- Identify and refer children giving cause for concern to the health centre
- Assist with therapeutic nutrition programmes
- Provide home-based care where indicated under the supervision of health centre staff.

Before working on this learning Unit you need to look back at what you have learned already. Look at Unit 3 How the body works, Unit 4 Healthy people, and Unit 7 Health promotion, education and communication. These are the foundation for what you learn in this Unit.

The role of CHWs

What CHWs do to help the community improve the nutrition of the children, pregnant women and others who live there is one of the most important of all their jobs. CHW are

- healthy nutrition advocates
- healthy nutrition promoters
- mobilisers who help the community to act.

CHWs also have an important role in identifying children who need help to become well-nourished. You will learn how to

- identify malnourished children
- refer them to the health centre or specialist teams
- support parents whose children are on treatment programmes at home
- assist with outreach and clinics.



Nutrition essentials

First, it is important to remember that food is more than just nourishment. It is an important part of our lives and the way we spend time with people.



You will remember from Unit 4 that people need a variety of different foods to stay healthy. This is extra important for children, pregnant women and those who are breast-feeding. They also need extra good food when they are recovering after illness.



Before looking more at nutrition, there is one vital message. The foundation for good health and good nutrition is early and exclusive breastfeeding. Right from birth – only breastmilk – and breast milk while the baby is weaned from six months – until about two years.



You need to remind yourself of how the body uses food. Unit 3 will help you.



ACTIVITY

In your group, find a way of showing how the body uses food and water.

- You could draw it on paper or in the sand if you do not have paper.
- You could make up a fun demonstration with
 - someone pretending to be some food
 - others pretending to be the mouth, food pipe, stomach and intestines.

Now just think about these two methods of remembering how food is used in the body. Which is more fun? Which helps you to remember better? You should remember this for when you are doing health education.

A quick reminder:

The mouth takes food, chews it, swallows it, it passes down the food pipe. In the stomach the food gets churned up with fluids. Some food goes straight into the blood. Some passes into the intestine then goes into the blood. Some gets passed down and out as waste.

You now need to remind yourself about types of food and what they do. Again, go back to Unit 4 to check. You looked at a chart of foods and what they do. You then decided what local foods provided these nutrients. Nutrients are the things in our food that keep our body healthy e.g. body-building nutrient, called proteins, and energy nutrients called fats and carbohydrates.

ACTIVITY

1. Remind yourself of the main types of foods and the nutrients they contain.
2. Make some big posters for each type of nutrient. Write the nutrient e.g. 'protein' and what they do e.g. 'body-building' on top.
3. Draw types of food on each poster. Or you could gather types of food and place them on top of each poster e.g. draw or place a fish on the protein / body-building chart.
4. Now look at the chart that you made in Unit 4 again and try to add as many new sources of nutrients as possible. Your trainer will help you to decide which is which.
5. Finally: in groups, draw different types of food on a poster (say 5 types or even 10). Ask people from other groups to identify the nutrients in them and say what jobs the foods do e.g. a fish will have protein, fat, vitamins and minerals. Beans will have----? Which group can get the most right answers?

Micronutrients

Nothing much has been said yet about micronutrients. 'Micro' means very small. You can not see them. These are the nutrients that keep us well and help us fight infections. They are in most of our foods. Different foods give us different micronutrients. They also help women stay strong and grow healthy babies in pregnancy and while breastfeeding,. There are two main types of micronutrient. These are minerals and vitamins:

- Minerals make healthy blood, bones, teeth. The main ones we need are
 - iron
 - calcium
 - zinc
 - iodine
- Vitamins are essential for making sure our bodies work well. Some of the vitamins we need are:
 - vitamin A
 - vitamin B
 - vitamin C
 - vitamin D

Now we have looked at the different types of foods and nutrients, here is a chart that shows them all.

Types of nutrient

Nutrient	What it is for	Food that provides it (Breast milk provides enough of all these nutrients for 6 months)
Protein	Body-building. Growth and repair of everything in our bodies	Animal: meat (muscle, liver, intestines, kidneys), eggs, fish, milk Plant: beans, peas, nuts, lentils, groundnuts Some protein in grains e.g. millet, maize, wheat and bread, but not as much as from animals
Carbohydrate	Energy and strength	Grains e.g. millet, wheat, maize, rice, bread Roots and tubers e.g. potatoes, yams, cassava Beans, peas, nuts Bananas, plantain Sugar cane, fruit and foods with sugar in
Fat	Energy Protecting organs e.g. heart and kidney Do not eat too much fat.	Animal fats e.g. meat , milk, some fish Plant oils e.g. groundnuts, soya beans, nuts, simsim
Minerals: Iron	Keeping the blood healthy Healthy unborn baby	Meat, eggs, nuts and seeds Dark leafy vegetables Supplements Breast milk
Calcium	Making strong bones and teeth , blood	Breast milk, other milk and milk products Dark green leafy vegetables, beans and peas, bony fish Supplements and fortified foods Short cooking time important using not much water Also see below about sun exposure for vitamin D
Zinc	Growth, intelligence, preventing diarrhoea	Breast milk Meat, liver, kidney, fish, chicken, grains including maize and wheat Fortified foods and supplements
Iodine	Healthy unborn baby, growth, intelligence, preventing enlarged thyroid	Breast milk, iodised salt, sea fish
Vitamin A	Eyes, skin, brain, protection from infectious diseases	Yellow, red and green fruit and vegetables, liver, eggs, milk, supplements
B (includes folic acid)	Blood, skin, nerves, brain, development of fetus	Meat, fish, grains, eggs, milk, vegetables, fruit Supplements
C	Blood, skin, mouth, teeth, bones, healing	Breast milk Fruit, uncooked vegetables e.g. tomatoes (cook quickly if necessary), Supplements
D	Making strong bones and teeth	Egg, chicken liver, margarine, milk Oily fish and fish oil supplements Supplements Vitamin D also comes from sunshine on skin

Here below is another way of looking at this information about some micronutrients. You will see that all micronutrients are in breast milk in the right quantities for babies.

 <p>All vitamins, minerals and other nutrients</p>	 <p>Wheat flour, meat, liver, peas and beans</p>	Iron	Iodine	 <p>Iodised salt, sea fish, lobster</p>
	 <p>Meat, chicken, pawpaw, peas and beans, maize</p>	Iron, zinc	Vitamin A	 <p>Carrots, eggs, camel milk, fish, pumpkin, kale</p>
	 <p>Cheese, fish, milk, peas, kale</p>	Calcium	Vitamin C	 <p>Oranges, lemons, mangoes, tomatoes</p>

Later in this unit you will learn more about what happens when people do not have enough good nutrients in their diet.

Why is fluid important?

Water is needed for making blood, saliva and tears. It is also essential for digesting food. It is important for keeping the mouth and lungs moist. The skin needs water for staying moist and cool. Water is needed to produce breastmilk. Breastmilk provides all the water for babies under 6 months.

Water is present in most of the foods we eat. Vegetables and fruit contain plenty of water. Any fluid we drink will have water in it. We need to be careful that drinks do not contain too much sugar. Too much sugar causes tooth decay and helps make us fat. It can help cause diabetes, heart disease and other serious illnesses.

A healthy balanced diet

A healthy diet is a balanced diet. This means that people have a good mix of foods of different types at every meal. They do not eat too much of one thing and not enough of other. Here is another way of looking at what a mixture of food gives us:

What is in different foods?

	Meat	Fish	Eggs	Milk especially breast milk	Beans & peas	Grain	Nuts & seeds	Yellow / red fruit & vegetables	Green leafy vegetables
Protein	✓	✓	✓	✓	✓	✓	✓		
Carbohydrate				✓	✓	✓	✓		
Fat / oil	✓	✓	✓	✓	✓	✓	✓		
Minerals	✓	✓	✓	✓	✓	✓		✓	✓
Vitamin A		✓		✓				✓	✓
B vitamins	✓	✓	✓	✓	✓	✓	✓	✓	✓
Vitamin C				✓	✓			✓	✓
Vitamin D		✓	✓	✓					

CHWs have an important role in helping people have this balanced diet. There are many ways you can help. Here are some of them

- Provide information about the importance of a balanced diet
- Encourage families to keep goats, camels, chickens, maybe cattle, for meat and milk
- Encourage families to grow gardens for food
- Look at ways of making sure food is available all through the year
- Encourage best child feeding practice especially exclusive breastfeeding and introduction of healthy complementary foods after 6 months
- Encourage families to give enough time for
 - preparing food properly
 - allowing children to feed at their own pace
 - not forcing food on children
 - enjoying meals together.



Local food habits, traditions and production

CHWs need to understand local food traditions and taboos. You also need to understand

- the way food is produced in your area
- how it is processed
- where food comes from if it is not produced locally
- what the barriers are to getting good food.

Food processing is important. For example, food is best prepared whole. Potato skins, husks of grains/cereals like rice and maize are better left in when grinding, pounding or milling. The skins and husks contain a lot of important nutrients.

Food traditions

ACTIVITY

In your groups:

1. Discuss food traditions and taboos that you know about.
2. Are they helpful or unhelpful?
3. What about traditions and taboos relating to pregnant and lactating women?
4. How could you help to change unhelpful ideas?
5. You could maybe talk to people in your village about it. You could even talk to old and younger people to see how things have changed.

Food production

ACTIVITY

In your groups:

1. How do people obtain food in your area?
2. What crops are grown?
3. What animals do people keep for food?
4. Do people have to buy food? If so, where does the money come from to buy it?
5. Are there differences between your communities?
6. Why do you think these differences exist? For example, if no-one plants gardens in your community, or no-one keeps animals for food, why is this?
7. Can you think of any ways you could help your community to have better food?



Barriers to having good food

There are many reasons why people can not have good food. It may be that the area is too dry and there is not enough water for irrigation. It may be that goats get sick and die. Maybe there is not enough grazing for cattle. Maybe there is no money to buy food. Maybe prices have risen too much.

ACTIVITY

Discuss this in your groups. You could ask people in your community during your time at home.

1. What makes having good food difficult in your area?
2. What could you try to do to help the community improve this?

Having worms is one barrier to having good nutrition.

De-worming

Worms can prevent children and adults from getting enough nourishment from what they eat. Regular de-worming is especially important for children and pregnant women.

Parasites (worms) in the intestines are very common in children. They often cause children to become malnourished. This is because they take nutrients for their own survival from the food children eat. Somaliland considers de-worming important for children. It is also important for pregnant women. The health system, education system and parents all need to work together.

How do people know they have worms?

- It may be possible to see the worms
 - Tapeworms show in the faeces as small square egg cases that have broken off the long tapeworm
 - Threadworms (pinworms) may be seen in the faeces, or moving around the anus
 - Roundworms may come out of the anus. Children can have large numbers of roundworms and pass many at a time. These children may be very sick.
- They may have
 - pain or discomfort in the belly
 - swelling in the belly
 - itching around the anus (threadworms)
 - malnutrition. Children may grow too slowly.

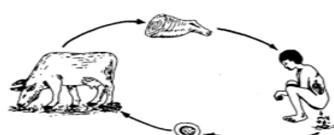


How worms are passed around

You will remember from Unit 4 that people may have threadworms, tapeworms and roundworms in the intestines. They pass the eggs out. Someone else swallows them after touching the soil where there has been faeces, or touching dirty hands and putting them to the mouth.

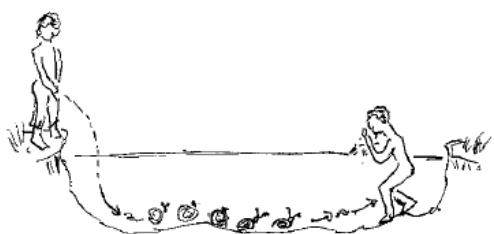


They may have hookworms that they have picked up from the ground. They pass into the blood through the skin (mostly through the feet) and go to the intestines. Then they are passed out into the soil for someone else to pick up.



They may have tapeworms that have passed when meat is eaten. The animal has fed on ground where someone with a tapeworm has passed faeces.

They may have schistosomiasis (Bilharzia) worms in their blood or bladder they have caught while standing in water. The worms pass out into the water when the person urinates and live in water snails.



Preventing infection with worms

Preventing infection depends on stopping this cycle.

ACTIVITY

Think about how worms are passed between people. How can this be stopped? Check back to Learning unit 4 to help you.

There are important parts to any de-worming activity:

- giving information to people in the community about de-worming e.g. parents, and answering their questions. They may fear the medicines.
- teachers, health workers and the Community Health Council planning and acting together
- giving information to children about de-worming and answering their questions
- providing antiworm medicines (known as anthelmintics)
- making sure that people understand the importance of hand-washing to prevent re-infestation.

De-worming children and adults

This may happen as an outreach campaign or because parents say they believe a child has worms. It may happen as part of malnutrition treatment. All children over 1 year of age should be given de-worming medicines at least one time a year. Most worms are killed by de-worming medicines. Pregnant women should also have de-worming medicine after 12 weeks.

Here in the Table is a programme for de-worming.

De-worming

Age	Dose of de-worming medicine	Things to remember
0-12 months	None	Do Not de-worm
12-24 months	$\frac{1}{2}$ tablet = 200mg.	Single dose
Older than 24 months	1 tablet = 400 mg.	Single dose
Pregnant women	1 tablet = 400 mg.	After 12 weeks. Do not give in the first 12 weeks of pregnancy.
Lactating women	None	Do Not de-worm. The woman may be pregnant and not know.

Some people have side-effects from de-worming tablets but they will go away. The possible side-effects are

- belly-ache
- diarrhoea
- dizziness
- vomiting.

Nutrition through the lifecycle

People have different needs at different times of their lifecycle. We will look at these groups:

- infants and children including complementary feeding
- adolescents
- childbearing women from conception to lactation
- old age.

Infants and young children have special needs. We will look at them afterwards. The most important thing is to give them a good start in life with early and exclusive breastfeeding.

Adolescents

Adolescents need good food as they are still growing. Some adolescents can be difficult about food.



If they have enough money and live in towns they may buy bad food. This is especially if their friends are doing the same. Others have no money or access to nourishing food and neither do their families. Adolescent girls need good food to make sure their bodies grow strong enough for bearing children. They need good size pelvic bones so that the baby does not get stuck during the birth. This can kill the baby and the mother. Once the girl is in late adolescence, it is too late then to grow better bones.

Adolescents need plenty of body-building protein, and micronutrients. They also need energy-giving foods.

Childbearing women from conception to lactation



Think back to the earlier section. Women need good food to make sure they do not become anaemic (have weak blood). They need food that gives them minerals (especially iron) and vitamins. Many women find these foods difficult to get. The family may not understand how important good food is to childbearing women. The baby will usually still grow and the malnourished woman will provide enough milk for the baby. But the woman herself will suffer and may become ill or even die.



Childbearing and lactating women need minerals and vitamins for the baby as well as themselves. These are often provided as micronutrient supplements. Micronutrient supplements contain several nutrients e.g. iron and vitamin A. You will learn more about this later.

Older people

Some people become less hungry as they become older. They may give their own food to children if food supplies are limited. Older people still need good food. They may need less energy food. They still need plenty of protein and micronutrients to help them repair the body and fight off infection.



If older people have painful teeth and sore gums, or lose their teeth, they may need extra help. They may need to have softer food or food that is easier to chew. They may need help with cooking but not tell anyone so that they do not eat well.

Feeding children

Feeding children is a big topic. You will learn about it later in this Learning Unit.



Nutrition when people are ill

When people are ill they need good food to help them get better. They need good food also to help them heal if they have wounds. Good nutrition is very important to people who have HIV or AIDS. It is essential for children who have been sick. They will become sick again more quickly if they are not well-fed. You will learn more about this shortly.

Inadequate nutrition

Why do people become badly nourished?

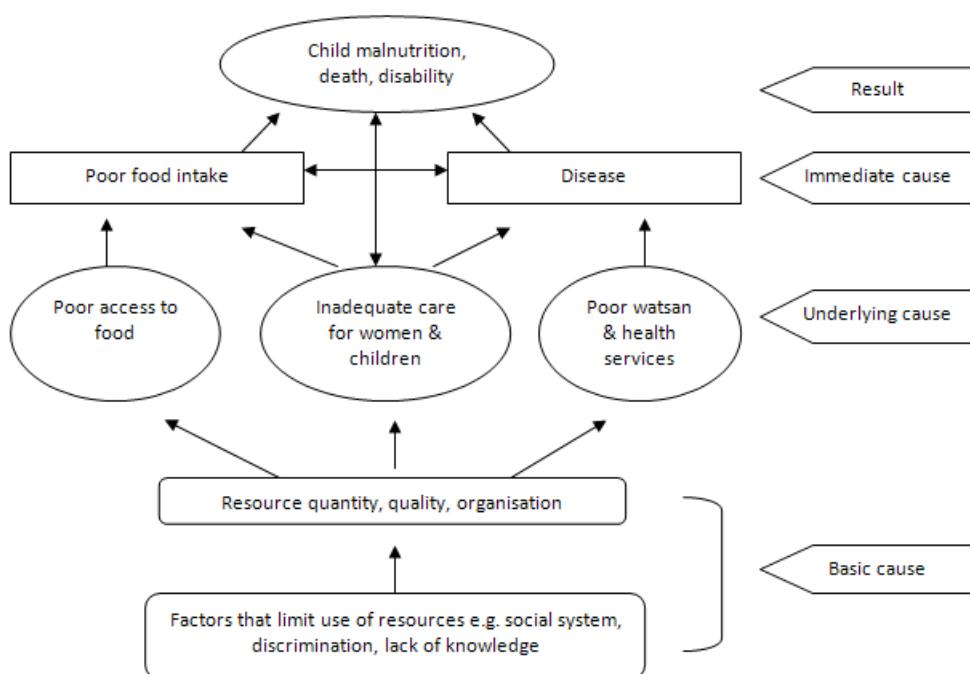
There are many reasons why some people are not well-nourished. Children are more at risk than anyone else. Pregnant women are also at risk. You will be able to work some of these reasons out.

ACTIVITY

In your groups:

1. Look at the diagram below. This is called the 'causal framework of malnutrition'. List the main causes of poor nutrition that you see there.
2. Now think about your own communities. Do you see any of these happening in your communities?

Causes of malnutrition



3. How can CHWs help the families in your communities to improve the situation?

Malnutrition comes from

- eating the wrong foods
- not eating enough
- cooking foods too much so nutrients are destroyed
- being unable to use the food properly in the body.

As the figure above shows, there is much more to malnutrition than just not eating well. It is to do with resources, how well people can access them especially women and children, how good the services are. It is to do with what people know about nutritional needs, and what they believe about nutrition, about disease and so on.

A common immediate reason for a child being malnourished is that the mother has not breastfed the child enough. She may have

- given other things like water or milk powder
- watered down the formula milk powders too much
- given supplementary foods too early.

Formula milk powders are often called ‘breastmilk substitutes’, or ‘artificial milks’. Babies who are fed these are often given feeds with too much water in them. They are very expensive. The family may try to save money by making feeds with less powder in than the instructions say. Instructions must be in Somali to be sold in Somaliland but they may not be able to read the instructions even when they are written in Somali.

Babies fed on formula milk powders become ill much more often than breastfed babies. They have diarrhoea and chest infections much more often as well as other diseases. Babies given formula feeds become malnourished more often than do fully breast fed babies.



ACTIVITY

Think now about this issue of women not breastfeeding and instead giving substitutes. Can you think of the basic reasons why this happens? Looking at the figure above will help you.

Infection and poor nutrition

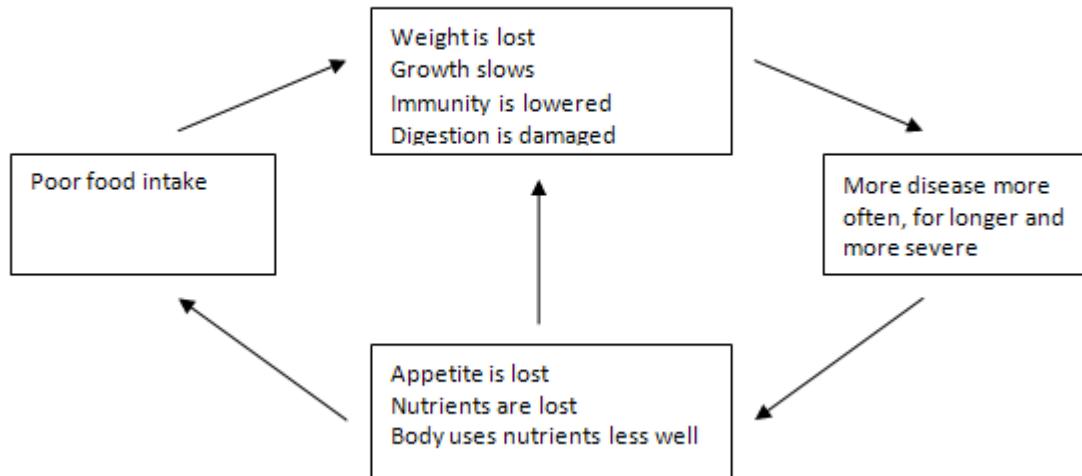
It is often not just lack of food that leads to malnutrition. Infection and infectious diseases are often a problem too. Insufficient food intake and infectious disease together cause a lot of the illness and death seen in developing countries like Somaliland.

When people, especially children, do not eat enough, their defences against infection are reduced.

- Their immune systems do not work well. They have diseases more often, they are more sick, and the diseases last longer.
- Nutrients are lost faster when there is infectious disease.
- The appetite may be low and the child does not want to eat.

In the figure below, you can see this cycle that makes people (especially children) more and more sick and malnourished.

How malnutrition and infection are linked



What happens when nutrition is inadequate?

Both adults and children will lack energy and take longer to recover from illnesses and are more likely to die from them. Wounds will heal less well. They are more likely to get infections as you learned above so malnourished children and adults are sick more often, they are more ill and take longer to recover. The child or adult will suffer from many different ailments.

There is also the link with having worms that you have learned about already. Children and adults who have parasites do not get the best possible nourishment from their food so can become malnourished even if they have the right food to eat.

Malnutrition has a basic effect on the way children and young people grow and develop. They may grow slowly or not at all. All of the systems of the body suffer.

What are the signs of malnutrition in adults?

Adults may be thin, or they may have swollen bodies. They may have hair that is falling out and have dry skin and breaking nails, and sores on the skin and in the mouth. They may have weak muscles and wounds that do not heal. They may have problems with their teeth. They may bruise easily, and their bones may break easily. They may not see well.

What happens to a torch when the batteries are running out?
What happens to a lantern when the kerosene is running out? The light will go dim and then fail. The human body is just the same. We cannot have energy to keep going without food as fuel.



Malnutrition in pregnancy and lactation

Women's bodies make better use of food in pregnancy than when they are not pregnant. They still do need some extra food to give the fetus all it needs without becoming malnourished herself. They need even more when breastfeeding. Extra food is even more important when pregnant and lactating women can not decrease their workload. Women may be tired and anaemic. Women who are malnourished are more likely to have health problems or even not survive. There is also a link between malnutrition and mortality of the baby before and after the birth. Iron and vitamin A are especially important so the woman can have strong blood. You will look at this again in Unit 15.

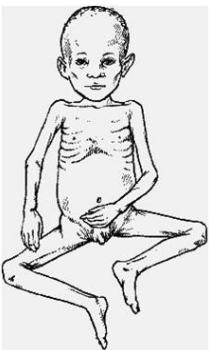
What are the signs of malnutrition in children?

Children may be malnourished through lack of protein or lack of energy foods. This is sometimes called ‘protein-energy malnutrition’. They may lack both protein and energy foods. They will also lack micro-nutrients. You learned about these earlier.

Children are not always under-weight and skinny. They may have swollen bodies instead. Some of their weight is extra fluid in the body, called oedema.



There are two sets of signs that you may see in children. They are very different from each other as you can see.



The malnutrition with oedema is sometimes called ‘kwashiorkor’. This most often happens if children do not have enough protein. It often happens if they do not have the right foods once breastfeeding stops.



The malnutrition without general oedema is sometimes called ‘marasmus’. These children do not have enough energy foods as well as not enough protein. It often happens when any food is in short supply such as in refugee camps and after disasters.

Other signs of malnutrition are

- change in colour and texture of skin and hair
- skin rash
- the child is irritable or does not want to eat or play
- diarrhoea
- enlarged belly even if skinny
- frequent infections
- the child may collapse and die.

Identifying children who are malnourished is very important. You can save a child’s life if you identify malnutrition in time, refer the child, and the child receives treatment.

Screening for malnutrition

‘Screening’ means checking all children to make sure they are not becoming malnourished. This is an important duty for CHWs.



This child is not malnourished, the parents need to be congratulated.



This child is malnourished. He needs help.

Common ways to screen including measuring the arm and checking for swollen feet. You learn about these next.

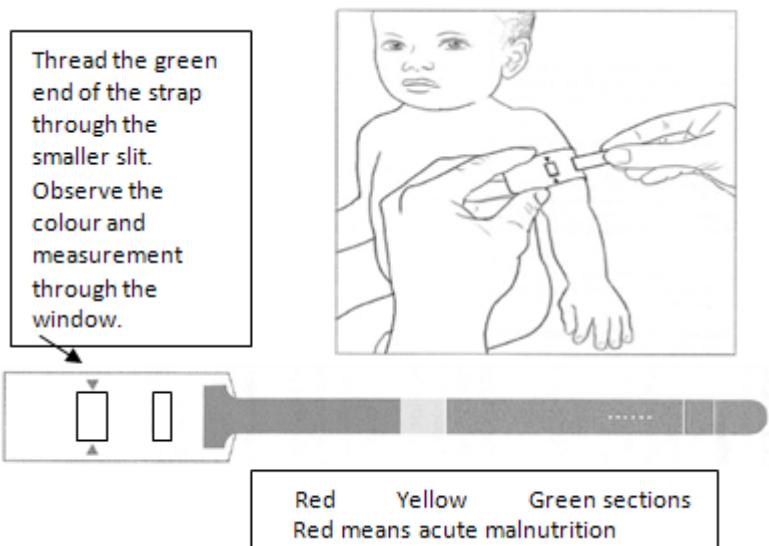
Measuring the arm

Before a child shows all these signs, you can find out if it is becoming malnourished by measuring with a special tape. The tape is called a MUAC strap. ‘MUAC’ stands for ‘Mid Upper Arm Circumference’ in English. Because a child’s upper arm does not change much between 1 and 5 years, it can be used easily. The diagram below shows a picture of a MUAC strap.

Using the MUAC strap

- MUAC is used for children between 6 months and 59 months (5 years).
- It can also be used for pregnant women and lactating mothers.
- Parents or older siblings can do this with training and supervision at first. They do not need to be able to read the numbers.
- MUAC is measured in centimetres .
- Instructions
 - Straighten the child’s arm gently.
 - Find the midpoint of the left arm between shoulder and elbow.
 - Hold the wide end of the strap against the upper arm at the midpoint.
 - Put the other end of the strap around the child’s arm. Thread the green end through the small slit in the strap from underneath.
 - Pull both ends until the strap fits closely. It should not be tight enough to cause folds in the skin.
 - Press the window at the wide end onto the strap. Note the colour at the marks. The tape has red, yellow and green sections. This allows you to identify children who need help and refer them quickly.
 - green = healthy
 - yellow = moderate acute malnutrition
 - red = severe acute malnutrition .

The drawing shows how to use the MUAC strap.



CHWs may be expected to know the actual measurements and record them as well as noting the colour. This means you can check the child's progress.

- Green: A well-nourished child will have a MUAC of 12.5 cms. or more.
- Yellow: A child with moderate acute malnourishment will have a MUAC of 11.5 to 12.5 cms.
- Red: A child with severe acute malnourishment will have a MUAC of less than 11.5 cms.

Checking for swollen feet

Press the feet of a child for 30 seconds if the feet look swollen. Do this with your finger. A dent will be left when you lift your finger. This is fluid (called oedema). It may spread to the legs or the rest of the child's body. It is a serious sign.



Recording what you found

Remember to record what you found every time you do these things. Use the child's EPI card if he has one.

Teaching parents to watch for signs of malnutrition

Parents should take their children to be seen by the CHW or straight to the health centre if they

- are thin, weak and losing weight
- have swelling feet
- have loose skin like old people
- do not want to eat.

Parents and community members need to understand how important it is to have MUAC screening. They need to understand that food and medicines can help. Children do not have to die.

It is important that parents understand that they need to attend the clinic regularly. If a child is not brought regularly, the CHW should find out why. Then the CHW should encourage regular attendance.

How do I know when a child needs to be referred to the Health Centre or outreach team? What are the danger signs?

Any child with malnutrition must be seen at the Health Centre or by a Child Health outreach team nurse. Some may be sent home again for treatment. They will need to continue to be seen regularly by health Centre or Outreach team staff.

You can support the parents of these children at home but they must be seen first by a nurse or doctor. Here are the danger signs which mean children must be referred:

- wasting: the child is very thin
- MUAC below 12.5 cms. in the yellow or red sections of the



MUAC strap

- oedema of both feet, legs or more.

Parents should be advised to take children with one or more danger signs to the health centre urgently. They should take the record card or a referral note if there are no EPI cards.

ACTIVITY

In groups:

- a. Body mapping:
 1. Draw a child on a big piece of paper.
 2. Draw on the child the parts of the body where you may find signs of malnutrition.
 3. Show the other groups what you thought.
- b. Practical:
 1. Practice measuring MUAC on each other.
 2. Demonstrate to each other how to check for oedema.
 3. Your trainer will give you the opportunity to visit clinics where you can practice measuring children.
 4. Role play teaching parents how to check for malnutrition.
- c. In class, talk together about how you could start this in your communities.

Nutrition programmes

Nutrition programmes in Somaliland carry out several activities. The Table below shows the activities, where they are carried out, and who is responsible for them. The system is called IMAM (Integrated Management of Acute Malnutrition).

Activity	Place	People responsible
Health promotion, education and mobilisation	Communities	CHWs, Outreach teams
Screening	Communities	CHWs, Outreach teams, parents
Supplementary feeding programme for children with moderate acute malnutrition (MAM)	Health centre outpatient clinic Homes	Health centre staff, outreach staff, CHWs
Treatment for children with severe acute malnutrition (SAM) and no complications	Health centre outpatient clinic Homes (once well enough)	Health centre staff At home: outreach staff, CHWs with supervision
Treatment for children with SAM who have complications	Hospital or feeding unit, inpatient Health centre outpatient clinic Homes once well enough	Hospital staff When improving: health centre staff, then outreach staff, CHWs under supervision

What happens when a malnourished child is referred?

You will not be responsible for children while they are still fully cared for by the Health Centre or hospital. But it helps parents if you can tell them what may happen.

Health staff will assess the condition of the child using

- MUAC measurement
- weighing
- height measurement
- full examination of the child
- checking for oedema
- testing the appetite
- assessing feeding
- talking to the parents.



The child will be started on the Outpatient Therapeutic (treatment) Programme. This is known as OTP. This will happen if the child

- has MUAC measurement less than 12.5cms
- has swelling of both feet
- is very thin and wasted or has other visible signs
- is more than 6 months of age.

Children with complications need to be admitted to hospital or a special feeding unit.

Babies less than 6 months of age also need admission as they are unable to chew the special food.

Some complications are shown in the chart below.

			
Fever	Fits	Uncontrollable vomiting	Large amounts of diarrhoea
Unable to breastfeed	Weak, unconscious, not interested in anything	Measles	Rush all these babies to a hospital or special feeding unit 

In the Health centre or hospital children will be given vitamin supplements and antibiotics. They will be given anti-worming medicine and immunisation if that has not been done before. They will be tested for malaria if it is in the area. They will be given anti-malarials if needed.

Children will be given extra food. The food used is called 'Ready to Use Therapeutic Food' (RUTF). A common type is called Plumpynut.

RUTF is not given to babies less than 6 months. If they have SAM, babies need inpatient care and special milks.

Plumpynut / RUTF

Made from groundnuts, oil, sugar, milk powder, vitamins, minerals

Needs no further cooking and no preparation

Safe for home use. It has low water content and will not go bad after the packet is opened. The packet can be used until it is empty

The clinic will tell the mother how much to give. They will change this at clinic visits as the child gains weight

The child is taken weekly to the clinic. One week's supply is usually given at one time. Two weeks supply may be given if the home is very remote

First week child has RUTF only

Other foods can be given after the first week provided the RUTF amount for the day has been eaten

Clean water needs to be given for the child to drink with the RUTF

Breastfeeding should continue if the mother is still lactating

The child is weaned off the RUTF gradually onto family food

Advising parents on feeding the child properly is essential

All children should be enrolled on any extra feeding programmes available in the area



Children who do not improve must be seen by a doctor.

Children with SAM can return to the OTP and then to the SFP (Supplementary Feeding Programme) and go home once they have improved. The MUAC needs to be more than 12.5cms.

There are some key messages for parents of children on feeding programmes. They are:

- Breastfeeding is best – and first. It should continue.
- RUTF is only for the child being treated. It must not be shared.
- Children need small, regular meals of RUTF. Sick children can eat small amounts only and may need encouragement. About 8 meals a day is needed at first.
- Water offered needs to be safe.
- Wash the child's hands and face with water and soap before feeding and after going to the toilet.
- Wash your own hands.
- If the child has diarrhoea, continue the RUTF, give extra food, breastmilk and water, take to a doctor if no improvement seen.
- Keep the child covered and warm. They get cold quickly.
- Use insecticide impregnated mosquito nets for children if the area has malaria.
- How can CHWs support malnourished children at home?



ACTIVITY

Look back at the previous pages. Think in your groups about

1. What should you do be doing to support parents at home when children are malnourished?
2. How do you support parents whose child is on the feeding programme?
3. How can you make sure the parents take their child for follow-up visits (usually every week)?
4. How will you know which children are attending for follow-up?
5. How can you encourage parents to go who do not do so?
6. How can you make sure the child does not become malnourished again?
7. How can you follow up the eating habits of children who have been malnourished?

You need to refer a child back to the Health Centre if the child

- has loss of appetite or does not want to eat the RUTF
- is not responding by gaining weight
- develops a complication or more danger signs.

Health promotion and education

Now that you have learned more about nutrition and malnutrition you could plan what you can do in your own community.

ACTIVITY

In your group, plan how to

1. promote messages about healthy eating with individuals, families, and the community
2. encourage good nutrition in households
3. teach parents about
 - the importance of good food for children
 - how to feed their children
 - early and exclusive breastfeeding to 6 months
 - introducing complementary foods after 6 months
 - continuing breastfeeding at the same time as giving complementary foods.

Feeding children after 6 months of age

Before you look at this next section, think about how children are weaned in your area and what they are given to eat. This is the final section in this Learning Unit. It is an important one.

How can safe complementary feeding be introduced?

How can food be improved?

We will look at these two questions at the same time.

Complementary feeding is the introduction of other foods as well as breast milk. This should happen at around 6 months of age. The child will now need more than he can get from breastmilk alone.

Children should continue to be offered breastmilk as well. Breastmilk should not be reduced. This is very important to keep children healthy.

Water used to prepare foods must be clean and safe. The person preparing the food and feeding the baby must wash her hands. Infants get infections like diarrhoea very easily and they can make them weak or even die.



Infants need soft food like porridge or pap. They should not be too watery, or too thick. The drawing shows a good consistency.



Soft foods need to be introduced carefully so the infant can learn how to swallow the food.

Later they start to learn to chew. Small soft pieces of food can be introduced. ALWAYS the child must be given this by an adult as the child could choke.



Food needs to be given more often to young children. Their stomachs are still very small. They can not take enough to fill their needs if they do not have frequent meals. This is shown in the pictures below. As well as breastmilk they need

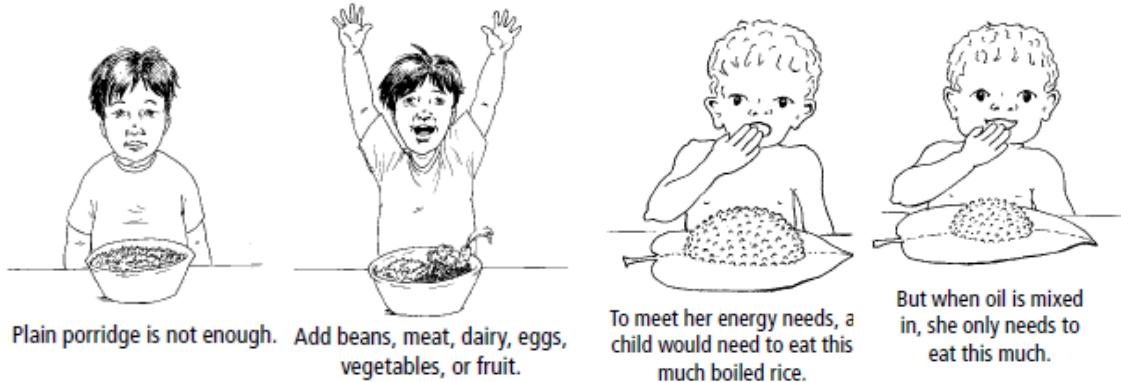
- at six months, 5-6 feeds a day
- after nine months, 4-5 feeds a day.

Babies will often show that they are ready to eat family foods. Some signs of this are that they

- show interest in what others are eating. They may reach out for food
- like to put things in their mouths
- can control their tongues better to roll food around in the mouth
- start to make up and down chewing movements.

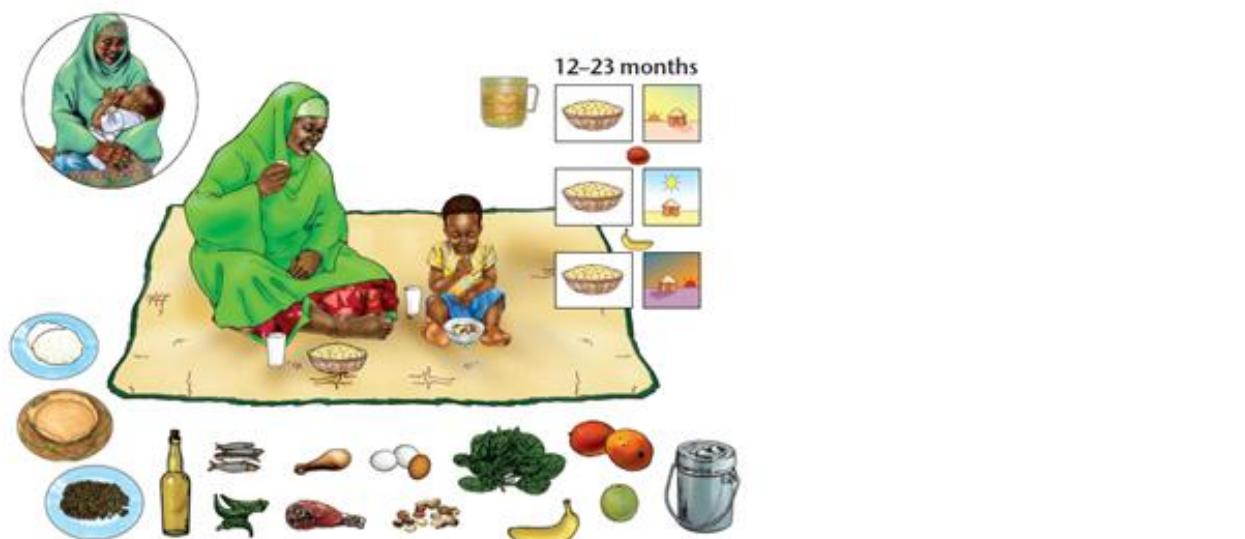
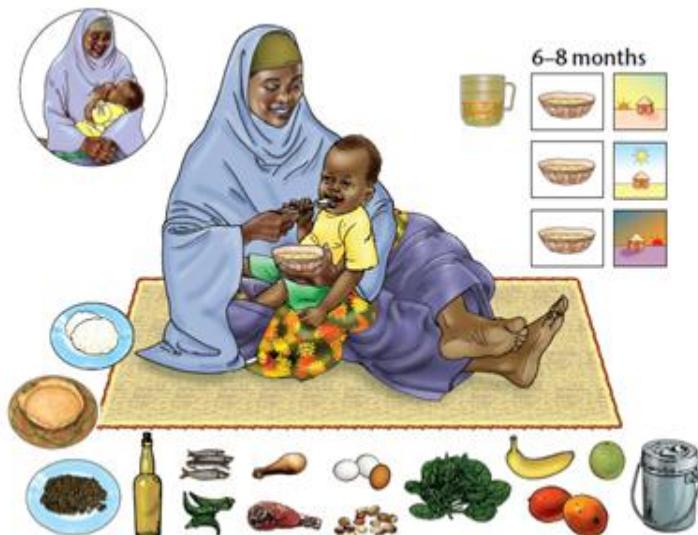
The main food can be the same as the family food e.g. rice, potatoes, maize, plantain, cassava, bread. This will not give enough energy, micronutrients or protein. Here are some foods that could be added if available. They all need to be mashed, pounded or crushed.

- vegetable oil or fat to add more energy. Groundnut paste and margarine are good
- eggs, peas, beans, lentils, groundnuts, fish, red meat, liver, chicken
- dark green vegetables (quickly cooked), orange vegetables, tomatoes
- fruit e.g. papaya, mango, banana if obtainable.



The pictures below show foods that are good for different ages. Remember breastmilk should be continued alongside other foods after six months and for two years.





ACTIVITY

Talk about how good food is included in complementary feeding in your community.

1. What foods are used?
2. What else could families give their babies on weaning? What is available? Can they afford it?
3. Is there anything given that is not helpful?
4. What could you do about it?

Food needs to be

- affordable
- nutritious and balanced
- easy to prepare and store
- high in energy content especially oil
- easy to digest
- familiar to people
- grown or produced locally.

For people with access to shops and some money there are many foods sold that are not so good for children. These include biscuits, tinned baby foods, tonics, sweets. Too much of these can make children too fat and lead to health problems when they are older. They may also fill them up so they then refuse more nourishing food.

It is important that children are not forced to eat, or beaten because they do not want to eat. It is also important that children have their own plates. This is for hygiene reasons. It is also so that parents can see how much the child has eaten. If a child has to compete for food with other stronger children or adults, he may lose out. He can then become malnourished very quickly.

Here is a suggested plan for complementary feeding for the child between 6 months and 2 years.

Age	Frequency	Amount of food (in addition to breastmilk)	Texture, thickness, consistency
At 6 months	2-3 meals plus frequent breastfeeds	Start with tastes Try one new taste at a time Gradually increase to 2-3 large spoons each feed	Thick porridge / pap made of cereals (grains)
6-9 months	2-3 meals Frequent breastfeeds 1 or 2 snacks as well	2-3 large spoons each feed Increase gradually to $\frac{1}{2}$ a cup or small bowl	Thick porridge / pap Family foods: <ul style="list-style-type: none">• Mashed, crushed, pureed
9-12 months	3-4 meals Breastfeeds 1 or 2 snacks	$\frac{1}{2}$ a cup or small bowl	Family foods: <ul style="list-style-type: none">• finely chopped• finger or sliced foods
12-24 months	3-4 meals Breastfeeds 1 or 2 snacks	$\frac{3}{4}$ up to 1 cup or bowl	Sliced foods Family foods

How should sick children be fed?

Children need food when they are sick. The belief that they do not need food is dangerous. Remember illness leads to malnutrition, and malnutrition leads to illness. Only if they are vomiting should food not be given. It is best to give children what they want to eat and when. They will only be able to take small meals. Once they are recovering they will want more than usual to eat.

Breastfeeding is extra important when children are sick or recovering from illness. It is also necessary to give extra energy food e.g. oil if the child is unwell or recovering from illness.

Safe clean water should be offered to all children over the age of 6 months who are unwell. If they do not drink, they will become dehydrated. This is dangerous.

When sick children are being given food and fluids, they should be held firmly. They should sit upright on the knees of the carer. These children can choke easily.

Children with diarrhoea should also be offered food. They should also have Oral Rehydration Salts (ORS). You learned about how to make ORS in Unit 8.

Sick children should also be given micronutrient supplements including vitamin A.



UNIT 10 IMMUNISATION

These are the things you should know and be able to do after studying this learning unit:

- Promote immunisation as an important way of preventing some illnesses especially in children and women of childbearing age
- Provide information about immunisation to families and communities
- Keep track of children living in the area and whether or not they are immunised
- Keep up to date with when outreach campaigns are visiting the area
- Take part in community outreach immunisation programmes
- Assist with immunisation clinics in the local health centre.

The basics of immunity and immunisation

What is immunity?

You will remember from Unit 3 that immunity is one of the ways our bodies protect themselves from infection. The immune system will protect us from many illnesses. But we cannot protect ourselves so well from germs and viruses we have not met previously.

Immunity works in two ways. We are given some immunity by our mothers. We also have immunity through having the disease. This is called passive and active immunity.

Immunity by having the disease (active)

This immunity is called ‘active’ because the body makes the immunity itself. If you have chicken pox once, you don’t usually get it again. Sometimes we can meet the disease but not get sick at all because our bodies fight it at once. Measles is another disease like this. Here is a story:

Hassan is six years old. Hassan catches measles from a friend who is sick.

- Hassan’s body has the measles virus inside and he gets sick too.
- His body makes special disease fighters. These are called antibodies. They fight the viruses in his body and kill them.
- When he gets better, the antibodies stay in his body. If he is infected with the measles virus again, the antibodies will fight off the viruses. He will not even get sick.

Hassan was strong and healthy before he got measles. He got better. If he had been weak or badly nourished he might not have lived.

This does not work so well with some diseases. We can have head colds or influenza many times. This is because the viruses are always changing themselves. This means the body does not have antibodies to fight them all.

Immunity given to us (passive)

When we are born, we are immune to many of the diseases our mothers are immune to. When mothers breastfeed, they pass even more immunity to their babies. This is one reason why breastfeeding is so important to newborn and young babies. Babies who are not breastfed get sick much more often than do



breastfed babies.

Some other diseases are so serious that scientists have developed immunisation. Vaccines have been developed that help us to fight infections we meet. Vaccines can even stop certain illnesses ever happening. Worldwide campaigns are needed to make this happen. Years ago smallpox killed many people. Now it has gone from all countries. The scientists hope that this will soon happen with polio. But this has not yet happened. It is very important indeed that every child born continues to have polio vaccination. If they do not, polio will become a serious problem again.

What is immunisation? Why is it important?

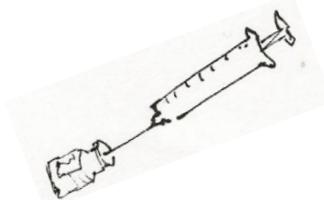
We can give ourselves protection from some serious diseases by being immunised. These are all diseases that can make us very ill. It is not safe to wait until we have had the disease and developed immunity by ourselves.

Think back to Hassan and his measles. He got over the measles. His brothers may not have got sick at all. But they may all have had serious complications even if they were healthy to start with. Even healthy children can die from measles.

How is immunisation carried out and how does it work?

Immunisation is done in two ways. It depends on the illness:

- by injection (diphtheria, tetanus, measles, whooping cough, tuberculosis, pneumonia)
- by mouth (polio).



This is how immunisation works:

- The vaccine is made from dead or very weak germs or viruses. They are completely safe.
- When the injection is given or the vaccine swallowed, the dead or weakened germs or viruses enter the body.
- Even though the germs and viruses are dead or too weak to harm the person, the body still learns how to make the right antibodies to fight them.
- The antibodies stay in the body.
- Next time the person is attacked by these germs or viruses, it knows how to fight them. The person does not usually get sick. If they get sick it will be much less serious than if they had not been immunised.

Four important points to pass on to your communities

1. Each vaccine can only protect against that type of illness. Also some vaccines need to be given more than once to give proper protection.
2. All children should be immunised. The only exceptions are children sick enough to be in hospital. They should be referred and nurses and doctors can do it there.
3. Immunisation helps prevent the diseases in each child. It also helps to prevent spread. This is why it is important to immunise every child and protect the population.
4. Immunisation is free. It is easy to administer and is very reliable.



What are the possible side-effects to watch for?

Some children and adults will get a slight fever after being immunised. This happens most often with children and they may cry more than usual. They may also have slightly red, swollen or sore arm or leg from the injections. These symptoms are harmless.

Serious reactions are very rare. These might be shock, or a very high temperature more than 40C. A child with high fever should be given plenty of fluids, or breastfed if less than 6 months. She should be referred at once.

All children should be immunised even if unwell or malnourished. They may not return to see a health worker again. It should only be delayed if a child is already ill enough to be in hospital. The child should be immunised in hospital before going home.

What diseases can be prevented by immunisation?

The table below shows the main diseases people are immunised against in Somaliland. It also shows when this happens and what the diseases are like. You will learn more about when this happens after.

Disease	When are people immunised?	What is the disease?
Tetanus	Pregnant women, women of childbearing age, newborn if mother not immunised, adult if injured	Disease of nervous system. Caused by germs from soil and animal dung. Usually fatal.
Polio	Newborns Child	Causes paralysis of muscles. May die or be disabled. Carried in water and faeces.
Diphtheria	Child	These are all severe respiratory infections. They are often fatal.
Measles	Child	Children who are weak or malnourished are the most vulnerable. Also people with AIDS. Carried by droplets on breath of infected people.
Whooping cough / pertussis	Child	Tuberculosis can affect lungs and other places like bones (e.g. from infected animal milk). Pneumonia is most common in babies and the elderly.
Tuberculosis	Newborns Child or adult	Tuberculosis can affect lungs and other places like bones (e.g. from infected animal milk). Pneumonia is most common in babies and the elderly.
Pneumonia	Newborns	
Hepatitis B	Child Health workers if possible	Carried in blood

Somaliland uses a programme of immunisation for babies, pregnant women, and women of childbearing age that is recognised around the world. This is the Expanded Programme of Immunisation (EPI). The tables show these programmes.

One immunisation covers several diseases. Official abbreviations are given to the vaccines and are used in the Tables. The vaccines are also given a number when they have to be given more than once e.g. OPV1 and Hib3. These are the vaccines given to children:

- oral polio vaccine (called OPV)

- diphtheria, tetanus and pertussis vaccines are given together by injection (called DTP)
- hepatitis B and pneumonia (HepB and Hib)

Routine immunisation schedule for infants 0-11 months. Somaliland schedule for immunising infants and children. The Expanded Programme of Immunisation (EPI)

Age	Vaccines	
Birth	BCG (as early as possible up to first birthday)	OPV0 (within 2 weeks of birth)
6 weeks	DTP + HepB + Hib1	OPV1 (delay if OPV0 given late)
10 weeks	DTP + HepB + Hib2	OPV2
14 weeks	DTP + HepB + Hib3	OPV3
9 months	Measles	

Immunisation schedule for pregnant women and women of childbearing age

Dose of Tetanus toxide (TT)	When to administer	Duration of protection
TT1	At first contact OR as early as possible in pregnancy	Not yet protected
TT2	At least 4 weeks after TT1	1-3 years
TT3	At least 6 months after TT2	5 years
TT4	At least 1 year after TT3	10 years
TT5	At least 1 year after TT4	Through all childbearing years

Health promotion, education and community mobilisation

The CHW role in immunisation is mainly one of health promotion and community mobilisation.

Health promotion and education

It is important to raise awareness of the importance of immunisation for children and pregnant women. This can be done at any time. You can provide information about the different diseases and why they are dangerous. There may be people living in the community who can help. Older people who remember children getting very ill or dying can tell their stories.

Community mobilisation

CHWs need to:

- mobilise families to take babies to the health centre for immunisation at the right time
- mobilise pregnant women to attend the health centre for antenatal care and accept tetanus immunisation. Tetanus usually kills. The immunisation protects
 - the women themselves from getting tetanus after the birth
 - their babies from getting tetanus through the umbilicus after the birth



- mobilise families to attend when immunisation outreach campaigns are organised.

Immunisation campaigns

Pregnant women should be immunised against tetanus at the health centre. They should not wait for an outreach campaign to come to the village.

Newborn babies should also be immunized at the right times at the health centre. They also should not wait for an outreach campaign. They should be taken for immunisation within the first week.

Most regions hold regular outreach campaigns. Any children who have not been fully immunised are given vaccines they have missed even if older than one year. Special campaigns may be held if there are outbreaks of disease.

EPI campaigns are run throughout Somaliland, often on Child Health Days. The programme follows the national schedule seen above. A national record is used. The image shows what it looks like.

<p>Wardadda Islaadka Comarqa Iyo Haweenka</p> <p>Majlis-Councilor (Child Name) _____ Institusii (Dhaqanka) _____ Date of Birth _____</p> <p>Majlis-Haweenka (Mother Name) _____</p> <p>Degrees _____</p> <p>Kastadaan (Sex) _____</p> <p>Wardadda (Village) _____</p> <p>Suburb _____</p> <p>Reg. Number _____ Girmaynta Nafaga Iyo taallaleed</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Year</th> <th>Month</th> <th>Program</th> <th>%</th> <th>Notes / Comments</th> </tr> </thead> <tbody> <tr><td>1</td><td>1</td><td></td><td></td><td></td></tr> <tr><td>2</td><td>2</td><td></td><td></td><td></td></tr> <tr><td>3</td><td>3</td><td></td><td></td><td></td></tr> <tr><td>4</td><td>4</td><td></td><td></td><td></td></tr> <tr><td>5</td><td>5</td><td></td><td></td><td></td></tr> <tr><td>6</td><td>6</td><td></td><td></td><td></td></tr> <tr><td>7</td><td>7</td><td></td><td></td><td></td></tr> <tr><td>8</td><td>8</td><td></td><td></td><td></td></tr> <tr><td>9</td><td>9</td><td></td><td></td><td></td></tr> <tr><td>10</td><td>10</td><td></td><td></td><td></td></tr> <tr><td>11</td><td>11</td><td></td><td></td><td></td></tr> <tr><td>12</td><td>12</td><td></td><td></td><td></td></tr> </tbody> </table>	Year	Month	Program	%	Notes / Comments	1	1				2	2				3	3				4	4				5	5				6	6				7	7				8	8				9	9				10	10				11	11				12	12				<p>Tololeekha Tewkansaa Dha horragga teekansaa imakha dhaashay Haweenkaa (village)</p> <p>15-49 Years Tololeekha Tololeekha Tololeekha Tololeekha Tololeekha</p> <p>Tololeekha Gobbedda Shababkaa (youth group) Tololeekha Jiddukaa Wadba (old)</p> <p>Tololeekha Dukhaayaa Afshirkaa (adults) Tololeekha Tololeekha Tololeekha</p> <p>Tololeekha Gudahaan Afshirkaa (adults) Tololeekha Tololeekha Tololeekha</p>	<p>Haweenka (village) Tololeekha Tololeekha Tololeekha Tololeekha Tololeekha</p> <p>Tololeekha Tololeekha Tololeekha Tololeekha Tololeekha</p> <p>Tololeekha Tololeekha Tololeekha Tololeekha Tololeekha</p>
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The CHW role in immunisation

CHWs have an important role. They

- inform and mobilise families and communities including the Community Health Committee and leaders (see above)
- encourage parents to have their children immunised when attending for another reason e.g. antenatal clinics
- accompany people to campaigns held outside the village
- accompany nervous parents to the health centre if necessary
- assist at health centre immunisation clinics if asked to do so
- communicate with the EPI and health centre teams so they are aware of when outreach campaigns are attending their communities
- register all children who are eligible for immunisations ready for outreach campaigns
- identify those who have not been immunised and encourage the parents to accept
- supply the health centre or outreach team leader with lists of village children who have not been immunised (including newborn babies)
 - name, age/date of birth, sex, child's mother, location
- assist with organising and running outreach activities that visit their villages e.g. EPI campaigns
- keep the community register up-to-date.

CHWs also need to be alert for outbreaks of disease and report them to the health centre.

CHWs do not normally give immunisations. This may happen with extra training and supervision.

An important part of an outreach campaign is called ‘cold-chain management’. CHWs are not normally responsible for this. However it is useful for you to understand the basics.

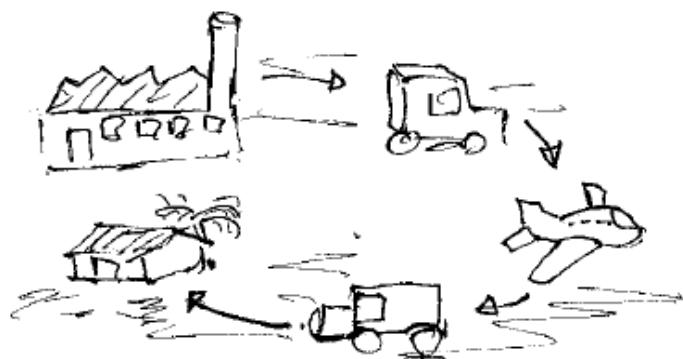
Cold-chain management

The ‘cold-chain’ means making sure that vaccines are kept at the correct cold temperature all the way along the supply line. Vaccines that are not kept at the right temperature ALL the time will be badly damaged. Children and adults could then die of the disease because the vaccine was no good.

Cold-chain management also means accurate record-keeping, of vaccines and of people immunised. Even the special batch numbers on the vaccines need to be recorded.

Cold-chain management starts in the laboratory where the vaccines are made. This is usually in another country. It continues:

- all the way to Somaliland, perhaps by air and road
- in the warehouse where the vaccines are stored
- in hospital and health centre store-rooms
- in vehicles going to villages and towns
- right up to when the vaccine is given.



Special equipment is used for all these stages. These cold boxes in the drawings contain ice.



UNIT 11 COMMUNITY MANAGEMENT OF HEALTH PROBLEMS IN ADULTS

This Unit helps you learn how you can support sick adults in the community. It is based on identifying and classifying danger signs just the same as Learning Unit 8. Both physical and mental illnesses are included. You will learn about physical illnesses by thinking about the signs people show and symptoms they tell you about. There are also sections on

- using medicines in your kit
- more information about diseases
- how to care for a sick person.

You will often need to look back at Units you have already studied. This is particularly so with Unit 8. This is to avoid repeating things too much.

You will not learn much about communicable diseases or STIs, HIV and AIDS in this Unit. That follows in Unit 12.

Physical and learning disability are included in Unit 4 and not repeated here.

The Unit is mainly about adults but adolescents and older children are included.

These are the things you should know and be able to do after studying this learning unit:

- Be aware of beliefs about illness in Somaliland
- Help people to understand how illnesses happen and reduce the stigma around being physically and mentally ill
- Provide information that your community needs to help prevent and manage adult physical and mental health problems
- Apply knowledge of how the body works (from Unit 3) to what you do
- Classify symptoms of physical illness and make decisions about home management or referral
- Refer clients to the health centre when needed
- Provide community-based treatment within your scope of practice using the medicine kit approved for PHUs
- Monitor the progress of clients and adjust treatment as needed
- Guide clients on home care in illness
- Identify people with mental health problems and refer appropriately
- Support people and their families when clients are living at home with mental health problems.

Beliefs about ill health

In Unit 4 you thought about customs and traditions that are helpful or harmful to children. In Unit 7 you thought about why people behave as they do. These are all linked to what people believe about health and ill-health. You need to understand how the people in your community think about illness.

Do they think it is to do with being weak? Is it to do with being good or bad people? Is it to do with the will of Allah? Is it to do with the way they live?

ACTIVITY

Talk about these things in your groups e.g.

- What do you think people believe about the causes of ill-health? Do you think they are right or not?
- What does your faith teach you about why people get sick and how they should be treated?
- What treatments or activities do people use other than modern medicines to help them recover from illness? Do you think these are helpful or unhelpful?
- Do you think people think differently about physical and mental illnesses? If so, why is this?

Here is an example from another country to help you talk. Can you think of examples of how people's beliefs make a difference to the way they are treated?

In some countries, people believe that difficulty giving birth means a woman has been unfaithful to her husband. These women have to name their boyfriends before help is called. They may have to swallow a special bean for every partner they name. Women and babies often die because of the delay or from the poisonous bean. Even in hospital, some midwives beat them during labour because they also believe these women have been unfaithful.

There may be some illnesses that Somali people believe need to be treated by a spiritual leader. Or there may be special ceremonies sick people need to go through. What about women and people with mental health problems? Does this make a difference to how quickly they recover? Are these ideas helpful or harmful?

Physical health problems

Before looking at particular problems, look back at Units 4 and 5. What do you think are the main reasons people get sick in your community? Then try to relate these to the health problems you learn about in this Unit.

Also , you need to look back at Unit 3 as you study this Unit to remind yourself of how the body works.

Assessing adult patients and classifying danger signs

You started to learn about assessing patients in Unit 8. This was for children. Here you learn more about assessing adults. There are 7 steps. You can see them in the Table below:

Steps to assessment

<i>Welcome</i>	Greet the patient Introduce yourself Use a private space if possible Provide somewhere to sit Watch for signs you can see e.g. a limp, looking unhappy, skin colour
<i>History</i>	You need to find out about the patient and what has happened to him: <ul style="list-style-type: none">• Ask him why he has come to you.• Ask about what he feels. When did it start. Is it still happening?<ul style="list-style-type: none">○ Pain, if so where is it? What does it feel like? (e.g. aching, stabbing, constant). Does anything make it better or worse?○ Fever, cough, vomiting, feeling sick?• You may need to find out more about the patient e.g. has he travelled from another area, does he have access to safe water, has he hurt himself?
<i>Examination</i>	Count breathing and heart rate, take temperature Listen to breathing if you have been taught this Look for signs for disease e.g. rash, wounds Feel painful places only if you have been taught this Use tests that you have been taught to use e.g. test urine for blood and protein, RDT for malaria in malaria areas
<i>Deciding what is wrong (diagnosis)</i>	Identify danger signs and classify them Decide on what you think is wrong if it seems obvious Remember that people may have more than one problem
<i>Treatment</i>	Refer patients with danger signs at once Start treatment if living far from the health centre and if permitted to do so. Advise on healthy living where needed Use the correct treatment from your kit ONLY if needed.
<i>Informing the patient</i>	Explain what you believe is the problem Give advice on caring for himself, or preventing disease If referring, explain why, explain what may happen at the health centre Explain what treatment you advise and why Tell about common side effects of a medicine Tell when to return to you for follow-up, or when you will visit again
<i>Record keeping</i>	Make a record of the patient's name, sex, age, where living Write down everything you have said and done. Use official cards if available If referring, send all this information with the patient as well

You look for danger signs first when you are assessing patients. If you find danger signs you should refer the person at once. Do not wait until you have finished a full assessment. This is just the same as when you assess children and classify danger signs. The same danger signs apply to older children, adolescents and adults:

- general danger signs
- diarrhoea danger signs
- fever danger signs
- difficult or fast breathing danger signs.

General danger signs

Not being able to eat or drink

There are many reasons why an adult may not be able to eat or drink. There may be a problem with the digestive system. They may be generally unwell. They will often have other problems at the same time like feeling sick (called nausea) or even vomiting. They may have pain.

Vomiting often or everything taken

Adults should be sent to the health centre if they vomit a lot and for several days. Vomiting happens with many different conditions. They should also be referred if they cannot keep fluids inside and become dehydrated as can happen with diarrhoea.



Severe pain, or pain that will not go away

Pain is a sign that there is a problem with the body. Pain that is very bad or will not go away with simple painkillers means there is something wrong. The person should be referred.

Not responding, or fits (convulsions or seizures).

Some people have fits from a brain disease called epilepsy. These people usually know they have fits. They should teach people around them how to look after them when they have a fit (see Unit 4).



They can even teach this to older children and tell them to run for adult help. People who often have fits do not need to be taken to the health centre provided they stop fitting and become conscious again quickly. A person who often has fits may want to see a doctor to get medicines to prevent the fits if they are available. You should refer someone who has a fit for the first time or is already sick.

A person who does not respond to you shouting in their ear or touching them needs to be referred urgently.



Many illnesses can cause someone to lose consciousness. Always roll someone over onto the side (recovery position) so they do not choke. You learned about this in Unit 4.

Ill for more than 15 days and not improving

People recover from most illnesses without much help. If they are ill for more than 15 days they need a doctor.

Skin is an unusual colour

If someone is very pale they may be anaemic.

- You can treat with iron and folic acid supplements
- Even adults may need worming medicine as this can make them anaemic
- You also need to talk to them about what they eat and try to help them improve their food
- Refer them if they do not improve with a few weeks

- Refer them if they are breathless.

If people have yellowish skin and eyes they need to be referred. This is called jaundice. The skin colour may be difficult to see if the person is dark. The eyes are easy to see. The pale area may be yellow.

Person is bleeding

If someone is bleeding enough to soak through clothing, they need to be referred very urgently (also see Unit 4 First aid). They can die very quickly. This is very important also for pregnant, labouring and newly delivered women. You will learn more about this in Unit 15.



Diarrhoea and dehydration danger signs

Adults may have diarrhoea from taking in germs just like children do. They may also have diarrhoea because there is something else wrong with the digestive system. Even a high fever can cause diarrhoea.

Adults with diarrhoea do not need to be referred unless:

- it fails to stop in a day or two;
- there is blood in the stools;
- they are very dehydrated and cannot re-hydrate themselves with ORS. This can happen even faster if they are vomiting all the time.

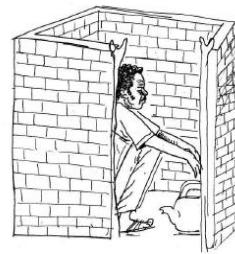
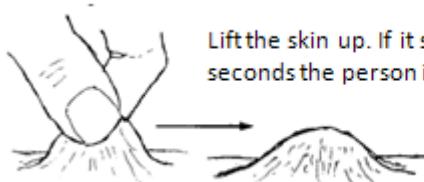


Illustration © UNICEF/WHO/World Health Organization (WHO) 2009. Geneva, Switzerland.

Adults can become very dehydrated with diarrhoea just like children can. High fever can also cause dehydration especially when the patient cannot drink.



Lift the skin up. If it stays in a fold for more than 2 seconds the person is dehydrated and needs fluids

Fever danger sign

Adults can get fever for many reasons. It may be malaria, it may be from diarrhoeal disease, from a lung infection e.g. pneumonia or TB, it may be from another infection. It may be from a wound. An infected wound may have red and swollen skin around it. The wound may be losing fluid, pus or blood. When a person has fever, the body is usually reacting to some sort of infection.



Difficult or fast-breathing danger signs and fast heartbeat

There are some differences between adults and children. The heart beat and normal breathing rates are different in adults. Here are some limits:

Heartbeat or pulse: Most adults have a heartbeat of about 50-100.

- Over 100 is fast. Over 110 is too fast. Over 120 is very fast. This is a danger sign.
- Below 50 is slow. Below 40 is very slow.

Breathing or respiration rate: Most adults breathe between 9 and 14 times a minute when resting.

- Over 15 a minute is fast. There is something wrong. The faster the person breathes, the sicker they are. Over 20 means they are really ill.
- Less than 9 a minute is too slow.

Body temperature: Most people have a temperature of around 37°C.

- Over 38.4°C is a danger sign. This is high fever. The higher it is, the more dangerous.
- Below 35°C is a danger sign. This is too cold. This is often called 'hypothermia'.

You should remember from Unit 3 that the heartbeat is faster when people are very active just like the breathing rate. You should count heartbeats and breathing when people are resting. The rates given above are for when people are resting.

Counting the heartbeat.

- You can count at the inside of the wrist and at the neck. You are feeling the person's pulse which counts the same as the heartbeat. Your trainer will show you how to find the pulse.
- You can count for one whole minute. Or you can count for 15 seconds by the clock and multiply this by 4.
- Use your first finger, not your thumb. If you use your thumb you may be feeling your own heartbeat. You are feeling the blood pumping through the blood vessels.

ACTIVITY

Work in pairs.

1. One trainee sits down. The other counts the heart beat of the trainee sitting down. Write this down.
2. The trainee who was sitting down runs or walks fast for about 30 seconds.
3. The person counting, now counts the runner's pulse again and writes it down.
4. What is the difference?
5. Can you think why this happens? Your trainer can help you decide the answer.

Counting breathing /respirations

You learned about this in Unit 3 and 8. This is more difficult to do accurately in adults than it is in children. This is because the person whose respirations are being counted will probably breathe faster while being watched. You can do it after counting the heartbeat without telling the patient. To do this you need to still hold onto the wrist so the person does not notice that you are now counting the breathing.

Difficult breathing in adults can occur for many reasons. It may be:

- an allergy or asthma;
- heart problems;
- infections like chest infection, (bronchitis, pneumonia, tuberculosis);

- an injury making breathing difficult e.g. broken ribs.

Communicable disease including STIs, HIV and AIDS

You will learn about these in Unit 12

Accidents (see Unit 4)

You learned about these in Unit 4. Unit 4 was about first aid. You may need to continue to help a client who has an accident for some time after the emergency. The things you learn during the rest of the training will help with this.

Health problems by body system and by symptom

In the Table below, you will find some common symptoms and the main health problems that the person may have. Some of the information repeats what you have learned above. This will help you to remember. You are not expected to remember everything but you will always have this manual to remind you.

Children can have many of these conditions too and the signs and symptoms may be the same. Adults will often need to be referred to the health centre to find out what is wrong and to be treated. You can decide on treatment for a few of the problems. Medicines in your kit that you can use for these problems are listed later.

See next page.

Signs and symptoms	Common illnesses
Coughing, coughing blood or sputum, fast or difficult breathing, sore/painful throat, cyanosis,	Common cold, flu Chest infections, bronchitis, pneumonia, tuberculosis
Chest pain, pain in arm or jaw, feeling sick, difficult breathing, blue colour skin, extreme tiredness	Heart attack
Abdominal pain, diarrhoea, constipation, bleeding from rectum, vomiting, vomiting blood, passing parasites	Many different problems including diarrhoeal diseases, digestive system blockages and other problems Intestinal parasites
Severe weight loss	Tumours and other diseases
Skin wounds and deformed, bruised, painful limbs	Wounds and bruises Bone fractures, dislocated joints Cuts, burns and scalds
Skin swelling, redness, soreness, pain, blistering, grazes, rash May be on skin May be on mucous membranes e.g. mouth, vagina, external genitalia	Infectious disease e.g. measles, chicken pox, rubella Allergies Skin parasites Skin fungus
Eyes, ears, throat	Infections, deafness, sight impairment
Reproductive discharges, infections, pain, burning pain on urination, bleeding from the vagina	Abortion /miscarriage, infections, effects of FGM, fistula , STIs (see Unit 12)
Urinary tract infections, pain, frequent urination, blood in urine	Bladder infections (cystitis) STIs, candidiasis (thrush) Bilharzia parasite
Headache, seizures, coma	Brain conditions, stroke, high fever, severe malaria, meningitis, tetanus
Fever, dehydration, nausea, vomiting, convulsions, weakness	Infections including diarrhoeal diseases
Severe tiredness and weakness, pallor	Anaemia and many other illnesses

Who must be referred?

People with danger signs must be referred. So must anyone with chest pain, severe weight loss, fractures, serious wounds or burns, convulsions, severe headache, ear and eye problems, communicable diseases (see Unit 12), anyone who does not recover after a normal course of treatment from you.



IF IN DOUBT – SEND THEM TO THE HEALTH CENTRE.

More information about some diseases

In this section you will learn more about some diseases. These are all diseases that are not in Unit 12. It does not include diarrhoeal diseases and most acute respiratory infections as you have learned a lot about them already. There is a Table that follows that lists the medicines in your kit and the dose you give.

Problem	What it is	Advice and treatment
Respiratory system		
Tonsillitis Painful throat The throat looks red There may be white spots on the tonsils or pus spots There may be fever There may be swelling outside of the throat below the ears	Tonsils are two swellings at the back of the throat, one on each side. They help protect from infection. Sometimes the tonsils get infected themselves and make the person ill. This is most common in children but adults get tonsillitis too.	Rest Drink plenty If a smoker: do not smoke Pain medicines Antibiotics if there are pus spots Refer if not improved in 3 days or if person often has tonsillitis
Acute bronchitis Patient says chest feels tight Short of breath Coughing Coughs up sputum (sticky fluid from lungs). May become pus.	Acute lung infection. Often follows other diseases e.g. measles	Rest Antibiotics
Long-lasting cough Coughs a lot, then all the time Coughs up very thick sputum Tight chest, wheezing sound Difficult breathing: may sit with shoulders up high to get more air in when breathing	Chronic bronchitis especially from smoky house Tobacco smoking Lung tumour (especially from tobacco) Tuberculosis (see Unit 12)	Stop smoking Try to make the house less smoky Refer to see doctor
Pneumonia (see Unit 8) Fever Fast breathing (nostrils may move in and out) Ache or pain in the chest especially when coughing	Acute infection in the lungs Has usually had a cold or sore throat, or measles in children Sick older people Sick people who do not move or breathe properly	Pain medicine (helps to bring down the fever as well as helping pain) Antibiotics Refer if no improvement with antibiotics.
Heart and blood circulation		
Anaemia Short of breath Looks pale: skin, mouth, tongue, nails, inside of eyelids, palms of hands Legs may be swollen Gets very tired	Blood is 'weak', does not carry enough oxygen May have parasites e.g. hookworm May be poorly nourished Frequent pregnancies	Eating advice Child spacing Iron and folic acid supplements Worming medicine Refer if no improvement after a few weeks.
Heart attack Pain in chest, jaw, left arm, abdomen Extreme tiredness, fear	The heart is not getting enough blood. There may be a clot	Take to the health centre without any delay. This is a big emergency. Give aspirin at once.
Blood clots Pain in leg or chest May be short of breath	Blood clots, often in the leg. Sometimes moves to the lungs	Take to the health centre without any delay. This is a big emergency.
Stroke Face may drop, unable to smile Speech difficulty One arm weak or paralysed , maybe leg too	Blood clot or bleeding in the brain	Take to the health centre without any delay. This is a big emergency.
Abnormal heart		

Short of breath, very tired Skin, fingernails pale / 'blue'	The heart is not well formed May show first as a child or when pregnant. Child may not grow well.	Refer
Digestive system		
Constipation	Poor food and water intake Tumour (may have diarrhoea at times and blood in stools)	Advise to eat more fruit and vegetables, drink plenty of safe water, walk Refer for blood in stools.
Intestinal parasites May see worms or egg cases in stools (Unit 5). Discomfort in belly May be anaemic	Worms / parasites live in intestines from infected food and water	Use parasite medicine Advise on prevention
Eyes, ears, nose		
Allergy Red and itchy eyes, sneezing, runny nose, May have swollen lips, mouth, throat, difficult breathing, red rash.	Allergy to plants, food, insect stings, animals. Medicines e.g. antibiotics	Antihistamines Advise not to rub eyes Swelling, rash and difficult breathing is an emergency. Take to health centre at once.
Eye infection <i>Conjunctivitis</i> Red runny, itchy eye, may feel like eye is burning, may have pus Can be gonorrhoea in newborns if it has pus <i>Trachoma</i> Like conjunctivitis at first. Irritation and pus in eyes. Pink/grey lumps inside upper lids, white scars after years. Damage and scarring of eyes and lids from repeated infections can cause blindness.	Sore eyes from smoke or allergy, or local medicines Eye infection Can cause blindness if severe. Infection spread by flies. Also spread by touching infected eyes, or sharing towels and clothes. Common in children and their carers.	Wash eyelids especially if lids stick together. Use clean cloth and boiled cooled water Advise not to rub Conjunctivitis is very infectious. Wash hands frequently and after touching/treating eyes. Tetracycline ointment only if it fails to improve. Newborn: refer mother and baby Mother may have gonorrhoea. Health advice – face and hand washing, avoid sharing towels and clothes, reduce flies in the environment Antibiotic ointment. Refer
Ear infection Fever, pain in ear or throat, children may shake or bang head	Ear infections – mostly in children and after head colds or measles. Can cause deafness	Pain medicines Refer
Dry-eye disease Night blindness, diarrhoea, skin problems	Vitamin A deficiency (Xerophthalmia)	Dietary advice Vitamin A Supplements

Sight or hearing difficulties		Refer
Skin		
Allergy rash Itchy red rash anywhere, often swollen. May have itchy red eyes and other symptoms (see above)	Allergy to plants, food, insect stings, animals. Medicines e.g. antibiotics.	Calamine lotion to skin Antihistamines if bad Swelling and difficult breathing is an emergency. Take to health centre at once Avoid irritants e.g. strong soap, use hydrocortisone cream.
Scaly dry itchy red rash	Irritants, dermatitis, eczema	
Abscess Red, hot, painful, shiny swelling under the skin. Can be caused by dirty needle, thorn or bite.	Infection of skin. Lump is a bag of pus. This can burst out. Can happen under a closed wound.	Put a hot wet cloth pad over the abscess (not too hot to touch) Pain medicine Refer if it is not better in a day or so or if fever is high.
Infection rash Spots or blisters (may be itchy), fever, may have common cold symptoms May have danger signs as with measles in children (Unit 8)	Contagious diseases e.g. measles, chicken pox, rubella	See Unit 8 Calamine lotion to skin or gentian violet Micronutrient supplements Antibiotic if infected sores do not improve Refer
Light-coloured patches Sores	Leprosy, no feeling in skin Sores: may be vitamin deficiency	
Fungal rash Looks like red rings on skin	Ringworm	Ringworm. Should avoid sharing a bed or hair brush or comb
Sore and itchy genitalia, may have white patches	Thrush	Fungal rash: Miconazole cream. Vaginal thrush: Clotrimazole vaginal pessary.
Skin parasites <i>Scabies</i> : Small itchy lumps on wrists, between fingers, waist, on the genitals	Insect tunnels along under the skin	Very infectious. Wash hands after touching. Wash clothes in hot water. Cut fingernails to reduce scratching. Scrub skin with brush or maize cob twice a day to kill parasites under the skin. Gentian violet skin paint
<i>Lice</i> : May see eggs (or mites) mostly in hair e.g. head and pubic hair	Lice lay eggs stuck to hairs	Permethrin solution if needed Permethrin shampoo for lice.
Reproductive system (You will learn about STIs in Unit 12)		
Bleeding from vagina Women past the menopause who bleed. Young women with heavy menstrual bleeding.	May become anaemic. May be disease inside.	Refer to health centre
Slow menstrual bleeding or none	Complication of FGM. Vaginal opening may be blocked. May have other complications e.g. urine	Refer
Abdominal swelling or pain		

	infection. NB No bleeding and swelling: is she pregnant?	
Frequent miscarriage	May have an infection	Refer
Unable to become pregnant	Infertility. May have an infection	Refer
Cannot control urine or faeces	Fistula after childbirth problems	Refer
Urinary system		
Painful frequent urination	Infection	Advise to drink plenty of water Pain medicines Nitrofurantoin Refer if it happens often
Unable to pass urine Slow urination Cannot control urine	Women or girls: may be complication of FGM or childbirth Older men	Refer: do not delay if person can not pass urine
Backache and fever	Urine (kidney) infection	Refer
Bones and joints		
Pain after injury Pain on moving Shape is wrong (deformed)	Break (fracture) Joint pain (arthritis) in older people Joint out of place (dislocation)	Refer Pain medicines
Painful swollen joints and fever	In children	Refer

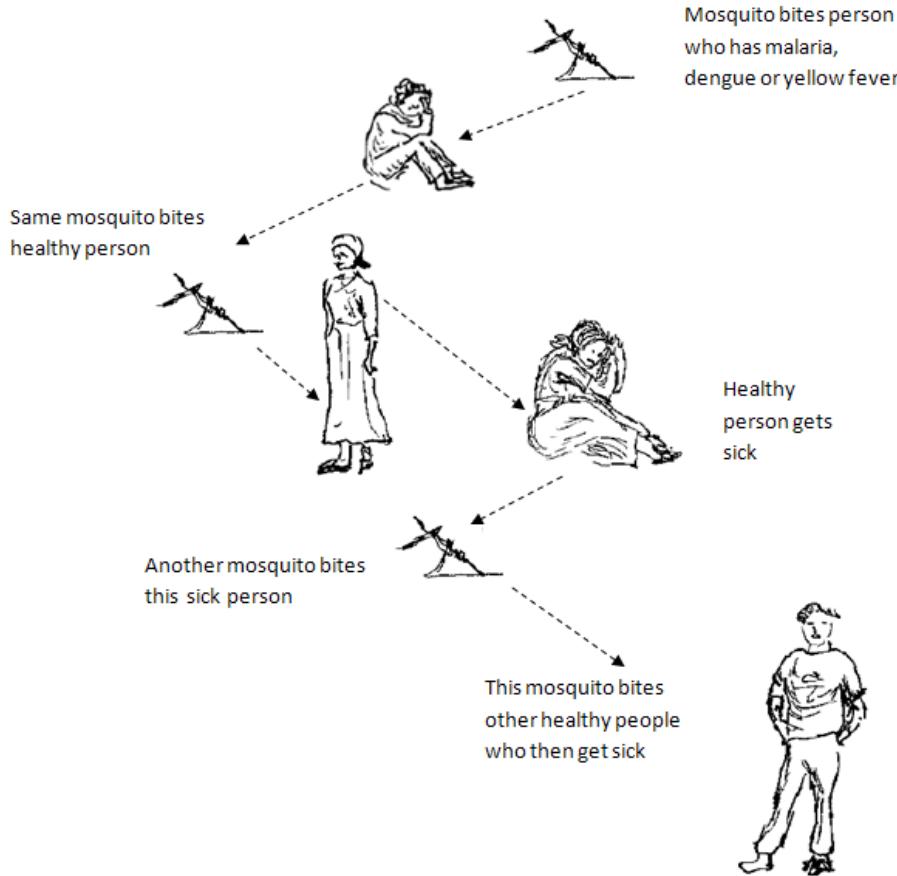
Malaria

Malaria is separate here as it causes illness in so many ways. It attacks the blood, the brain, the digestive system, and the respiratory system.

Many areas in Somaliland do not have malaria-carrying mosquitoes. But you must remember that people who have travelled may have malaria.

Check back to Unit 5 to remind yourself about preventing malaria. When a person is bitten by a mosquito it puts its saliva into the person so it can suck up the blood easily. If it is a malaria-carrying mosquito it injects parasites with the saliva. The parasites live in the person's body and multiply. Then the person gets sick. When a mosquito bites someone who has malaria, the mosquito sucks up parasites with the blood. It then infects other people that it bites. This is how it is spread.

How mosquito-borne diseases spread



You already know that malaria causes fever. It may swing up and down from day to day. It may be over 38°C or even higher. This may be classified as a danger sign. It is especially dangerous for young children and pregnant women. Parasites can harm the unborn baby as well as the mother. High fever can cause an abortion (miscarriage).

Shivering is very common with malaria. So is vomiting, diarrhoea, pain in the abdomen (belly), joints and head, respiratory problems and fits. The person may be anaemic if he often has malaria, or dehydrated. Children can have a swelling in the abdomen on the left side (spleen).

Malaria medicines must be used carefully and properly. This is because they can fail to work on anyone at all when used too much and not given properly. Usually, two different malaria medicines are given at one time. This is to stop the parasites surviving and learning how to resist the medicine. This happened with the old medicine chloroquine which does not work now.

Mental health problems

This is a basic overview so that you can have some understanding of the needs of people who have mental health problems.

First it is important to understand that we do not all see mental health and illness in the same way. People in some cultures will think of a real illness, others think of witchcraft, or the person being bad or mad or odd. Ways of behaving may be acceptable in one culture and not in another.

Mental health problems are as real as physical health problems. In fact there is usually something physical wrong. This is mainly to do with the brain and how it works. Mental health problems may affect the way people feel. They may affect the way they act. They may affect the way they think. They don't show up as a rash or a fever or something else other people can see.

There are not as many services in Somaliland for people with mental health problems as there are for other illnesses but you can still assist.

- You can help firstly by being an advocate. People may be tied up by their families or treated cruelly. People are often afraid to be near them. People who have a mental illness need to be treated kindly and with understanding. They should not be restrained unless they are a real danger to themselves and others.
- You can help people to understand that strange behaviour is an illness.
- You can teach families how to help the person who is mentally ill.
- You can refer the person to the health centre. Nurses there will know what services there are in the area to help.
- Just listening to people can be important. Allow them to talk. Do not laugh at them or criticise them for what they think or say.
- It is important to check that there are no physical signs or symptoms that may be causing the problems.

Activity

On your own or in groups think about these questions and discuss them.

1. Do you know of anyone who has a mental health problem? If so, how are they treated by the family and people around? How are they treated by health care staff?
2. Do they have access to special nurses and doctors?
3. Do they use traditional healers? If so, what for the healers do to try to help them?
4. Are they chained up to keep control of them?
5. Do you know of any specialist mental health services in your area?

Why do people have mental health problems?

There are many reasons why people may have problems with their mental health. Here are some of them.

Life circumstances

People who are stressed by what happens to them may become sick. People who have great difficulties that they cannot change may feel helpless and hopeless. Here are some examples. You may be able to think of others:

- poverty
- being homeless

- being displaced from their usual surroundings
- disasters
- experiencing or seeing violence because of conflict
- experiencing or seeing violence and abuse at home, in school or at work (physical and mental abuse)
- disability and life-changing physical (or other mental) illness
- old age
- being unable to have children.



Physical changes or illnesses

People who have certain physical illnesses may have the symptoms of mental illness too. They may affect the way they think and behave. The symptoms will get better when the illness has gone if it can be cured. Some of the illnesses that may cause mental health problems are

- infections like syphilis, HIV and AIDS
- brain tumours
- severe dehydration
- high fever e.g. with malaria or meningitis
- illnesses that upset the way the body works e.g. kidney infection.

Some physical illnesses of the brain e.g. epilepsy are often treated as mental illnesses. Epileptic people seem healthy and behave like anyone else when they are not having fits.



Other causes of mental illness

Medications can sometimes cause mental health symptoms. If someone behaves strangely after starting a medication, it should be stopped until they have been referred.

Several substances that people take for pleasure can cause mental illnesses. The most common are khat and alcohol. There are many others that people use in different countries.

Some children have illnesses that cause them to behave in different ways. You learned about this in Unit 8. It is important to understand that children who are slow to learn are not mentally ill. They do not have sick minds. They have a disability. It is often called a learning ‘disability’ or ‘impairment’. This is usually caused by a physical problem from birth, or damage to the brain that happens later. You learned about this in Unit 4.

Types of illness and how they show up

Depression and anxiety

Sometimes people feel very unhappy and find it difficult to carry on normal activities. For example someone may

- just sit instead of working or being active
- refuse to talk

- refuse to meet friends
- keep crying
- not want to eat normally
- believe everything is hopeless.

This is often called depression. People with depression need help. They can become physically ill as well as very unhappy. They may have trouble relating to their families. Depression can start at almost any age. Some depressed people try to kill themselves, and some are successful.



Depression can come with many other illnesses. If someone has a leg amputated, or is dying, they may become depressed. They may become depressed with any illness or event that will change their lives. Depression is common in older people but having family and friends around who love them makes it less likely. Older people who are alone often become depressed. Even some medicines can make people depressed.

People also become depressed for reasons like having no work or not enough money to feed themselves or the family.



People whose loved ones die may become depressed. It is normal to be sad when saying goodbye to loved ones. Some people become angry at first and try to blame others for what has happened. They may blame themselves. They become very sad and it can take some time to recover. Serious sadness and taking ourselves away from others for a long time because of a death is not normal. These people need special help although it may be difficult to find this help.

Depression can show in other ways. Some people become anxious. Here are some ways this anxiety (or neurosis) shows. They may

- worry all the time about things, even things that are not really serious
- be unable to sleep
- have ‘panic attacks’ with fast heart rate, sweating, dizziness, feeling they can not breathe
- keep doing the same things again and again when these things are not needed
- be frightened of going out or of meeting people
- believe they have illnesses that are not really there.

There is a severe type of depression called ‘manic depression’ or ‘bi-polar disorder’. This illness can start in adolescence and last a life-time. It makes people swing between

- being very sad and feeling hopeless
- to feeling abnormally happy and excited, talking without stopping, being over-active.

Suicide is very common when they are depressed. Taking big risks is common in over-active periods. Risks may be doing dangerous things, or spending big sums of money, or having sex with many people. They may suspect everyone of trying to harm them. They can become angry. They may not believe they are ill.

Thinking in unusual ways

Several illnesses cause problems with the way people think. They are called ‘thinking disorders’, ‘psychosis’, or ‘psychotic’ illnesses. Some are mental illnesses that last for years. Other are just because of a physical illness or a medicine and the problems stop when the person recovers or stops the medicine.

People with psychosis may

- have unreal ideas called ‘delusions’. They may believe they are someone important, perhaps a religious or historic figure. They may believe they have a special job to do.
- see, hear or smell things that are not really there. These are called ‘hallucinations’. They may hear voices that tell them to do things. These things may be very real to people experiencing them. They may make them very fearful. They may not be able to stop themselves obeying the voices they hear. They may even believe there is another person inside them.

People with psychosis can cause harm to themselves and to others.

Psychosis can happen after childbirth. You will learn more about this in Unit 15.

Memory difficulties and confusion

Memory difficulties and confusion may be because of dementia. Dementia is a group of illnesses where the brain becomes damaged and people become very forgetful and confused. It happens most often in older people. It can also happen with illnesses like syphilis, AIDS and brain infections. People with dementia may

- forget recent events or the past
- be unable to remember names for people or objects
- not recognise people they know well
- not know where they are, or what day or time it is
- wander around and get lost in places they know well
- do strange things
- behave in ways they did not used to e.g. become angry easily or violent.



There is no cure for dementia. CHWs can help families to find ways of supporting people with dementia. Eventually, many people with dementia who live long enough will become more like children, then like babies. They forget all they have learned including basic things like using the latrine. They will be less able to care for themselves and may die of the disease.

Dependency on drugs, khat, alcohol and eating problems

Being unable to stop chewing khat, taking other drugs, or alcohol is called ‘addiction’ or ‘dependency’. Another name is ‘substance abuse’. Even tobacco causes dependency as well as physical illness. This dependency makes it very difficult for someone to stop smoking for health reasons. The dependency is an illness and the ‘substance’ abused (e.g. khat, alcohol and other drugs) can itself cause other mental illnesses.

People become dependent on the ‘substance’ in two ways:

- Their brains need the substance. They are not in control of this.

- They get used to the habit of using it. Men who chew khat with other men need their company and the routine. People who smoke cigarettes need the activity of lighting and smoking them.



Addicted people need referral and specialist help to stop. This may not be easily available. Some ways you can help are to

- make sure they understand the dangers of what they are doing
- talk about their difficulties
- talk about how it affects the family
- find other routines to replace the habit
- get help from a religious adviser.



People who have 'eating' illnesses need the same sort of help. These are known as 'eating disorders'. They are often hidden from other people. Some people have eating disorders because of other problems like being abused. A person may avoid eating because they believe they are very fat when they are not. They may overeat, then make themselves vomit in private. This seems to be more common in some cultures than in others and is most common in young women.

What to do when you believe someone may have a mental illness

You will normally need to refer someone who shows signs of having a mental illness. There are some special treatments that people trained in them can provide. Some of these are called 'talking' treatments (therapy). Talking treatments help people to

- understand what is happening to them and the way they feel and behave
- think about their illness and why it has happened
- find ways of improving their situation.

There are some special medicines that doctors can provide as well. Often sick people need both talking treatments and special medicines.

If there is no way of getting special advice and treatment in your area, the health centre staff will advise how you and the family can help the sick person. The most important thing is to understand why people feel and behave the way they do. They should be treated normally and with respect. People should not be locked up. This can make their behaviour more difficult.

What can you do if there is an emergency with a person who has signs of mental illness?

Emergencies can happen with mentally ill people. They may be aggressive and violent. They may be threatening to kill themselves or someone else. They may be confused and agitated. It is important that you protect yourself and others around.

- Make sure you and others nearby are safe
- Make sure you can get out of a room if you need to and your way is not blocked
- Talk calmly and try to find out why the person is upset. You may be able to calm him or her
- Do not stay if the person has a weapon



- Call for help
- Have the person taken to the health centre
- Restraining the person should only be done if all else fails. It may make the condition worse.

Management of essential medicines for adults

In this section you will learn more about the medicines you are able to provide. These are the ones supplied in your kit. The list of medicines is taken from the Somaliland essential Package of Health Services (2009). This may change from time to time. The medicines in your kit may change too. If this happens you will need more training to make sure you are up to date. You also may need to check back to Learning Units 8 as you study this Unit. and will learn more in Unit 13.

This Learning Unit is about adults but what you do here will help you think about the differences between them and children. It will also help you remember about medicines for children.

You need to remind yourself about the key points about using medicines before you start to learn more about the medicines in your kit. Try these activities together in your groups.

ACTIVITIES

- a. Prepare a short talk about how CHWs look after the safe storage of medicines and give it to the other trainees.
- b. Prepare a drama or role play about how you would teach patients or families about using and storing medicines at home.
- c. Make a poster about the ‘Five rights’ of giving medicines. Stick all the posters on the wall. Discuss with each other what you believe is good and what is not so good about each poster.

Giving medicines and treatments

You may not have learned much about how to give medicines and treatments yet. With your trainer, you should talk about how to give different medicines and treatments now. You should try these skills out in class. You should also practise this when you are on supervised visits to health centres. The list below shows the types you need to learn about, and to practise preparing and giving under supervision:

- liquids e.g. ORT, antibiotic syrups or elixirs, how to prepare them
- tablets and capsules
- rectal medications / suppositories
- vaginal pessaries
- eye drops and ointment
- skin paints and ointments.

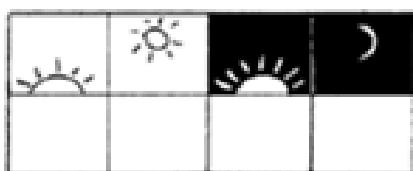
It is important to practise record-keeping and reporting as well.

You can help your patients to understand and remember what to take, when and how by using a reminder card like the one below. This shows information in symbols.

ACTIVITIES

When you think you understand how to use the reminder card, try making some yourself.

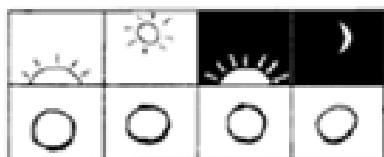
1. Draw several copies of the card
2. Draw in the symbols for these medicine doses
 - a. 1 tablet every morning
 - b. 2 capsules every morning and evening
 - c. 1 measure before bed
 - d. $\frac{1}{2}$ tablet four times a day.
3. Check with other trainees that you have got them right
4. You could test each other with different doses.



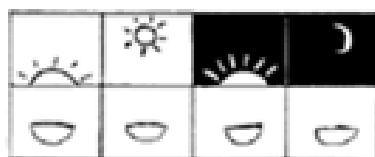
An empty card for reminding people about when to take medicines and how many. The symbols show early morning, mid-day, evening and night.
Draw in the blank squares.

Here are some examples

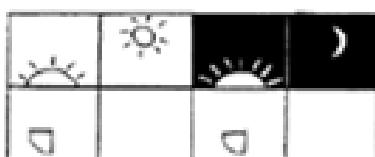
Take 1 tablet 4 times a day, early morning, mid-day, evening, night



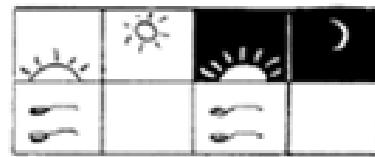
Take $\frac{1}{2}$ a tablet 4 times a day



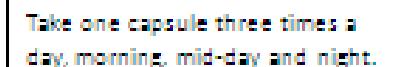
Take $\frac{1}{2}$ tablet 2 times a day, early morning and evening



Take two measures 2 times a day, early morning and evening



Take one capsule three times a day, morning, mid-day and night.



Main medicines and treatment in the EPHS (2009) kit for PHUs

Name of medicine or treatment	What it is for	Points to watch for
<i>Mineral and vitamin supplements</i>		
Ferrous sulphate 60mg. + folic acid 0.40mg tablet	Treating severe anaemia including pregnant women and children. Refer low birth-weight babies and children under 12. (Childbearing / breastfeeding women see Unit 15).	Pregnancy: 2 tablets daily Children under 2 years: $\frac{1}{2}$ tablet daily for 3 months Children 2-12 years: 1 tablet daily for 3 months Do NOT give to children with acute malnutrition until feeding centre says they can have it. Do NOT give to anyone with malaria Stools look black. This is normal. Can cause constipation or diarrhoea. Take after food. Treatment of anaemia: one tablet x3 a day for 3 months
Micro-nutrients tablets	Prevention and treatment of malnutrition <ul style="list-style-type: none">• pregnant women• adolescents and women of childbearing age• children including after illnesses	1 tablet daily through pregnancy and 6 months after the birth for lactating women 1 tablet daily with no time limit Best taken with food to avoid nausea.
Retinol 100,000 unit capsule Vitamin A	For prevention in children 6-11 months of age	Single dose every 4-6 months
	To treat child with: <ul style="list-style-type: none">• severe/ prolonged diarrhoea• pneumonia• chicken pox• severe malaria• severe malnutrition To treat child with measles <ul style="list-style-type: none">• 6-11 months use 100,000 Units• under 6 months of age use 50,000 Units (half dose)	Under 6 months: <ul style="list-style-type: none">• half dose of 50,000 Units once 6-11 months: <ul style="list-style-type: none">• 1 dose of 100,000 Units once For measles: <ul style="list-style-type: none">• 1 dose Day 1• 1 dose Day 2• 1 dose after 2 weeks if eyes signs are present
	To treat child 12 months and over with: <ul style="list-style-type: none">• severe/ prolonged diarrhoea• pneumonia• chicken pox• severe malaria• severe malnutrition	Single dose Measles:

	To treat child with measles: • 6-11 months • under 6 months if not breastfed	• 1 dose Day 1 • 1 dose Day 2 • 1 dose after 2 weeks if eye signs are present Under 6 months: use half dose of 50,000 Units
Retinol 200,000 unit capsule Vitamin A	For prevention in women after birth (See Unit 15) Prevention for child 1-5 years	Single dose within 6 weeks of birth Single dose every 4-6 months
	To treat child 1-5 years who has • severe/ prolonged diarrhoea • pneumonia • chicken pox • severe malaria • severe malnutrition • measles: child 12 months or older	Single dose For measles: • 1 dose Day 1 • 1 dose Day 2 • 1 dose after 2 weeks if eyes signs are present
Oral rehydration salts (ORS)	For dehydration and when there is diarrhoea	Make up with 1 litre safe water. Give zinc tablets as well unless the sachet contains zinc
Zinc sulphate 20mg. tablet (see below)	For diarrhoea with ORS if combined ORS and Zinc is not available	Child less than 6 months: • $\frac{1}{2}$ tablet daily for 10-14 days Children over 6 months: • 1 tablet daily for 10-14 days Take in water
Parasite treatments		
Albendazole tablet 400mg	Hookworms, pinworms, tapeworms, round worms	Do not use before 4 th . month of pregnancy Take once with food
Malaria treatments are not included on the lists. You will be given special training if they are supplied for you to use.		
Treatments for itching, rashes and allergy		
Chlorphenamine 4mg. tablets	Allergies	4mg. every 4-6 hours
Chlorphenamine syrup 2 mg. in 5 ml.	Allergies in children	1-2 years old: 1mg. every 12 hours 2-5 years old : 1mg. every 4-6 hours Over 5 years: 2mg. every 4-6 hours
Hydrocortisone 1% cream	Inflamed, itchy skin (dermatitis)	DO NOT swallow
Medicine for fever and pain		
Ibuprofen 400 mg. capsule	Pain in adults (over 12 years)	1 tablet every 6-8 hours
Ibuprofen 100 mg. in 5ml. syrup	Pain in children over 1 year of age Child under 1 year: do NOT give.	Every 6-8 hours: • 1-2 years: 2.5 ml. • 3-7 years: 5ml. • 8-12 years: 10 ml
Paracetamol 100mg. tablets	Pain or fever in children up to	(Maximum 4 doses in 24 hours)

	12 years	6-12 years: 2-5 tablets every 4-6 hours depending on age
Paracetamol elixir 120 mg. in 5ml.	Pain or fever in children Under 3 months for fever after immunisation only	(Maximum 4 doses in 24 hours) • Under 3 months: 2.5 ml. • 3-12 months: 2.5 - 5 ml. 1-5 years: 5-10ml.
Paracetamol 500 mg. tablets	Pain or fever in adults	1 or 2 tablets every 6 hours (maximum 8 tablets in 24 hours).
<i>Child-spacing supplies:</i> see learning Unit 18		
<i>Treatment for infections</i>		
Nystatin 100,000 IU per ml.	Anti-fungal. Thrush in the mouth in babies	2 drops in the mouth after each feed for at least 10 days
Clotrimazole 500 mg. vaginal pessary	For thrush in the vagina	Pessary to be put high into vagina at night x1. DO NOT SWALLOW
Miconazole nitrate 2% cream	Fungal skin infection	DO NOT SWALLOW. Apply to skin 2 times daily and 10 days after infection has healed
Tetracycline 1% eye ointment	Conjunctivitis, red eyes Gonorrhoeal conjunctivitis of newborn	Both eyes 3 times a day x 7 days Newborn: both eyes 2 hourly and refer with mother
Amoxycillin 250mg. tablet	Antibiotic against germs (for pneumonia and middle ear infection)	250mg. every 8 hours for 10 days Remind the patient to complete the whole course of treatment. Do NOT give if the patient has had a bad reaction to antibiotics in the past.
Amoxycillin 125mg. powder to mix in 5ml. for oral suspension	Antibiotic for children up to 10 years	125mg. (5ml. mixed) every 8 hours for 10 days
Phenoxycephalothin 250mg. tablet	Tonsillitis	Take every 6 hours for 10 days Children up to 1 year: ¼ tablet Children 1-2 years: ½ tablet Children 2-8 years: 1 tablet Adults and over 8 years: 1-2 tablets
<i>REMEMBER: For all antibiotics:</i>		
Remind the patient to complete the whole course of treatment. Must drink plenty of water. Diarrhoea is a common side-effect. Do NOT give if the patient has had a bad reaction to antibiotics in the past. Stop the antibiotics and refer if patient has a rash, breathing difficulties, itchy eyes, swollen lips, tongue or face		
Nitrofurantoin 100mg. tablet	For urinary infection (cystitis, painful urination)	Must drink plenty of water. Take every 12 hours with food for 7 days.
Gentian violet powder	Simple skin infection	Paint on the skin mixed with

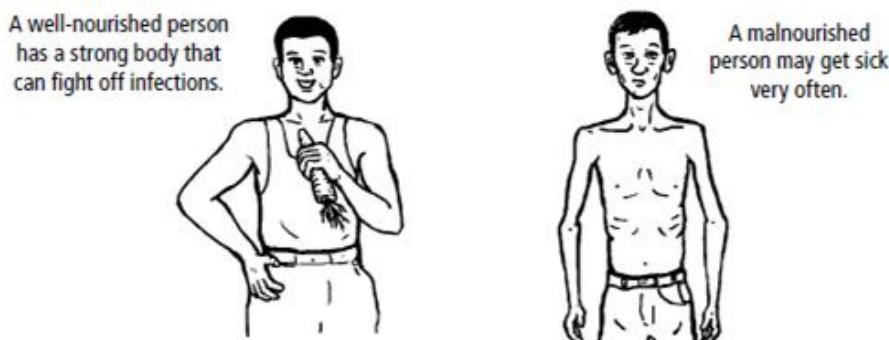
		water. DO NOT SWALLOW
Chlorhexidine 5% solution	Antiseptic for skin cleaning Disinfectant for surfaces	DILUTE. DO NOT SWALLOW
Silver sulfadiazine 1% cream	First aid treatment of bad burns to prevent infection	DO NOT SWALLOW Not for babies less than 8 weeks old Apply once or twice a day
Other		
Permethrin shampoo 1%	Scabies and head lice	DO NOT SWALLOW. Keep out of eyes. Apply to clean damp hair. Leave on for 10 minutes then rinse off.
Magnesium trisilicate compound tablets	Reduce stomach acid in gastritis and indigestion Refer if not improved after 7 days	Not for children under 10 years Do not give with other medicines Chew 1-2 tablets as needed
Zinc oxide 10% cream	Rash on buttocks in babies (nappy rash) Sore skin around anus and buttocks in incontinent adults	DO NOT SWALLOW

Caring for sick people at home

Sometimes you will need to help families look after sick people at home. Here are some ideas about how to do this and what to teach them.

Food and fluids

It is important that sick people drink plenty, and eat if they can. If they do not drink they will become dehydrated and die. If they eat nothing they will become weak and not be able to recover quickly. Remember that people recover faster if well-nourished and become ill less often anyway.



When you are sick do not avoid food.
Food will help make you well.

Drinking: patients should drink ORS if they have diarrhoea. If they are just very thirsty, they can drink safe water with sugar or honey if available. They should drink frequent small amounts. The

family may need to help and even hold the cup. They may need to support them while they sit up to drink.

Eating: Frequent small meals are better than large ones. If families can provide food patients really likes, they are more likely to eat. Older and very sick people may need food chopped or mashed until they are better. They may need help to eat. It is important that the family do not just take food and leave it by the patient. He may not eat especially if he is confused and not thinking normally.

Comfort and warmth, light and air

The patient may need help to be comfortable. If cushions or pillows are not available to make them comfortable, patients can be given rolled up clothing or cloths or blankets. If someone has a broken bone, they may need something soft under the limb to support it after it has been set.

They may need help to keep a limb up high to prevent it becoming swollen. A pillow or bundle of clothing underneath can help this too.

When people are sick or very old they can get cold easily. They may need extra clothing or covers, or even a fire nearby. They also need light and air. Air flowing though a room is extra important if there is a fire. Some diseases like tuberculosis spread more easily if rooms are not airy. Smoke from fires can cause sore eyes and chronic bronchitis.

Cleanliness

It is important for sick people to wash the hands with soap or ash and water before eating and after using the latrine or other ways of passing faeces.



They may need help to wash themselves. They should be helped to wash all the parts they normally clean. If the family has to do this for the patient, then they should be careful to protect his dignity. He should be covered everywhere except the part that is being washed. Even sick people who cannot manage to wash unaided may be able to wash their own genitalia. Privacy is very important.

It is important to help sick people to keep their mouths clean. Maybe they can clean their teeth, or wash their mouths out. You may need to do this for them. You could use small pieces of cloth on a small stick. Dip the stick in clean water that has a pinch of salt in it. You must be very gentle to avoid damaging the mouth.

Passing urine and faeces

When people are sick they often cannot reach the latrine. It may be possible for them to use an old pot or basin in the room. Men can use an old bottle for urination. Do not use the pot or bottle for anything else. Destroy it when the patient does not need it any more.

If women need to pass urine in bed then a container that can be put under them is needed. The same is needed if men and women are unable to get off their bed to pass faeces.

If patients soil themselves or are incontinent of urine, they should be cleaned at once. They need clean clothes and bed covers. The skin will become very sore if patients are left in soiled or wet clothes. It is also very upsetting for the patient.

Many people are unable to control their urine or faeces when very unwell or very old. This is called incontinence. It is not their fault and they should be treated with kindness and understanding.

Movement

It is important that people move and are as active as possible. If people lie in bed for a long time, their muscles quickly become weak, and limbs become twisted. They can also get other complications like blood clots and swelling in the legs. If they cannot walk, or move their legs and arms themselves, the family needs to help. Families can help them move the arms and legs even in bed. If patients are too weak or limbs are paralysed, the family can gently do it for them. They should move the limbs in the way they usually move.

Caring for someone who is in bed or cannot move

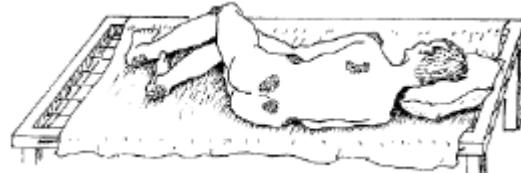
People who lie still for a long time often get pneumonia. Moving the patient helps, especially sitting them up and telling them to cough if they can. Lying flat is not good.

Preventing sores

People who stay in one position can get broken skin sores on places like their buttocks, back, heels and elbows. These sores can become infected. Sores happen because the patient's weight stops blood from reaching the part properly. They need to change the position they are using frequently. If patients cannot move themselves, they should be rolled from one side to the other several times a day, or put into a different position.

These sores are called 'pressure sores'. People who are most likely to have these sores are those who

- do not move much
- are malnourished
- are elderly
- are dehydrated
- have illnesses that they are not likely to recover from
- are unable to control urination or passing faeces.



Relieving pain

Families need to give pain medicine to patients who are in pain even if no other treatment can be found. Being in pain makes everything else worse. It makes people very unhappy or depressed and even slows down recovery. It is an important question for CHWs to ask when visiting these patients.

It is important to spend time with people who are very sick or very old. Having people to talk to makes pain and illness feel less severe and helps recovery.

UNIT 12 COMMUNICABLE DISEASES, WITH STIS, HIV AND AIDS

In this learning unit you will learn about how to identify and support people with some more serious diseases. These are infectious diseases. They are often called ‘communicable’ diseases.

Some of them must be reported to the authorities. These are called ‘reportable’ diseases.

You will also learn about sexually transmitted infections (STIs) and about HIV and AIDS. The meanings of these terms is explained below.

This Unit links closely with Units 2, 5 and 11. You will have started to learn about some of these diseases there. Now we will build on what you already know and can do.

These are the things you should know and be able to do after completing this learning unit:

- Provide initial support and refer people with symptoms of communicable diseases including measles, meningitis, dysentery, cholera, viral haemorrhagic fever;
- Understand the problems communicable diseases cause in Somaliland including diarrhoeal disease, measles, tuberculosis, STIs, HIV and AIDS;
- Inform communities about sexually transmitted infections, tuberculosis, HIV and AIDS;
- With Community Health Councils, mobilise communities to prevent diseases;
- Take part in information outreach campaigns;
- Assist with targeted vaccination campaigns;
- Identify individuals who may have communicable diseases;
- Respond in the right way when these diseases are suspected or identified including referral;
- With Community Health Councils, mobilise communities to act properly when diseases are identified;
- Report suspected ‘reportable’ diseases;
- Assist public health staff with emergency e.g. WATSAN activities in response to communicable disease epidemics
- Guide families about home-base care and hygiene;
- Provide home-based care where appropriate under supervision from health centres
- Collect data and make reports required by WHO and HMIS according to national regulations.

Basic principles and common terms used

What are communicable diseases?

Communicable diseases are those that can be passed from one person to another. Another word that is often used for these diseases is ‘contagious’. There are many different terms you may hear. Here are some of them:

Term	Meaning
Epidemic	outbreak of a disease when cases suddenly become more common at one time e.g. measles
Pandemic	an epidemic that covers a very wide area e.g. ‘bird flu’ infecting a continent

	or the world, HIV
Endemic	a disease that is always present in an area e.g. tuberculosis
Contact	Someone who has been near a sick person or animal, e.g. family of a child with measles Someone exposed directly to the infection e.g. sexual partner of someone who is HIV positive
Case	Someone who is infected with a disease e.g. child who has measles
Incubation period	First stage of the disease. Period between first being exposed until the first signs of infection appear
Isolation period	The length of time an infected person must be kept away from others to prevent transmission of the disease
Quarantine period	
Transmission	Disease passing from one person to another

What are Reportable diseases?

Some communicable diseases are ‘reportable’. This means that the case must be reported to the government. Your duty is to report the case to the health centre. The health centre sends this information regularly to the government. Eventually this information is used to provide information about what is happening around the world. This way epidemics are spotted before they spread too far and infect too many people. This helps governments to prepare for epidemics e.g. by organising vaccination or water and sanitation campaigns, or sending extra nurses and medicines to an area.

Which diseases are reportable?

There are the diseases that must be reported in Somaliland if they are suspected:

- cholera
- shigellosis
- measles
- acute flaccid paralysis (poliomyelitis)
- haemorrhagic fever
- diphtheria
- whooping cough
- confirmed malaria
- neonatal tetanus.

Communicable diseases are more common with poverty, malnutrition, over-crowding and displacement. Why is this?

You have learned something about this in Learning Units 4 and 5.

When people are in poverty, they may have overcrowded living conditions. Too many people live in the houses. Water may not be clean and sanitation may be bad. This means that infections can spread quickly and easily.

They may not have good food. If they are malnourished, they may get sick faster.

Their access to health care may be very limited. This means that people do not have treatment and diseases just spread around. Early diagnosis and treatment are essential. You have an important role to help with this.

People who are displaced experience all these problems. They are then vulnerable to many diseases. For example, cholera has been a major problem for people displaced by war in South Central Somalia.

ACTIVITY

In your groups, talk about how this affects your own communities.

How these diseases spread

Refer back to Learning Units 4, 5 and 10 to remind yourself of what you learned there. The term used for passing diseases on is ‘transmission’. A sick person can transmit or ‘pass on’ the disease to another person.



Main routes of transmission

There are several important ways infection is passed on. These can be seen in the Table.

Ways infection can be transmitted

Route of infection	How it happens	Disease examples (more in section below)
Touch	Mostly carried on objects or hands e.g. unwashed hands, dirty gloves and instruments	Wound infection Touching child with chicken pox Touching eyes of someone with conjunctivitis
Faeco-oral route	Water or food is infected Failure to wash hands after using latrine Germs go from faeces to mouth	Diarrhoeal diseases Intestinal parasites (may need another animal in between) Hepatitis A
Body fluids	Blood, urine, tears, saliva, sexual fluids Spilled, fluids, used injection needles or razor and surgical blades	HIV(not tears, saliva, urine) Hepatitis B Viral bleeding diseases Conjunctivitis from tears also
Sexual contact	One person has sexual intercourse with an infected person and is infected	STIs HIV Hepatitis B
Air-borne route, carried on the air	Person with the disease breathes out, coughs or sneezes. Germs or virus is on invisible water drops or dust. A healthy person breathes the same air. Germs or virus land on a surface. Others touch this and put hands to their mouths.	Common cold, flu, measles, tuberculosis
Insect or animal-borne (they are called ‘vectors’)	Person is bitten by an infected animal e.g. dog, fox, mosquito. Skin may be penetrated e.g. with schistosomiasis	Rabies, malaria

The term ‘chain of infection’ is often used. For someone to become infected, three main stages are needed:

- the source where the micro-organisms come from
- a way of transmitting them
- someone to receive them and become infected. This person then becomes a source.

If you look back at Learning unit 5 you will find a typical chain of infection. This one is for malaria.

Prevention strategies

You learned about this earlier in Units 4, 5 and 10 including the role of immunisation.

ACTIVITY

Each group make a poster that shows how to prevent one type of infection (groups choose different ones). Try to use pictures and drawings instead of words. Show these to each other groups and talk about the topic.

Main communicable diseases and what to do if you suspect them

Here you will learn about some of the most important communicable diseases. You will learn about how they happen and what the signs are. You will learn about what to do. This is arranged by the main way the disease is transmitted listed in Table @ above.

ALWAYS you must notify the health centre at once when you suspect people in the community have one of these diseases. The health centre will contact the right people to organise the rapid response teams for communicable diseases. Rapid response teams have the people, resources, knowledge and skills to deal with outbreaks.

Faeco-oral route: water and food-borne diseases

You have learned a lot about these in Unit 8. This gives you more detail but it is a good idea to go back to remind yourself of what you already know.

Water and food-borne diseases are very contagious. They spread easily. It is very important to make sure people

- boil drinking water, and water used preparing food
- use clean containers for food and water
- boil milk
- wash hands after passing urine and stools, and before eating
- always use proper latrines
- keep flies away from food and drink.

The image below reminds you of the importance of hand washing.



Diarrhoea is the main sign of all diseases carried in water and food. Diarrhoea is passing three loose, watery stools or more in a day.

The main danger is **dehydration**. The patient is thirsty with a dry mouth, looks ill, cheeks are sunken in, babies may have a sunken in patch on the head (fontanelle), skin does not go back quickly if you pinch it up.

The main treatment is **rehydration**, first with ORS.

Cholera

SUSPECTED CHOLERA IS A REPORTABLE DISEASE IN SOMALILAND

What happens?

Cholera sufferer is infected from water contaminated by faeces. The incubation period is 2-5 days. Cholera is very dangerous and happens in epidemics especially in IDP camps and after disasters. Many people die.

Signs of cholera

- sudden cramps in the abdomen
- violent diarrhoea and vomiting
- stools look like rice water (the water left when rice is cooked)
- very fast dehydration from fluid loss
- lethargy
- confusion
- may collapse.

What to do

- Give ORS

- Needs antibiotics (doxycycline / tetracycline available when outbreaks occur)
- Notify health centre (you **must** do this)
- May need IV fluids at the health centre. Many people die without special treatment
- Observe contacts for 5 days. Doxycycline can be used to prevent infection for contacts
- Make sure contaminated clothes, cloths, nappies are burned or buried deep
- If possible, clean surfaces with dilute bleach e.g. where a baby's soiled nappy has been changed.

Bloody diarrhoea (dysentery, shigellosis)

Dysentery is diarrhoea with blood. It is often called 'bloody diarrhoea'. It may be shigellosis.

SUSPECTED SHIGELLOSIS IS A REPORTABLE DISEASE IN SOMALILAND

What happens?

The usual causes are

- food and water infected with germs from faeces of infected people like other diarrhoeal diseases
- directly from person to person by hands that have been infected by touching faeces.

The incubation period is 1-2 days.

It often happens in overcrowded places with poor watsan like IDP camps. It is common among travellers.

There are several germs that cause bloody diarrhoea. Shigellosis is a type of diarrhoea caused by a bacteria called 'shigella'. It is most common among small children. Some are very ill and may die, others are not so ill.

Signs of acute bloody diarrhoea or dysentery

- abdominal pain and cramps
- vomiting
- fever
- diarrhoea which can last for a week or more
- blood in the faeces (the faeces are dark)
- people may die if the fluid lost is not replaced.

What to do

- Make sure patients drink plenty of fluids especially ORS
- Refer. The person needs special antibiotics e.g. cotrimoxazole
- Make sure people understand the importance of good hygiene as with other diarrhoeal diseases. hand-washing.

Acute watery diarrhoea (gastro-enteritis)

What happens?

Patient has drunk or eaten infected water or food.

Signs of Acute watery diarrhoea

- diarrhoea (no blood) and vomiting
- does not want to eat
- may become dehydrated.

What to do

- Tell patient to drink plenty of fluids especially ORS
- Refer if diarrhoea does not stop within 3 days
- Report to health centre if you see 5 cases or more in one week
- If possible, clean surfaces with dilute bleach e.g. where a baby's soiled nappy has been changed.

Typhoid

SUSPECTED TYPHOID IS A REPORTABLE DISEASE (in many countries)

Typhoid is a very serious illness caused by water or food contaminated with the faeces of someone else with typhoid. That person may not even know they have the disease. They are 'carriers'. So typhoid can be carried in water, and on hands.

Typhoid is preventable with immunisation when it is available.

The incubation period is 1-2 weeks.

What happens?

- some people (carriers) have no signs
- others become very ill and may die.

Signs of typhoid fever

There are four stages. Each lasts about 1 week. The patient is infectious. The stages are in Table # below.

Table#

Stage	Signs and symptoms
Stage 1	Feeling unwell, headache, cough, slight fever
Stage 2	Green diarrhoea, maybe 6-8 times each day; May be constipated instead; High fever and slow heartbeat; Abdomen is enlarged and painful to touch; Pink blistery rash on skin, may be difficult to see on dark skin
Stage 3	Bleeding from the bowel; May be confused, seeing and picking at things that are not there, saying things that make no sense; May be dehydrated

Stage 4:	Fever reduces; May recover if complications not too serious; May become a carrier
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What to do

- Refer at once. Patients will need special antibiotics and care.

Acute flaccid paralysis (Poliomyelitis)

ACUTE FLACCID PARALYSIS - POLIOMYELITIS IS A REPORTABLE DISEASE

Poliomyelitis is preventable with immunisation.

What happens?

Poliomyelitis virus is caught from water and food contaminated with faeces and polio virus. It can occasionally be caught direct from a person who has polio. It attacks the mouth and throat first. It may then attack the nervous system. Polio is uncommon where there is good child immunisation e.g. as part of EPI campaigns.

The incubation period is 1-3 weeks.



Signs of polio

Some people have no signs when infected but usual signs are

- Fever, headache, sore throat
- Nausea and vomiting
- Neck and limb stiffness
- There may be paralysis of
 - limbs, usually the legs. The limbs are floppy. This is called 'flaccid' paralysis.
 - breathing
 - urination and passing faeces.
- Some patients die e.g. with untreated breathing difficulties
- Some are left with disabilities.



What to do

- Notify the health centre when anyone has flaccid paralysis in case it is polio
- Take care with sanitation and disposal of faeces; the patient is infectious for weeks after recovery
- Encourage good nutrition
- Encourage rest especially if there is paralysis
- Refer. For treatment and rehabilitation help if needed
- Use the opportunity to encourage child immunisation.

Jaundice (hepatitis)

SUSPECTED HEPATITIS IS A REPORTABLE DISEASE (in some countries)

What happens?

Disease caught mainly from infected water. This is hepatitis A.

Signs of jaundice

- yellow skin in fair-skinned people
- yellow eyes
- sudden loss of appetite
- pain below the ribs on the right side
- may have fever
- feeling sick and vomiting
- dark yellow urine (like black tea)
- stools turn white.

What to do

- encourage rest and good food
- encourage plenty to drink
- NO alcohol for at least 3 months
- refer the patient if very ill.

Air-borne

Measles

SUSPECTED MEASLES IS A REPORTABLE DISEASE IN SOMALILAND

Measles is preventable with immunisation.

What happens?

Measles is caused by a virus. It is passed across the air from coughs and sneezes. It is very common among children up to 3 years of age who have not been immunised.

Children often die of measles. They are more likely to die if they are malnourished or are very young. If one case happens, most other children will get it too unless they have been immunised. This is an epidemic.

The incubation period is 8-14 days. Measles is very infectious for the 7 days before the rash appears and 2 days after.

Signs of measles

- Measles starts like a head cold with a runny nose, cough, fever, sore mouth, red eyes
- The child has white spots in the side of the mouth. There may be ulcers

- A blotchy rash starts on the face and neck on the third day. It spreads to the body. Spots may be difficult to see on dark skin
- May have diarrhoea and vomiting
- May have the complications of
 - difficult breathing from narrowing of the wind-pipe. The child makes a loud noise to breathe
 - pneumonia
 - ear infection
 - fits
 - brain infection
 - may become malnourished later.

What to do

- Keep child away from healthy children
- Wash eyes with cooled boiled water
- Keep mouth clean, may use gentian violet
- Keep cool, can sponge child with water that is just warm
- Give paracetamol to bring fever down
- Keep breastfeeding, or give other food as usual
- Make sure children who are not breastfeeding are given plenty to drink
- Any child with danger signs must be referred at once
- Children who have had measles will need good food and micronutrient supplements.

Tuberculosis

TB is preventable with immunisation when it is available.

What happens?

Tuberculosis is a serious infection caused by bacteria. It is often called TB. It attacks the lungs and other parts of the body. It can attack bones and joints.

It happens most often when people live in overcrowded places or are malnourished or weak. People who have poor immunity are at special risk e.g., people who are HIV positive or have AIDS. It spreads very easily and lasts a long time even with treatment. People may die without treatment.

Signs of tuberculosis

- cough that does not go away
- coughing blood or sticky sputum stained with blood
- loss of weight and loss of appetite
- low fever
- night sweats even in cold weather
- tiredness.

What to do

Refer anyone with these signs to the health centre. The treatment takes many months to complete and is taken daily. This is called DOTS. Dots is ‘Directly Observed Treatment’. The nurse watches the patient swallow every dose. This is because it is very important that all tablets are taken over all the months.

TB patients need to eat good food to help them recover.

Other people living in the household will be tested for TB. They are treated if necessary.

Meningitis

SUSPECTED MENINGITIS IS A REPORTABLE DISEASE (*in some countries*)

What happens?

Meningitis is an infection of the brain. Patients may die if not treated.

Signs of meningitis

In adults and children older than 1 month

- starts suddenly
- high fever
- severe headache and vomiting
- stiff neck or back
- confusion (the patient may not know where they are or what they are doing)
- bright lights hurt the eyes
- may be sleepy or even unconscious
- convulsions
- may have a skin rash and tiny blood spots in the eyes.

In newborn babies less than 1 month

- signs may be difficult to see
- may be no fever
- baby fails to suck
- vomits again and again
- the gap between the bones on the top of the head (called the fontanelle) may be bulging
- the baby may be shocked – cold, damp skin, very pale.

What to do

Refer at once.

Diphtheria

SUSPECTED DIPHTHERIA IS A REPORTABLE DISEASE IN SOMALILAND

Diphtheria is preventable with immunisation.

What happens?

Diphtheria should be prevented by immunisation. It is children who have not been immunised who are most likely to have it. Adults can have it too. It is caused by bacteria spread on the air from someone else. This person may be infected but have no symptoms. The incubation period is 2-5 days. The disease may be mild or severe. The death rate is high.

Signs of diphtheria

- child is very ill
- rapid heart rate
- fever
- headache
- bad-smelling bloody discharge from the nose
- swollen neck
- sore throat and painful swallowing
- voice changes, becomes ‘hoarse’
- difficult breathing
- too much saliva
- grey-black membrane can be seen across the back of the throat. It may block the breathing
- there may be a skin rash.

What to do

- Report and refer at once
- Too much saliva is an emergency sign as the airway may be about to block.

Whooping cough (pertussis)

SUSPECTED WHOOPING COUGH IS A REPORTABLE DISEASE IN SOMALILAND

Whooping cough is preventable with immunisation.

What happens?

Whooping cough is a serious disease of children. It is very infectious. It occurs in epidemics when children are not immunised. It is known because of the noise children make when they cough. This is the ‘whoop’.

Children can become malnourished after whooping cough. It is most dangerous in children younger than 1 year.

The incubation period is 7-12 days.

Signs of whooping cough

There are three stages

<i>1 or 2 weeks 'head cold' stage</i>	Starts as a cough and cold for 1-2 weeks with runny nose, fever, mild cough The child may refuse food and feels unwell
<i>3 weeks</i>	Cough gets worse after 1 or 2 weeks. Children <ul style="list-style-type: none"> • have fits (spasms) of coughing where they cough all the time and can not stop • may turn blue (skin and gums). This may be difficult to see in dark-skinned children • may vomit with the cough • coughing ends in a the 'whoop'. This is a big noise as the child tries to suck in air Coughing may cause small blood patches in the eyes Children may fail to eat and become weak Babies may have swollen puffy eyes Babies under 3 months may go blue, fail to breathe and even die Children may get pneumonia They may become dehydrated Malnutrition is common after whooping cough.
<i>3 or 4 week recovery stage</i>	Coughing reduces

What to do

- Babies less than 6 months must be referred
- Refer any child with danger signs e.g. high fever, fits
- Advise the mother to make sure the child drinks well and eats some food after coughing
- Refer the child who is very weak or becomes malnourished.

Insect/animal-borne

Rabies

SUSPECTED RABIES IS A REPORTABLE DISEASE (*in some countries*)

Rabies is often called 'hydrophobia'. This means 'fear of water'. People with rabies may have spasms on drinking which look like fear.

What happens?

Rabies is caught from the saliva of an infected animal. The animal may be wild or domestic e.g. dogs and cats. It usually happens because of a bite. The incubation period is 2-8 weeks.

Signs of rabies

Rabies goes through stages as shown in the Table:

Stages in rabies

2-10 days	Flu-like signs and symptoms
next stage	<ul style="list-style-type: none">The person becomes sensitive to light and noiseThere is increased saliva, sweat and tearsPupils of the eyes become dilated (wide)Heartbeat and respirations become rapidThe bite wound become itchy or painful
agitated stage	<ul style="list-style-type: none">The person is easily over-excited or agitatedDouble vision (seeing two of everything) and jerky eye movementsSpasms on drinking may lead to choking, skin going blue, and failure to breatheChewing and swallowing may become impossiblePatient becomes confused and unconsciousDeath follows.

What to do

- Refer at once
- The animal needs to be destroyed if it has been captured.

Malaria

CONFIRMED MALARIA IS A REPORTABLE DISEASE IN SOMALILAND

You have learned about malaria before in Units 4, 5, 8, 11. This adds to your knowledge. You will learn more in Unit 15.

What happens?

A blood parasite is injected by mosquitoes when they bite. The parasite multiplies in the blood and makes the person ill. Children under 5, pregnant women and their unborn babies are most at risk of damage or severe malaria. So are travellers from areas that do not have malaria. Malaria happens in areas where the mosquito can breed in slow-moving or still water. There are different types of malaria. Most malaria in Somaliland is the type called falciparum malaria.

There may be serious complications

- pregnant women may die or may abort the fetus
- the fetus may be born of low birth weight
- malaria attacks may return
- weakness and anaemia
- jaundice, becoming unconscious (coma), kidney failure, death.

The incubation period for falciparum malaria is 9-13 days. Falciparum malaria is present in some areas of Somaliland and neighbouring countries. Although it is not widespread, any traveller can have attacks of malaria they have caught elsewhere.

Signs of malaria

- Flu-like illness with aching joints, feeling unwell, headache, fever, weak muscles, pain in the abdomen, diarrhoea
- Fever may come and go from day to day. May have shivering and sweating attacks
- Babies may only show failure to feed and losing interest in what is happening around them.

Malaria is diagnosed when someone who lives in or visits a malaria area has any of these signs

- sleepy, confused, coma
- unable to drink, or eat, or breastfeed
- convulsions (fits, seizures)
- vomiting that does not go away
- dark urine, called 'Coca-cola' urine
- bleeding gums
- breathing danger signs
- fever danger sign more than 39°C
- treatment fails.

What to do

- Make sure the patient drinks plenty. ORS is best
- Cool the patient with wet cloths
- Give paracetamol, if the patient can swallow
- Refer if any danger signs start
- Use the opportunity to remind community members to use Insecticide-treated bed nets and to destroy mosquito breeding places.

Some CHWs may be able to diagnose malaria using the rapid diagnostic test (RDT) and treat with extra training.

Body fluid transmission

Haemorrhagic fever

SUSPECTED HAEMORRHAGIC FEVER IS A REPORTABLE DISEASE IN SOMALILAND

This is also called 'acute haemorrhagic fever' and comes from some animals. It is seen in other parts of Africa and there are many different types. Travellers could arrive with a haemorrhagic fever. It is very dangerous and infectious between people. Most people will die without good treatment.

Signs of acute haemorrhagic fever

- bleeding in body tissues
- after being very unwell

- diarrhoea and vomiting
- skin rash
- sore throat and eyes.

What to do

You must report to the health centre immediately if you see anyone with these signs and symptoms.

HIV (see later section)

Jaundice (hepatitis B)

SUSPECTED HEPATITIS IS A REPORTABLE DISEASE (*in some countries*)

This is not a repeat. There are two types of hepatitis in this manual.

Hepatitis is preventable with immunisation when it is available.

What happens?

Disease caught mainly from body fluids that causes jaundice. This is hepatitis B. it can be caught through sexual activities or from infected needles.

Signs of jaundice

The signs are the same as for water-borne hepatitis A (see earlier section).

What to do

This is the same as for water-borne hepatitis A (see earlier section).

Tetanus

SUSPECTED NEONATAL TETANUS IS A REPORTABLE DISEASE IN SOMALILAND

Tetanus is preventable with immunisation. The pregnant woman needs to be immunised to prevent tetanus in her baby.

Tetanus is different from the other diseases in this Learning Unit but still fits best here.

What happens?

Tetanus is an infectious disease but does not pass directly from one person to another. It is not contagious. The micro-organisms come from animals and live in the soil. The micro-organisms are called spores. Spores are able to live for a very long-time when dried up.

The spores can get into wounds. Infection is most likely with deep and closed wounds. The incubation period is about 8 days from injury but can be much longer.

Here are some examples

- A man digging his garden injures his foot with the tool
- A woman treads on a rusty nail

- A child is bitten by a cat
- Instruments are used for surgery that have not been sterilised properly
- A woman has an abortion and non-sterile instruments are used
- A dirty blade is used for FGM, or some traditional treatment is used after cutting
- A newborn baby is infected through the cord stump. This most likely happens if soil or animal dung is put on the cord, or dirty blades are used for cutting.

Signs of tetanus

First sign is usually difficulty with swallowing, a stiff jaw, then spasms of the face. The jaw is 'locked'. Then muscle spasms spread around the body.

The person may have fits (convulsions) especially if there is a loud noise. The person may go rigid with an arched back as in the drawing. Spasms may be very sudden and can even break bones and tear muscles.



There may be incontinence of urine and faeces.

Newborn babies with tetanus:

- do not feed well, they may not suck
- may not open their mouths properly when they cry
- may jerk when touched or startled
- may have difficult breathing and go blue
- may have fever
- umbilicus may look infected.

With special hospital care some patients may survive but the illness may last many weeks and many die.

What to do

- Keep the person as quiet as possible. Avoid bright light. Refer at once.
- Later remind the community about immunisation and how to prevent tetanus. Remind women who are not immunised to have tetanus immunisation when pregnant. This protects their babies and themselves.
- People should ask for a special tetanus immunisation if they are wounded or bitten, and if it is available at the health centre.
- Report and refer any infant with suspected tetanus.

What to do during epidemics

An epidemic is an outbreak of some infectious disease where it spreads from person to person and several or many people are suffering from the disease.

It can be very hard work to care for many sick people if an epidemic happens in your community. If many people come to you with the same complaint, you need to

- notify your supervisor / manager or the health centre
 - about how many people are sick
 - what is happening to them
- work with the Village Chief, Community Health Committee and heads of families
- advise families how to care for their sick people
- try to prevent the disease spreading any further
- record all you do
- keep yourself healthy by careful hand-washing, eating and drinking properly, taking some rest, getting help.

Preventing spread: You should

- try to find all cases of the sickness
- make sure the people understand why the disease is happening
- advise people to wash their hands before eating or drinking, after caring for a sick person, using the latrine
- boil drinking water and milk if the disease is diarrhoeal
- keep sick people away from healthy people if you can.

In Somaliland, the Regional Health Officers inform health centres by phone if infectious disease cases increase in the areas they serve. They can then be alert and ready to take action.

Basics of sexually transmitted infections (STIs)

Infections from germs and viruses that are spread during sexual activity can make people very ill. They can also cause death. STIs may have many side-effects. They can all be prevented by

- having only one sexual partner
- getting help when signs and symptoms happen so that the illness is not spread because it is left untreated.

Round the world, using condoms is an important way of preventing infection where their use is acceptable.

What are the dangers of STIs?

When STIs spread around, many people can be affected such as

- the sufferers
- husband or wife, or other sexual partners
- infants of women who have STIs in pregnancy.

Women may become infertile and be unable to have children. People can have long illnesses that they die from if not treated properly.

Babies can be infected before birth and be born with the disease the mother has. Babies' eyes can be infected during the birth.

In this section, you will learn about the main signs and symptoms. After that you will learn what to do when someone comes to you with these signs and symptoms.

Who is most at risk?

The people at most risk of STIs are

- people with more than one sexual partner
- people whose husband or wife has other sexual partners
- young people who are sexually active before marriage
- people who have been subject to sexual assault including rape.

Signs and symptoms of STIs

There are four main signs and symptoms that people with STIs may have. These are used to decide on treatment. The treatment is called 'syndromic management ' of STIs. STIs are treated by providing treatment that helps cure the 'syndrome'. People are not treated by deciding which disease they have.

A **syndrome** is a collection of signs and symptoms.

Genital ulcer in men and women

- There is an ulcer, a break in the skin on the genitals. This may start with small blisters. The man or woman may have had these before.
- Ulcers can be painful or painless
- The ulcer may go away. This does not mean the disease has gone
- There may be swellings in the groin.

Lower abdominal pain in women

This pain can mean that the woman has disease in her pelvis. It is called 'pelvic inflammatory disease'. It can cause her to be infertile because of a blockage. The egg cannot reach the sperm after she has sexual intercourse. The woman may have:

- pain in the lower abdomen
- pain during intercourse
- discharge of fluid from the vagina
- heavy bleeding during periods and bleeding at other times
- burning or pain when passing urine
- fever
- nausea and vomiting.

Urethral discharge in men

Men may have

- mucus or pus comes from the end of the penis
- stained underwear

- burning or pain when passing urine.

Vaginal discharge in women

Women may have

- fluid loss from the vagina that is more than usual. It may have pus or smell bad
- stained underwear
- itching, redness or swelling of the genitals
- burning or pain when passing urine
- pain in the lower abdomen or back.

Syndromic management of STIs

Syndromic management means treating people by the syndrome (collection of signs and symptoms) they are experiencing.

Remember the importance of privacy and confidentiality when seeing patients. They will probably not be happy about coming to you to report the signs and symptoms. They may want to see a CHW of the same sex as themselves.

Refer anyone with these signs and symptoms. They will need special medicines depending on what their signs and symptoms are. This is syndromic management. It is important to refer the wife or husband too as they may have a STI too. Sometimes it can be ‘silent’ and they may have no obvious symptoms. Or they may not understand that the symptoms are unusual especially if they are very young.

The CHW role in supporting people with STIs

Contact tracing:

You may be asked by the health centre to help to find any other sexual partners. It is very important that sexual partners are identified. This is because STIs are very contagious. Other sexual partners will catch the diseases.

Finding other partners can be very difficult so you will need special training. You have to be very sensitive and must not show judgement of the way patients may have behaved.

Patients may not want to say who they have had sexual intercourse with other than the wife or husband. Having STIs diagnosed can cause serious problems between married couples. This is because one or the other must have had intercourse with someone else at some time. Sometimes patients can be abused by their partners e.g. by being beaten even if the person being beaten is not the one who has had sex with others. It is most often women who this happens to.

Advocacy, health promotion and education, and mobilisation of communities

You have an important role in promoting healthy sexual behaviours and educating the community about:

- what STIs are
- how they are spread and how to prevent them
- how to recognise them and what to do when you suspect an STI.

It is important to work with community leaders e.g. Community Health Council, community and religious leaders, school teachers. It is wise to educate young people about healthy sexual behaviours before they become sexually active. They also need to learn how to treat each other with respect. This may be very difficult to do when it is not culturally acceptable.

STI services in Somaliland

All treatments for STIs are carried out by nurses, midwives or doctors at health centres. If they find it is difficult to treat a person, they may be referred to a referral health centre, a clinic that specialises in treating STIs, or a hospital.

Basics of HIV and AIDS

HIV AND AIDS ARE REPORTABLE DISEASES (*in some countries*)

What are HIV and AIDS?

'HIV' stands for the Human Immuno-Deficiency virus. This is what happens:

- The virus attacks the immune system. The immune system fails. It becomes 'deficient'. Someone who has the virus is called HIV positive. This is because the HIV test shows as 'positive', that they have the virus.
- HIV-infected people easily become ill with other infectious diseases.

'AIDS' stands for Acquired Deficiency Syndrome. Remember, a 'syndrome' is a collection of things someone can have wrong with them. People with AIDS usually have several illnesses caused by having an immune system that does not work properly. We will return to that later.

HIV in Somaliland and the region

At the moment, HIV infection rates are fairly low in Somaliland but cases do occur. It is still important that health care workers are alert to the possibility that people may be HIV positive. They also need to be aware of HIV and AIDS, of the services available in Somaliland, and of their responsibilities.

Causes and transmission

How is HIV passed?

The Human Immuno-Deficiency virus spreads in two ways:

- by sexual contact with someone who is HIV positive. This is the main route of infection.
- by contact with some types of body fluid from someone who is HIV positive:
 - blood
 - birth fluid (known as amniotic fluid);

- semen
- vaginal fluids
- breast milk

Infection from blood and body fluids may happen from

- use of infected instruments e.g. blades used for FGM
- injection needles used more than once
- an injury from a used instrument or injection needle (called a needle-stick injury)
- dirty dental instruments
- dirty instruments used for birth
- transfusion with unsafe blood

Health workers can be infected by contact with blood and birth fluids. This is why universal precautions are used.

The risk of being infected is high for men who have sex with men

The risk is higher when people have STIs (see below).

Newborn babies of HIV positive mothers can become infected

- in the uterus during pregnancy
- from the mother's blood as they are born especially if the mother has an injury or difficult delivery e.g. episiotomy, tears or opened infibulation scars, use of instruments to aid delivery
- through unsafe injections, re-used needles, dirty instruments
- through breast milk. The risk is reduced a lot if the baby is breast-fed exclusively until complementary foods are introduced at six months. No other food or fluid including water should be given. Babies should be either:
 - exclusively breastfed until 6 months, then breast fed along with family foods
 - exclusively fed on commercial artificial breast milk replacements. Most of the children fed on breast milk substitutes in poorer countries get sick of diarrhoeal diseases and die.

Women can be given anti-retroviral drugs in pregnancy to help prevent mother to child transmission (PMTCT). This may be just for a short period or may be longer-term treatment. Treating the mother after the birth will help to protect her breast-fed baby.

The drugs used are called antiretrovirals (ARVs).

Babies may be given ARVs for 4-6 weeks after the birth to reduce the chance of mother to child transmission (MTCT) through breast milk also.

How is HIV NOT passed?

HIV is not passed via contact with tears, saliva, sputum, nasal mucus, faeces, vomit except when they have blood in them
HIV is not passed through touching an infected person, or by hugging or kissing them. It is not passed by sharing a cup or eating utensils
HIV does not pass through the air
HIV is not passed by insect bites

What happens to the body? The journey from infection to illness

Signs and symptoms of opportunistic disease

- First the body is infected with HIV. There may be no symptoms or signs. But the person may be unwell for a short time. This may happen 2-4 weeks after being exposed to the virus. The signs and symptom that may be seen and felt are
 - flu-like illness
 - genital or mouth soreness
 - a rash on the body
 - nausea, vomiting, diarrhoea.
- Then there are no signs or symptoms for months or even years. The person can still pass the virus to someone else;
- HIV infected people begin to feel unwell. They have more and more infections. These are the opportunistic infections you learned about above. They may be caused by bacteria, viruses, fungus or parasites. The infections may be ones that people without HIV can fight off easily;
- Infections can be very serious. They may weaken the patient. Here are some of them
 - unusual cancer tumours (lumps)
 - difficult breathing illnesses e.g. pneumonia
 - thrush infection of the throat
 - TB (see below)
 - fevers that do not go away
 - sweats
 - severe diarrhoea
 - severe loss of weight.
- The patient's condition gradually gets worse. AIDS will lead to death without very good treatment.



AIDS is the name for the condition when people get more and more infections and other health problems.

There are special modern medicines that can keep people with HIV or AIDS healthy for years. They have to look after their health and eat well. They have to take their medicines all the time. If they stop, they can become sick. Many of the infections in people with AIDS can now be controlled and people can stay well for much longer.

Why the link with tuberculosis?

Very many people who are HIV positive or who have AIDS are also ill with tuberculosis. This is because the person's immune system is damaged. Tuberculosis is a common disease when people

are poor and not well-nourished. TB is an ‘opportunistic’ disease. If someone has TB, it is important to persuade the patient to be tested for HIV.

Why the link with STIs?

A person who has an STI has a much greater risk of being infected with HIV. The greatest risk is with genital ulcers. The open sore makes it easier for HIV to enter the blood.

The management of people with HIV or AIDS

You will need to refer anyone who may have HIV to the health centre for testing. If it is decided that they are HIV positive, the health centre staff will manage their treatment. They will also advise on how to care for themselves such as getting enough good food.

You should refer anyone with the conditions in the Box to the health centre. Some are very urgent.

Refer people with	Refer urgently people with
People with repeated infections	Painless dark lumps on the skin or in the mouth
Painful rash (shingles)	Severe infection e.g. pneumonia or muscles
Swollen lumps under the jaw, arms, in groins	TB
STIs	Adults with thrush in the mouth or throat
Husband, wife or other partner known be HIV positive	Ulcers in the mouth
Husband, wife or other partner has HIV related illness	Big weight loss that is not planned
Unexplained death of husband, wife or other partner	Illnesses lasting more than 1 month: <ul style="list-style-type: none">• Diarrhoea• Vaginal thrush• Fever• Genital or mouth ulcers

Basics of how HIV and AIDS are treated

At the health centre people will be offered testing for HIV. It is important that they receive counselling. They will have information about HIV and about testing. They will also be helped to think about whether they want to accept testing, and what it may mean for them and their husband or wife. They will be informed about HIV and how it is spread, and how it can be prevented.

If they accept the test, they will also receive this counselling after the results are known. They will receive more advice about prevention and safer sex. If they are HIV positive, they will learn about

- how to stay healthy and eat well with HIV
- getting treatment quickly for infections
- pregnancy and the risks
- protecting the baby if pregnant
- protecting the family if they become sick
- what to do if they have symptoms.

Special medicines will be offered. Some of the



medicines are called ARV (anti-retroviral) therapy. It will be supervised by qualified nurses and doctors.

HIV in pregnancy, and PMTCT (also see Units 15 and 16)

Childbearing women who have HIV or AIDS need extra help. Their care will be supervised from the health centre. They may receive special drugs called antiretroviral drugs (ARVs). These help to reduce the possibility of the baby being infected before or during birth and while breastfeeding.

Remember It is very important that women who have HIV breast feed their babies. They should do this from the birth and continue after the infant begins to eat family foods after six months. It is very important that the baby is exclusively breast fed. If other substances are given, even water, they will damage the baby's intestines. Then the HIV virus can more easily get in.

More babies die of diarrhoeal diseases when formula fed, than from HIV infection when breast fed. The only time HIV positive women should consider feeding infant formula instead of breast milk is if they have enough money and good facilities to continue to buy all the formula needed, and fuel for boiling water and feeding equipment. Then they must give only the formula to their babies.

The message for women with HIV about infant feeding is:

Breast milk only OR formula milk only. Don't do both when HIV positive!
Formula fed babies are more likely to become sick and even die of diarrhoea and pneumonia.

The CHW role

CHWs have no medicines used to treat HIV and AIDS in their kits. Doctors and qualified nurses provide all treatments. CHWs may be asked by health centre staff to support people with HIV and AIDS. Special training will be provided.

CHWs have an important role in

- health promotion and education, (also see Learning Unit 7)
- mobilising communities to prevent these diseases
- mobilising communities to report signs and symptoms
- Helping people with HIV or AIDS and their families to learn how to manage the illness.
- following universal precautions to prevent spread to themselves and others (See Learning Unit 5).



HIV services in Somaliland

Health centres can test for HIV when women attend antenatal clinics.

HIV services are provided by some health centres, referral centres and hospitals. There are also specialist clinics and agencies.

UNIT 13 MANAGING THE PRIMARY HEALTH UNIT

These are the things you should know and be able to do after studying this learning unit;

- Manage yourself and others e.g. more junior CHWs and volunteers
- Organise and manage the services you provide
- Carry out all administrative tasks including
 - record-keeping and reporting
 - managing medicines, consumables and equipment
- Make sure any facilities e.g. PHU building are safe, secure, hygienic and in good repair.

The Somaliland PHU

The ‘Primary health unit’ (PHU) in Somaliland has two meanings. It is the CHW herself/himself as well as a building. If there is a CHW there is a PHU even if there is no special building. The CHW may use his or her home as a base.

If you look back at Learning Unit 2 you will see how the PHU and the CHW fits into the Somaliland health system. The CHW and the PHU are usually the first contact people have with the health service. They may be referred on to a health centre or hospital if needed.

ACTIVITY

1. Look back at Unit 1 and remind yourself of the CHW role. Also look at the competencies you need to achieve.
2. Do you have different ideas now about what CHWs do than when you first started? If so, what are the differences?

Your CHW management duties are

- managing people
- managing health services and facilities at community level
- data collection and reporting
- reporting and working together.

Managing people and yourself

Managing yourself;

If you think back to earlier Units you will remember how you need to set an example to others. People will see what you do and will often copy you. If you say one thing, and do another, no-one will listen to you. So it is important to control what you do. People will respect you if you are honest



and self-controlled. They will not respect you if they believe you do bad things e.g. steal medicines from your kit to sell them privately. They will not believe you if they see you live or work in unhealthy ways.

It is also important to learn to manage your time. You will work alone most of the time. Your manager or supervisor will visit you sometimes. She will not be there always watching you or telling you what to do but the community will always be watching you. They need to know they can trust you.

One of the ways you can help people to respect you is to have regular times when they can come to see you. If you arrange your clinic opening times with the Community Health Council then everyone will be happy. You will need to change them sometimes but you should always let people know if you are going to be away or have to close the PHU.

If you are visiting people in their homes, it is important to do what you have said you will do. If you say you will visit e.g. in the morning, then do so, or try to send a message if something delays you.

It is good to let people know how to get help in an emergency. They need to know how to find you, or what to do if you are away.

You need to learn to decide what is most important. This is called 'prioritising'. It is part of managing yourself and your time and it is not easy. Sometimes it seems like everything must be done at once. If that happens, it helps to think quietly about what is most important.

It is also important for you to have breaks. If you keep working without breaks you can become sick. You will need to organise this with your manager. As a government employee, you will have breaks organised.

ACTIVITY

In your group, talk together about times when everyone wanted you to do something for them at the same time. What did you do about it and did this work? How could you do it better another time?

Managing others working with you e.g. volunteers

You may have volunteers from the community who help you. They may help keep buildings and the area clean. Maybe they help with repairing equipment, or with painting the walls. Maybe someone can plant things so the PHU looks welcoming.

You may have other people working with you who are junior to you. They may be volunteers from your community. It may be a new trainee CHW or someone qualified a shorter time than you. You will need to help them to do the right thing at the right time. You may need to tell them what to do sometimes. Some of the things you can do are to:

- help them to set goals for their time
- help them work out the best way of doing something
- working out together how you will organise clinic sessions



- plan other activities together
- avoid giving them orders except in an emergency
- try to remember their needs and feelings
- treat the other person with respect.

If you find it difficult to work with someone, it is good to talk with them about it. If you cannot solve any difficulties between you, you could talk to the Community Health Council members or to your manager. You may need to do both. You should not tell others in the community about your difficulties.

Managing the services you provide

Organising health services

You need to organise how you use your time and your PHU base. This is important whether you work in a special building or if you use your home.

You learned above about making sure the community know when services are available and how to find you. You will need to organise

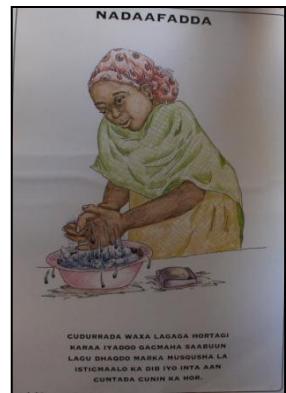
- a regular clinic time at the PHU building or at your home
- time when you visit people in their own homes e.g. newborn babies and their mothers.

You may also be expected to help at the health centre at regular times.

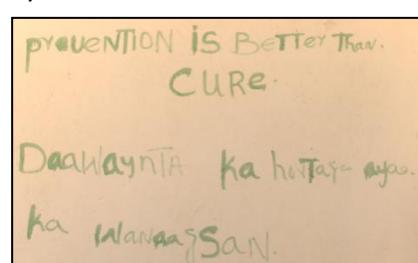
Managing any buildings you use

Appearance of buildings

People will decide what you are like from the appearance of the PHU. If it is dirty and untidy, they will expect you to be like that too. If it is clean, well-repaired and welcoming, they will believe you are tidy and welcoming person too.



It is a good idea to use any wall-space you have for health information posters. Your supervisor may give these to you or you could make some yourself. If you have a waiting area, people will have time to look at posters and maybe talk about them with others who are waiting.



Safety and hygiene of facilities

Make sure any PHU building or your home is kept clean and secure. You need to be able to:

- lock the PHU or your home securely
- keep it clean and tidy. Walls, floors, furniture and ground outside need to be clean
- make sure outbuildings e.g. latrines, wash houses and stores are clean

- report problems with facilities to the Community Health Committee and Health centre
- make sure the buildings and surroundings are safe so that people will not have accidents when they visit
- if it is your home, make sure others such as children can not be harmed by things you store there.

Managing your clinic sessions

It is important that people feel welcome when they visit you. They should always be greeted with courtesy. Their questions should be answered patiently and in words they understand. Do not rush them however busy you are. They may misunderstand you. They may make a mistake e.g. with giving medicines to a child. Next time they or their child is sick they may not come to you if you rush them or are rude to them.

You know that it is important too that clinic sessions are well-timed to suit people e.g. families and mothers, farmers, livestock herders, older people. It helps to consider how far people must come to the PHU. It is no good holding sessions so late that people have to walk home in darkness.

You need:

- a waiting area where people can sit and be comfortable if possible. This needs shade from the sun and shelter from rain and wind
- latrine and washing facilities
- a system to make sure people are seen in turn and fairly. If you need to see someone out of turn and urgently because they are very ill, then you should explain this to others waiting
- if you have a system of selecting children with danger signs to be seen quickly, make this clear to everyone.

Fairness is important. If you have a closing time you should stick to it so that people know they can rely on you. It is not right to let people wait then turn them away because you want to close early except in emergency. If an emergency does happen, then maybe you should visit the people at home who you had to turn away.

Managing your supplies

Medicines, consumables and equipment;

You will have medicines, consumables and equipment to look after. Here are some things you need to do:

- Make sure equipment, medicines and other resources are securely stored. Medicines and other stores must be locked away in the PHU building. If you use your home you will need a special storage area. Storage needs to be secure from pests e.g. rats. It is very important that children can not get at supplies especially medicines. Medicines can hurt or kill children when taken accidentally.
- Check that medicines are not out of date. All medicines have an ‘expiry date’ on them. After this they can be dangerous or not work properly. Your manager or supervisor will tell you what to do with out-of-date medicines.
- Record medicines and other supplies when they are used to make ordering easier.

- Order supplies when instructed to do so.
- Check medicines and supplies on arrival to make sure they are all there.

Record keeping and administration

You will be expected to keep accurate and clear written records of

- how you use your time
- patients you have seen
- the reasons for their visits e.g. ailments: what did they complain of?
- what you have said to them and advice you gave
- what you did e.g. medicines you gave them including
 - dose
 - how often
 - how they are to be taken e.g. by mouth
 - how long for
 - when they should return to you (or when you will visit them again) for follow-up
 - if you referred them to the health centre and why.

You will also be expected to keep records of children and women of childbearing age

- who have been immunised, including when and what they have received
- who are eligible for immunisation.

There are other important things you need to do:

- Store patient records securely and ensure others do not have access. Do not talk about them with other people.
- Record how medicines and supplies are used in your register as well as on patient records.
- Report all activities to your manager.

Here are some more important points about record-keeping.

First, why do records matter so much?

ACTIVITY

Think about these two scenarios and decide why records matter:

1. The CHW visits Yassiin and finds he has a cough. He has had the cough for 3 months. The CHW is worried about the cough lasting so long. He refers Yassiin to the health centre. He does not write anything in his records. Two months later the CHW moves to the town. Yassiin has not bothered to visit the health centre and goes to visit the new CHW. Yassiin does not tell the new CHW that he has been coughing for a long time. The new CHW gives him antibiotics and sends him away.
2. Ahmed is three months old. His mother brings him to the CHW because he has a fever. The CHW gives him antibiotics. She does not record what she has done. The next day the mother visits the PHU with Ahmed again. She sees the assistant CHW. He gives him antibiotics.

Health records help the CHW to

- know what is happening in the area
- plan her work
- remember what she has done and said
- makes sure other health workers know what has happened.

Referral records

Letting other health workers know what has happened is important also when you are referring a patient. You should always send a referral note with them. Your trainer will show you the form used in your area. It will at least contain:

- the referral date, your name and address;
- the patient's name, age, sex, address;
- why the patient came to see you;
- the signs and symptoms including danger signs;
- what you have told the patient or parents;
- what you have done e.g. medicines given.

Data collection

The Somaliland Ministry of Health collects information about health and health care. You may be expected to help with this. The data collection is for the Health Management Information System (HMIS). Your trainer will help you to learn about the forms used in Somaliland.

Health records help the government and regional authorities to

- plan services
- know what is happening in the area e.g. communicable diseases
- make sure the right numbers of health staff are working where they are needed
- pay salaries.

If records are to be useful they need to be

- filled in correctly
- filled in regularly
- made on standard forms that everyone uses
- sent regularly to the supervisor or manager who then sends them to the
 - district
 - province
 - regional headquarters.

Here is an example of a patient record form. You will learn about the ones used now from your trainer.

A typical patient record form

Date	Number	Name	Age	Sex	New/repeat visit	Address	Diagnosis / complaint	Treatments	Remarks

You may also be expected to record

- daily attendance at the PHU (how many patients)
- birth registration (information about every baby born)
- death registration (information about every death)
- growth charts for children (weight gain or loss)
- monthly reports on work done.

Reporting and working with others

Reporting to tour manager or supervisor is very important as you have learned above. You need to make official records. You may also have disease surveillance forms to complete. These are usually diseases that are infectious. You may need to report this to the manager/supervisor or to a designated person for disease.

You also need to report regularly to the Community Health Committee. Then they will know what you are doing and what is happening in the area. They will be able to support you better if they know. They will respect you for giving them information. You should not normally be telling them about individual patients. If you do believe the Community Health Committee needs to know about someone, your supervisor can guide you about what to do.

UNIT 14 FAMILY CASE STUDY

This Learning Unit will help you to understand better the knowledge and skills you have developed so far. It will help you to understand how different issues apply to families in your community.

A family case study is a piece of work that asks you to find out things about one family and think about their needs. You can think about their lives and how they live. You can think about how this affects their health and what might help them. You collect the information and put it together to show your trainer. You can write about them or make pictures of different issues.

These are the things you should know and be able to do after studying this learning unit:

- Understand the way families and individuals live and the difficulties they face
- Support families in improving their health
- Build relationships with family members
- Provide information to families to help them deal with their difficulties
- Work with families to find solutions for difficulties
- Help families to decide on the actions they wish to take
- Make choices and decide which are the most important topics and activities for you to consider
- Produce a report and present it to an audience.

You will probably use a family chosen from your own community for this case study. If that is not possible, your trainer will help you to find another family. This could be near the training centre. First you will spend time in class preparing yourself. Your trainer and other trainees can help you.

While you are doing this case study, you need to be able to get support if you need it. Someone also needs to watch that you are progressing well as you work with the family. This support can be from your trainer. If that is not possible, your trainer will help you find someone else e.g. a nurse from the health centre.

You need to look back over previous Learning Units. This will help you to plan this case study and carry it out.

Some special things to think about are

- Which family should I use? It is sensible to choose a family that has children and older people as well as younger adults.
- Why is this family a good one to use?
- Will they agree to me doing a case study?
- Do the leaders of the community know and agree? (You may need to talk to the Community Health Committee?)
- Have I talked about my choice to my trainer?
- What issues will I spend most of my time on? Remember it is not possible to look at everything!
- How am I going to produce a report to give to my supervisor?

- How am I going to present my family case study to others?

Your trainer will help you and advise about how long the report and the presentation will be. They will help you to plan, prepare and carry this out. Everyone is nervous when they first do this. Don't worry too much, you will all be nervous together!

Here are some of the topics you could consider. Remember you cannot focus on all of them. You may think of other topics you wish to find out about.

- What is the environment like where your family lives?
- What sort of housing do they have? Are they settled or nomadic?
- How do family members spend their time?
- Do children attend school?
- Who are the most powerful people in the family?
 - Who controls any money the family has?
 - Who decides about crops they grow, animals they keep, trading?
 - Who decides whether family members e.g. women and children, can have health care?
 - Who has the most influence over others?
- What are their beliefs about health?
- What customs are good and which are not good?
- Find out what food they have available
- Understand who eats the different foods that are available
- What nutritional needs do different family members have?
- Are children malnourished?
- Understand how they obtain their water supply and how healthy it is
- Find out what health problems families have
- Find out how illness affects the families
- How easy is to get medical help if they need it?
- How much do people in the family know about keeping healthy?
- How much do families know about accidents in the home and village?
- What risky things do they do?
- What are their needs for information about health?
- How could you help them?

Important point

You should not focus on pregnant women or those who have recently had babies for this case study. You have not covered those Learning Units yet. You will do a mother and baby case study later in Learning Unit 17.

It is important to do more than find out about the family and their lives. You also need to decide what help they need. You may need to decide what changes they need to make themselves. It is always best to seek the family members' views of this. Try not to make up your own mind without talking to them about it.

It is important to hide the identity of the family. Do not use real names. Do not make the village name public. You should also not talk about what you find out to others in the community or outside it. You should only report in your training group. This is so that the family's privacy is guarded.

Some practical tips

You will need to talk to the family and gain their trust to do this activity well. When you are going to talk to people, think first about what you will say. What will you ask? Who will you talk to?

It is a good idea to think first about how you would feel if someone came to find out about your family. You will not make many mistakes if you always try to see things from their viewpoint.

It would be a good idea to practice meeting a family by doing role play in class. Your trainer will help you with this. Role play will help you to

- understand how people feel
- avoid upsetting people
- see how well your plan will work
- try out questions and ways of talking to people.

You could also discuss your plans with your class-mates. They will help you to see the pitfalls and what is good about what you plan to do. You can get ideas from each other. It is not a competition so you do not need to keep your plans secret from other trainees!

Enjoy doing the family case study!

UNIT 15 MATERNAL HEALTH AND ILLNESS

Both female and male trainees will take part in this Learning Unit. You will learn about the newborn in Unit 16.

These are the things you should know and be able to do after studying this learning unit:

- Work alongside any local TBAs and collaborate with them
- Promote the health of pregnant women
- Inform people about the importance of antenatal care
- Inform people of danger signs and when childbearing women need professional help
- Promote the health of women who have recently given birth
- Watch for childbearing women who suffer gender-based violence
- Act as advocate in the community for childbearing women
- Understand helpful and unhelpful local customs and why they matter
- Explain why a qualified midwife needs to give antenatal and labour care
- If there is no TBA available
 - provide information on danger signs in childbearing women
 - help the community to be ready for birth and emergencies
 - support breastfeeding women in establishing lactation
 - provide basic emergency care for women while they are being referred to the health centre
- Advocate for attendance at the child spacing clinic after birth
- Advocate for women having fistulae to seek medical help.



'Childbearing women' are those who are pregnant, in labour, and newly delivered. It also includes lactating women in this Unit.

What is the CHW role with childbearing women?

The CHW role is mainly about helping women to stay healthy. CHWs work alongside trained TBAs and collaborate with them. TBAs are supervised by qualified midwives.

It is still important that CHWs have some understanding of women's needs. CHWs will meet childbearing women all the time in the community. They need to know the right things to say and do. They need to have some idea of what should happen to women. They need to know how to react to danger signs if the TBA is not there. They need to know when women need help from health centre staff. They need to be able to pass this information on to people in the community.

Another role for CHWs is to make sure women are healthy after the birth when the CHW visits newborn babies.

The role of CHWs with childbearing women links with their health promotion and education role. It also links with their advocacy role. Important things the CHW should advocate for are

- ensuring women's health is protected in pregnancy and during lactation
- good food for childbearing and lactating women
- antenatal care from a qualified midwife
- skilled attendance at birth. A 'skilled attendant' is a qualified midwife, a doctor or nurse with maternity care training. In Somaliland skilled attendants mostly work in health centres and hospitals. This means women need to go there
- community plans for being ready for birth. This is known as 'birth preparedness'
- community understanding of danger signs and what to do
- child spacing after the birth.

Customs and practice of childbearing

The way people think about pregnancy, birth and the period afterwards is not always the same in every society. People may think differently about some things e.g.

- the role of fathers, grandmothers and families
- helpful and unhelpful practices. These might cover pregnancy and birth, food taboos and expectations, mothers hiding themselves away, where women give birth, infant feeding, who decides what to do.

It is important that you know about local ideas and customs. You also need to understand which are good, and which are unhelpful or even dangerous. This way you can help people to change if they are doing things that do not help women and their infants.



Here are two examples of unhelpful customs that are common in some countries (not Somaliland):

- Women are expected to eat as much as they can so they become very fat. They are not allowed to take exercise. They are not allowed to eat eggs as people believe they will harm the unborn baby.
- Women live in total seclusion. They must not allow a man to see them who is not part of the family. They are not permitted to leave the house without the permission of the husband or mother-in-law. They are not allowed to receive care from a doctor, midwife or nurse unless they are female.

ACTIVITY

Think about customs and beliefs you know exist in Somaliland.

1. Decide which of these are helpful
2. Decide which are unhelpful
3. Why do you think they are helpful or unhelpful?
4. What do you think you could do to change the unhelpful ones?

Gender-based violence in pregnancy

Gender-based violence can be verbal or physical. It is any act that leads to physical, sexual or emotional harm just because of the person's sex. GBV is all about having power and control over someone. GBV can be women to man, or man to woman. Man to woman is the most common. GBV is a real problem in areas where there is conflict. Women and girls who are IDPs are at special risk. Fighters may use abuse, especially rape, as a weapon. Forced sex is rape whatever the circumstance.

In some cultures, people believe that a man has a right to beat his wife even if she is pregnant. We know that around the world, many women suffer harm when they are pregnant or have just had a baby. This happens more often than at almost any other time of their lives. Women even die because of this when pregnant. Unborn babies may also die. The other time when women are often abused or even killed is when they decide to leave their husbands.

This violence is called by several different names e.g.

- gender-based violence (GBV)
- wife-beating
- domestic violence or domestic abuse.



It is important that you are alert for women experiencing gender-based violence in pregnancy. If you are worried you should seek advice from health centre staff. You probably can not help women directly but can perhaps involve family community and clan leaders. These are some of the signs that women may be being abused in some way:

- bruises and other injuries that are not explained well;
- frequent bruising even when explanations are given;
- bruising in places hidden from view;
- pain in the belly can be from being kicked especially when pregnant;
- the husband
 - is always with the woman. He will not leave you to talk alone with her
 - seems jealous and will not let the woman out of her home
 - insults his wife or makes fun of her in front of others
 - blames the woman for what he does
 - refuses her money to buy what she needs even if he has it.

ACTIVITY

In your group think about GBV and about what happens in Somaliland. It may be helpful to think about the Islamic view about how women are treated. Remember you must make sure you do not allow women to be identified as you talk about what you know.

What happens to women's bodies in pregnancy, labour, birth and the postnatal period

This builds on Unit 3 How the body works.

What changes happen?

In pregnancy

You will remember that pregnancy starts once the man's sperm has fertilised the woman's egg and have met and formed an embryo. The embryo settles down to grow in the lining of the uterus. The uterus is a bag made of muscle in the woman's pelvis. As the embryo grows it is called a fetus.



Women soon know that they are pregnant or suspect it. These are the signs of pregnancy:

- monthly periods (menstruation) stop
- morning sickness for a few weeks
- passing urine frequently
- breasts becoming bigger. They may have blue blood vessels visible and be tender
- fair-skinned women may notice that the skin may become darker in some places
 - across the face
 - around the nipples
 - a line down the stomach
 - top of the thighs.
- feeling soft movements in the lower belly around the fourth month, then stronger movements later. This is the fetus moving.

This is what happens during pregnancy:

- The fetus gets bigger and the uterus grows bigger too
- The uterus keeps the fetus safe during pregnancy. The uterus is full of liquid. This is often called the 'waters'. The uterus and waters protect the fetus from germs and from injury
- The 'afterbirth' or placenta grows inside the uterus. It is large and dark red. The placenta is joined to the fetus by the cord. The placenta has two jobs
 - The fetus gets the food and oxygen it needs for growing from the mother
 - The fetus gets rid of waste into the mother's blood
- When the fetus is ready to be born, the uterus starts to contract (tighten up). The mother will soon be in labour and begin to give birth. You will learn about this later.

The pregnancy lasts around nine months.

During labour and birth

After the nine months, gradually the uterus tightens up harder and more often. These are called contractions. They are often uncomfortable and often get more painful as they get stronger. The birth is getting nearer with every contraction. This is called the *First stage of labour*. This is when the woman needs to move to the health centre if she has not gone there beforehand. Here in the Table are the main things that happen during labour.

<i>First stage of labour</i>	<ul style="list-style-type: none"> The woman may pass a very little blood and some sticky jelly. This is from the opening of the uterus. The opening of the uterus becomes bigger and opens enough for the fetus to start to pass through it. The opening is called the cervix. The ‘waters’ will burst out of the uterus during this part of labour.
<i>Next is the Second stage of labour</i>	<p>When the cervix is completely open the fetus can pass through. Now the woman starts to push hard with every contraction.</p> <ul style="list-style-type: none"> Every time she pushes, the fetus passes further down her birth canal Then the baby’s head can be seen at the opening to the vagina The baby’s head and then its body come out; The baby will quickly start to breathe The baby will suckle if he is held close to the mother’s breasts.
<i>Next is the Third stage of labour</i>	<ul style="list-style-type: none"> The woman may have a rest for several minutes Then she feels her uterus contract again. She may push Out comes the afterbirth or placenta and a small amount of blood

What does the midwife or TBA do? They will

- make sure the woman stays healthy during the labour, drinks, and eats if she wants to
- protect her from infection by using very clean hands, equipment and cloths
- make sure the labour is following the normal course
- watch for danger signs
- makes sure the baby is born safely
- makes sure the baby breathes in good time
- dry the baby and wrap it with the mother
- help the woman to suckle the baby straightaway
- cut the cord at the right time
- check that the placenta comes away properly
- make sure the woman does not bleed too much
- call for help or refer the woman and baby if there are danger signs.

After the birth

After the birth the midwife will check that the woman does not start to bleed. If possible she should check the woman for a few days to make sure she does not bleed or get a dangerous infection. The woman will have a small blood loss from the vagina for a few hours. Then it gradually gets darker. After about 10 days it turns almost white. It does not smell bad at any time. While this is happening, the uterus gets smaller again.

The woman’s breasts change. They get bigger and often a bit sore to touch. They may become a little hot. This is the milk beginning. It is called lactation. The first milk is present from before the birth. This is called colostrum. It looks very watery and there is very little of it. This is normal. It is just enough for the baby’s tiny stomach. The baby should not be given anything else, even water. You will learn more about this later.

Gradually the mother’s breasts become comfortable and softer



over the next few days. They may feel tender and prickly just before feeding the baby. This is the milk being made.

It is important to understand that the woman's body produces milk that is just right for the baby. The milk changes as the baby grows older. Milk is made in the right quantities, and has the right content for that baby at that time. You will learn more of this in the next Unit.

How can women stay healthy?

It is important that women stay healthy when they are having children. They need special attention because

- women who are healthy usually give birth to healthy babies
- healthy babies who are well cared for usually become healthy children
- healthy children usually grow up to become healthy adults.

Nutrition

Women need plenty of good food, they need rest, they need activity. It is good for them to continue to work in the home, on the farm, in outside jobs. It is also important that they should have good times for rest. They should not have to do very heavy or dirty work. There is more about this below.

Hygiene

Women also need to think about personal hygiene. They need to keep themselves clean especially after the birth.

Malaria

Women need to protect themselves against malaria. Malaria can seriously affect the health of women and their unborn babies. If there are malaria mosquitoes around women should sleep under treated bed nets. They should do the same with the baby once it is born. They should stay well-covered in the evenings and early mornings. In some places, women are given protective medicines at the antenatal clinics.



STIs and HIV

These are dangerous to pregnant women and their babies. It is important for women to be tested at the Health Centre so they can be treated. For women found to have HIV extra care and advice will be available from the health centre. They may receive special drugs called antiretroviral drugs (ARVs). These help to reduce the possibility of the baby being infected before or during birth and while breastfeeding.

Support

Women need a lot of support and understanding. Being pregnant and having a baby is very tiring.

Women need time to recover after the birth. Some women can be a little sad after the baby arrives. Sometimes they cry. This happens to most women in the first week after the birth. This is normal. It is important to educate men in their



role. They can support their pregnant and newly delivered wives when they understand what is happening to them and what the dangers are.

Antenatal care

It is very important that women see the midwife at the health centre for antenatal care. It is also helpful that you know what will happen. Women and their families will be more willing and confident if you can explain things first.

The midwife will check them regularly to make sure they are staying well and that the unborn baby is growing. The midwife can do several things that measure their wellbeing. Midwives are specially trained to understand what tests mean. Here are some of them:

- talk to them about their general health
- ask about previous pregnancies and births
- weigh women, especially those who do not look well-nourished
- measure the blood pressure
- take some blood from the arm for testing especially for weak blood (anaemia) and some infections like STIs and HIV
- examine the woman's abdomen to make sure the baby is growing properly
- decide whether the woman has more risks than usual and needs a doctor's care.



Midwives also help to prevent some illnesses e.g. providing

- iron and folic acid tablets for the blood for 6 months
- vitamin A and micronutrient supplements at the right time of pregnancy
- tetanus immunisation for women who are not fully immunised to protect them and their babies.



Usually women are asked to attend the clinic about four times during the pregnancy. The midwife will also talk to them about planning for the birth and about the importance of giving birth with a qualified midwife. For women who are at higher risk of problems than usual, the midwife may arrange for them to have hospital births.

At the end of this Learning unit you will find copies of the UNICEF pregnancy card.

Nutrition

You learned about nutrition in Learning Unit 9.

Women need to eat and drink well in pregnancy. This is so that they can grow healthy babies and stay healthy themselves. Good nutrition needs to start early. In fact she needs to have had as good food as possible from babyhood and through adolescence. This will help her body to grow properly. If it does not grow properly she can have many complications when in labour.

Women need to eat and drink well when breastfeeding too. In pregnancy and when lactating women need

- plenty of protein
- foods that give them energy like fat and whole grains
- fresh fruit and vegetables
- food like meat, beans, peas, eggs and dark green leafy vegetables that have iron and folates in them so women have strong blood
- beans, milk and foods made from them. These give calcium needed for strong bones and teeth, and for making breast milk;
- dark yellow and green vegetables and some yellow fruit. These have vitamin A.



Women may be given micronutrient supplements at the health centre. The supplements given to prevent ill health are shown in the Table.

Micronutrient supplementation for childbearing women, adolescents and women of childbearing age.

In pregnancy	Multiple micronutrient tablets or sprinkles OR IF MICRONUTRIENTS ARE NOT AVAILABLE <ul style="list-style-type: none"> • iron and folate tablets
Lactating women	Multiple micronutrient tablets or sprinkles OR IF MICRONUTRIENTS ARE NOT AVAILABLE <ul style="list-style-type: none"> • iron and folate tablets • vitamin A
Adolescents and women of childbearing age	One multiple micronutrient tablet (or sprinkles) once a day

There are also special supplementary feeding programmes for malnourished pregnant and lactating women in Somaliland.

More iron may be needed If women are anaemic. They should go to the health centre.

In some places you may be able to give supplements yourself if you are given the supplies. If you are permitted to give these supplements you will be trained in the proper dosage for pregnant and lactating women.

ACTIVITY

As a group, plan a nutrition demonstration for a group of pregnant women.



- a. Try to gather foods that they should eat, at least one from each food group
- b. Plan what you will tell them about the foods
- c. How could you help them find ways of getting foods that are difficult to find?

It is a good idea to look back at Learning Unit 7 to help you.

How can under-nourished pregnant and lactating women be Identified?

Women who are malnourished can be identified using a MUAC strap. The cut-off point is 21cms. If they have a MUAC below 21, they need to go to the health centre. They also need to go if they have obviously lost weight. In some places they may be provided with extra food.

Postnatal care: home visiting

You can help women stay healthy by checking them when you visit the newborn baby at home. You need to make sure that

- she has no fever
- the fluid from her vagina is going brown in the first week, then losing its colour and becoming white
- there is no bad smell from her vagina
- she knows how to wash or dispose of pads or cloths safely
- her breasts are producing milk and getting more comfortable day by day
- she
 - is drinking and eating well
 - is not too depressed or tired
 - is able to rest and not work too hard
 - has an insecticide-treated mosquito net to prevent malaria if necessary
 - knows the danger signs and how to get help if she needs it
 - has the opportunity to consider how she will space her children and obtain contraceptive supplies.

How can CHWs help communities make birth safer?

Communities can make birth safer in several ways. It is important that the leaders and people work together with the CHW and TBA. This is an important role for CHWs. This is called 'birth preparedness.'

Birth preparedness: These are some of the things that can be done:



- Women are encouraged to attend the health centre in pregnancy for antenatal care
- Husbands and mothers-in-law are educated about why this is important
- Community plans are made to help all women get to the health centre for their births
 - Women may be able to stay with family members near the health centre
 - Transport plans are made ahead. The community knows where they can find drivers, reliable vehicles and fuel in an emergency. This plan can be used for any emergency, not just childbearing ones
 - A stretcher is made. It could be stored at the PHU building, leader's or CHW's house
 - The community holds a small fund that the family can borrow if they do not have enough for expenses
 - Everyone knows how to communicate with the health centre
 - Drivers know how to get to the health centre.
- Everyone knows what to do if there are complications to help the woman reach the health centre as quickly as possible. This is called 'complication readiness'.



Complication readiness: this is part of birth preparedness. People in the community know what the main danger signs are. They know how to react to them. The CHW can teach these to people in the community.

The CHW will be the main person to act if there is no TBA. It is very important though that families know to call the CHW. This is why you need to know about the danger signs.

Advocacy for child-spacing: This is an important part of the role of CHWs. When a woman has given birth she can become pregnant again very quickly. Women who have too many pregnancies, too close together are more at risk of dying than women who can space their pregnancies. This gives them time to recover. So health promotion and education around child-spacing can save women's lives.

Danger signs

These danger signs and the actions below are about women. You will learn more about the newborn in the next Learning Unit. The danger signs are also shown on the UNICEF pregnancy card.

The danger signs here are ones that may happen to women when they are pregnant, giving birth, and afterwards in the postnatal period. It is important that people react quickly when they happen. It is not safe to wait and see what will happen. It is not safe to try local remedies first to see if they work. The woman and her baby may die or be badly injured.

When women have any of these signs, you must contact the health centre. You may call an ambulance to come, or arrange urgent transport. Do not wait until daylight if it is night-time.

If people want to pray for help for the woman, then this can happen while the referral and transfer is going ahead.

Pregnancy danger signs

The main danger signs are:

Bleeding from the vagina at any time in pregnancy 	Severe pain or cramps in the belly or stomach 
Severe headache, blurred eyesight, flashing lights in the eyes, pain in the stomach 	Very swollen hands, face and feet 
Fits 	Difficult breathing 
High fever 	

Labour danger signs:

<p>The waters break but labour does not start for 1 day and 1 night. Green or brown waters come from the vagina</p> 	<p>The baby is lying sideways You can see an arm or leg coming out and the baby does not follow</p> 
<p>Labour that lasts more than 1 day and 1 night</p> 	<p>Bleeding before the baby is born</p> 
<p>Fever</p> 	<p>Severe headache, blurred eyesight or flashing lights, fits</p> 
<p>The afterbirth (placenta) does not come away within about one hour of the birth Bleeding that lasts more than one hour Bleeding that is more than 2 cupfuls or soaks two thick rags.</p>	

Care after the birth.

It is important that women are seen by a trained health care worker in the first days and weeks after the birth. CHWs may take this role in Somaliland alongside TBAs as long as they refer women with danger signs. It is best to see women after one day then as often as possible for about two weeks. This helps them to breast feed well. Problems can be noted and help arranged

Normally the woman recovers this way:

- The fluid from the vagina
 - Is bright red for about two days
 - starts to turn brown
 - goes white after about two weeks
 - does not smell unpleasant
 - does not soak through pads or cloths
- The uterus shrinks down gradually
- The woman passes urine as usual
- The breasts

- become tender, swollen and hard for a few days. The woman may have a slight fever.
- then soften and become comfortable.
- produce the first milk for about two days. It is called colostrum.
- produce milk that changes in quantity and nutrients over the weeks and months to provide the infant with everything it needs at the time including water.

COLOSTRUM is the milk designed for newborn babies. It looks thin and watery and the quantity is small. This is plenty for the newborn baby whose stomach is very small. The colostrum is very important to the baby. It contains all the nutrients the newborn needs and helps to protect against infection.

After the birth danger signs

General danger signs

- bleeding that
 - soaks more than 2 thick rags an hour (first day)
 - soaks more than 1 thick pad or rag an hour after the first day
 - is continuous. Even a constant trickle is very dangerous. Women can die.
- fever. This can be a problem with the birth canal or with the breasts
- bad smelling liquid from the vagina
- pain in the belly that is there all the time
- severe headaches and eye problems (blurred sight, flashing lights)
- fits.

Some of these problems can arise two or more weeks after the birth. A woman may become feverish, have bad smelling vaginal discharge and then bleed heavily. This is very dangerous. She needs medical help FAST as she may die.

Some women have infections of the breast. They may have

- fever
- hot swollen breast
- pain in the breast
- a hot red lump.



Low fever and pain that is not severe can be treated with pain medicines. Massaging the breast with hot wet cloths may help. The woman should massage from the outer part of the breast toward the nipple. For severe pain, high fever and lumps, she should go to the Health centre.



At the end of this Learning unit you will find a copy of the UNICEF card given to new mothers. This shows the danger signs for the woman and her baby.

Mental health after the birth

Most women have a short period of feeling unhappy and may cry about three days after the birth. This is normal. Some women feel much more unhappy after the birth than other women and it

continues for longer. These women need urgent help. A few nurses and doctors in Somaliland have received special training. All midwives will have some knowledge of how to help.

- They may cry a lot even after the first week
- They may feel unable to cope with being a mother
- They may not look after themselves or the baby properly
- They may believe they are bad mothers
- They may feel they can not love the baby
- They may have bad thoughts about themselves or their baby. They may imagine things. They may even believe a voice is telling them to harm themselves or their baby. These women need to be referred urgently too. They are mentally ill. They could harm themselves or their babies if left.

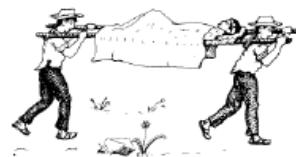
You can remind yourself about mental illnesses in Unit 11.



Referring women and babies

You need to

- communicate with the health centre if you can. Phone if you can or send a message ahead
- arrange transport and instruct the driver
- arrange for a stretcher to be made if needed
- organise a companion for the woman, two if possible
- send a paper record of what has happened and what you have done
- you may need to go with the woman yourself.



What can a CHW do for women while waiting for transport? Providing emergency care

There are some things you can do to help women. It is very important that you do not delay the transport in any way while you do them.

- If the woman has a fit you need to
 - put something soft under her head
 - try to turn her onto her side so she does not choke
- If the woman's placenta is still inside
 - ask her to pass urine
 - ask her to squat. Do NOT pull on the cord
 - ask her to nurse the baby at the breast. If the baby does not suckle, get her to roll her nipples or ask a female relative to do it for her. This helps to make the uterus contract hard.
- If she is bleeding heavily (see danger signs)
 - ask her to pass urine
 - make sure she is lying down
 - ask her to nurse the baby at the breast or roll her nipples if the baby does not suckle

- rub the uterus firmly but gently until it feels hard and the bleeding stops. The uterus should be round and below the belly-button now she has given birth. It may be soft to start with.
- If she has a fever
 - encourage her to drink plenty

Once it is supplied locally you may have a special medicine to use to prevent or stop heavy bleeding. This is called Misoprostol.

On the final page of this Learning unit you will find the UNICEF cards given to pregnant and newly delivered women.

KAADHKA HOOYADA UURKA LEH

Nambar: _____

Taarikh: _____

Magaca Hooyada : _____

Magaca Aabaha : _____

Nooca Guriga : _____

Tuulo/Bulsho : _____

Magaca Umuliso Dhaqameed : _____

Tirada Carrurta : _____ wa'da ilmaha ugu yar : _____

Daada uruka : _____

Taarikhda boooqashada ee xanaanada hooyada uruka leh : _____

Boooqasho 1 _____ Boooqasho 2 _____ Boooqasho 3 _____ Boooqasho 4 _____

Diyargawga dhalimada:

- Lagula tallyay muhiimada ku dhalida xarunta caafimaad?
- Lagula tallyay diyaargawiga dhalimada?

Caadade ugu danbaysay : _____

Waqtiga la filiyi in ay dhusho : _____

Magaca Xarunta Caafimaadka : _____

Calamadaha khatarta Uurka.



Dhig kalimida Ciwraada



Qaraxa dilaaqa xuubka
Dheecanka saxaaxa



Garfir



Madax xannuu aad ah



Qandho ama Xumad



Bog xaniin aad ah



Neefsi degdeg ah ama dhibis

KAADHKA HOOYADA IYO ILMAHA DHALASHADA KA DIB

Nambar: _____

Taarikh: _____

Magaca Hooyada : _____

Magaca Ilmaha : _____

Taarikhda Dhalashada : _____

Gobtta Dhalashada : _____

Magaca : _____

Boqashooyinka umuliso dhaqameedka:

Maalinta boqashada 1: _____

Maalinta boqashada 2: _____

Maalinta boqashada 3: _____

Taarikhda 1aad ee xanaanada umusha ee xarunta: _____

Milaanka dhalashada

kg : _____	goobaab:	< 2kg	2 - 2.5kg	> 2.5kg
	casaan	Huruud	Cagaar	

Hadday matopro yhiin ku diwoongeli mettaanka labood hoos:

kg : _____	goobaab:	< 2kg	2 - 2.5kg	> 2.5kg
	casaan	Huruud	Cagaar	

Hadi cuniga cabirkiso yahay jaale ama guduud, u gudgbi meesha ugu dhaw ee isbitaalka ama qaybta nafaqeda lagu xanaaneeyo (SC)

Booqasho la socod

Ilmaha yar: Maalinta booqashada aad ee la socodka _____
Maalinta booqashada 2aad ee la socodka _____

Calaamadaha khatarta ah: Maalinta _____

Aad isbitaalka kuu dhow hadii aad isku aragtlu calaamadahan.

HOODYADA:



Dhig bax xoog ah



Bog xaniin aad ah



Qaraxa dilaaqa xuubka
Dheecanka saxaaxa



Garfir



Madax xannuu aad ah



Neefsi degdeg ah ama dhibis

ILMAHA:



Fillecoondilisu
yeraataay



Jidhko dhan oo
huruud noqda



Ama qabow aan
caadi ahayn



Joojiyay jiqida naaska



Neef dhibis ama
degdeg dareemaya
kulay

UNIT 16 NEWBORN HEALTH AND ILLNESS

These are the things you should know and be able to do after studying this learning unit:

- Support families with keeping their newborn babies healthy
- Provide information about newborn health and illness
- Teach families about the danger signs for illness
- Support families in deciding when a baby needs to be seen at the health centre
- Help when a newborn baby has problems at birth when there is no TBA
- Visit newborn babies at home to check they are healthy
- Encourage women to breastfeed newborn babies very early and not give other liquids or foods
- Encourage women to breastfeed exclusively to 6 months
- Support home care for newborn babies that are low birth weight or born early.

Why do newborn babies become sick and die?

Many babies are sick or even die after the birth in Somaliland. This is because many people are poor and many women are malnourished or have babies very close together. Many women also do not have the help of a midwife at the birth. It is also because it is often difficult to get to a health worker with a sick baby.

Sometimes babies die for very simple reasons such as

- the baby is not dried and kept warm at birth
- the baby is bathed soon after the birth and gets cold
- the baby is not helped to breastfeed soon after the birth
- the cord is cut with unclean instruments
- the cord is treated with things like animal dung or dirt.



Many people do not know how or when to act if a baby is sick. In the Learning Unit, you will find out how to help families with newborn babies.

Babies are called 'newborn' for the first 6 weeks of their lives.



The CHW role

CHWs have a role in helping families in Somaliland. They will help with newborn babies alongside TBAs if they work in the village. They are the first people many families see when they are worried about a baby. The CHW must be able to recognise danger signs and react in the right way. They must also be able to teach families. CHWs help families to keep their babies healthy.

CHWs have important roles in

- teaching families about keeping babies healthy
- advocacy and mobilising families for immunisation

- health promotion and education especially about early and exclusive breastfeeding.

Keeping babies healthy includes

- immediate care after birth
- breastfeeding
- immunisation after birth
- identifying danger signs and referring babies with them to the health centre
- advising mothers to protect babies from malaria in areas where it is present.

CHWs also need to understand helpful and unhelpful customs used in their communities. This Learning Unit covers all these topics.



How can CHWs help immediately in an emergency after the birth?

TBAs may not always be available for births that take place in the community. There are some important things you can do if you are called to help.

Airway and breathing

Babies that do not breathe within 2 or 3 minutes after the birth will die or their brains may be damaged. You need to act quickly to get the baby to breathe. First make sure there is nothing stopping the baby from breathing. Next you need to breathe for the baby very gently. Your trainer will have shown you how to do this during learning Unit 4 and can remind you now.

Drying and keeping warm

Skin-to-skin contact immediately after the birth, and avoiding bathing the baby are very important.

Babies become cold very quickly when they are wet. Cold babies die very quickly. This is what you should do

- dry the baby
- ask the woman to hold her naked baby against the skin between her breasts to warm it up. This is called 'skin-to-skin contact'
- wrap dry cloths around mother and baby together.



Wrapping the baby against the mother's skin is a very important skill to learn. You can teach it to all your mothers. It is even more important for babies born too early or who are malnourished at birth. This is called the 'kangaroo' position. The kangaroo position

- keeps babies warm
- they breathe better and their heart beats are more steady



- babies learn to suckle very easily
- mothers may produce more milk.

ACTIVITY

With your trainer's help and using a doll, practice the kangaroo position for babies on yourself. Practice also helping your colleagues wrap the baby in the kangaroo position so you are able to assist mothers. If you do not have a doll you could make one from old cloth, or tie a bundle of cloth together, or even use a large plastic bottle.

Immediate and exclusive breast feeding (see below)

Babies should be put to the breast as soon as they are born. If this is not possible, they should suckle within the first hour after birth. Putting babies to the mothers' breasts as soon as they are born does several things. It

- helps to make sure the placenta comes away properly
- helps to stop the bleeding after the birth
- encourages babies to suckle
- encourages the milk supply to start, and to continue for many months.

The first milk gives the baby a lot of energy. It also protects the baby from infection.



It is very important that the baby is given only breast milk. It is dangerous to give other foods or even water. If the baby has other drinks or foods he or she will

- not receive the colostrum. Remember, baby animals usually die if they do not have their mother's colostrum. Human babies are the same. Colostrum gives energy and protects from infection.
- probably get an infection and be ill from germs
- be more likely to get sick as other drinks or foods, even water, damage the intestines
- have less milk from the mother.

If the baby has problems suckling then you can feed slowly by cup. Using a clean cup is much safer than using a bottle and teat. It is easier to clean. You can feed babies born too early this way until they learn to suckle. The woman will learn quickly how to express milk from her breasts.

Here are five important things for you to know.

Early suckling is important for another reason. The mother who does not suckle early will find it more difficult to get her milk supply going. This is because breast milk happens by 'supply and demand'. The more the baby demands the more the mother will supply. This is why most women can feed twins well.

Babies are healthiest when they feed when they want to. This is called 'baby-led' feeding. The milk supply works better.

Babies should continue to breastfeed exclusively even if they are sick or the mother is sick.

There is enough water in breast milk for the hottest day or for a baby with a fever. Babies do not

need extra water.

Babies born to HIV positive mothers are more likely to become infected with HIV if they are given other fluids or foods as well as breast milk. Exclusive breastfeeding is safer than mixing. You will learn more about this later.

Emergency cord care

When a baby is born, the cord between the placenta and the baby goes cold after a few minutes. You can feel that the blood passing through it has stopped. It does not pulsate any more. The cord can now be cut.

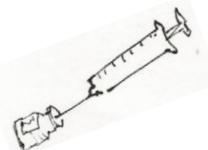
To cut and tie the cord

- The cord should be tied tightly with clean string (boiled if possible) about 2cms. from the umbilicus.
- Cut on the side of the string that is AWAY from the baby's umbilicus (nearest the placenta). You must use a new razor blade or boiled scissors or knife.
- Keep the cord stump clean and dry. It is good to clean daily with soap and clean water until the cord falls off. Chlorhexidine is even better for cleaning if you have it as it prevents infection.



Immunisation

Newborn babies should be immunised against tuberculosis and polio at the health centre. This is best done as soon after the birth as possible. If the oral polio vaccine (OPV) is not given by 2 weeks, then other immunisations have to be delayed. The tuberculosis vaccine (BCG) should be given as soon as possible up to one year of age. The newborn schedule is below.



Newborn immunisation schedule

Age	Vaccine
Birth up to 1 week	BCG
6 weeks	DTP-HepB+Hib1

By 10 weeks the baby should be in the full child immunisation schedule (see Learning unit 10).

The CHW may be asked to assist at these clinics.

Home visiting

Babies that are visited at home by a health worker have a better chance of staying healthy and surviving. The CHW or the TBA can do this.

Visits should be timed in the way shown in the Table.

Timing of home visits to newborn babies

First visit	Soon after birth for babies born at home Soon after return from the health centre for babies born there
Second visit	Day 3
Third visit	Day 7
Babies who are low birth weight should have extra visits on days 2 and 10.	

What should the CHW be doing and checking for during home visits?

These are some of the tasks

- Support early (within one hour of birth) and exclusive breastfeeding
- Check that the newborn is being kept warm
- Cord, umbilicus and skin care and hygiene
- Safe disposal of the bay's faeces
- Teach the importance of hand-washing
- Inform parents about the importance of immunisation and where to go and when
- Encourage parents to go to the health centre or PHU for growth monitoring and illness
- Encourage parents to avoid putting the baby in smoky air
- Assess for danger signs
- Teach danger signs to parents
- Encourage parents to play with newborn babies, talk to and stimulate them
- Promote birth registration if available.



Home visits are ideal for teaching and advising parents. Babies who have received good care from early on are less likely to die later. This is why a visit within 2 days is so important.



If the baby is born early or of low birth-weight, mothers can be supported with their care. This should include Kangaroo mother care and cup feeding if needed. Cup feeding is used to give breast milk the mother has expressed from her breasts. The CHW will need support from her supervisor or manager.



ACTIVITY

1. Learn about expressing breast milk from your trainer.
2. Practice cup feeding with your trainer and learn how to keep the cup clean.
3. Demonstrate how you would teach the two skills to women.

Some babies are born with birth defects. The parents may need a lot of support with these babies. The health centre should advise you on how to help the parents. Then you can continue this in the child's home.

Keeping records and reporting is also important. The CHW needs to record everything she does. She needs to report this regularly to her manager or supervisor.

Illness and danger signs in the newborn

Newborn babies can become ill very quickly. The main problems with newborn babies are

- breathing difficulties
- cold baby
- fever
- poor feeding
- reduced activity
- dehydration
- jaundice



What are the main danger signs in newborn babies?

It is important to teach families about the danger signs so that they can seek help fast. These are the main danger signs. The baby may

- not feed well
- have a chest that pulls in with each breathe (called in-drawing)
- breath extra fast (60 breathes or more in one minute)
- have fever 37.5°C or more
- be cold, 35.4 or less
- have fits or be jerky when disturbed
- have an unusual high-pitched cry
- be unusually pale or be yellow (jaundice, yellow soles of the feet)
- have signs of infection: skin boils, red umbilicus, pus from umbilicus or eyes
- fail to respond to you properly or be unconsciousness.



These babies must be taken to the health centre immediately. It is important to remember to

- make sure the mother goes with the baby. Never separate them
- wrap the baby against the mother's breasts under her clothing for the journey – kangaroo position
- make sure the mother has a companion



- tell the mother to suckle the baby while travelling if he is conscious
- send a referral note saying what the problem is, what you have done, when you did it.

Some groups of babies need special referral to the health centre if they are born at home. These are

- babies of mothers who are known to be HIV positive
- babies born early or smaller than they should be
- babies with serious deformities.

Babies whose mothers are known to be infected with HIV need special treatment as soon as possible. The mother also needs to be informed about the important of exclusive breastfeeding up to 6 months. She should be informed of the importance also of continuing to breastfeed beyond this alongside complementary feeding. You will learn more about this later.

Preparing to go to the health centre or hospital

The mother can do several things while waiting to go to the referral centre and also while travelling. She should do these without delaying the journey.

- Suckle him if he will do so
- Wrap the baby between her breasts to keep warm
- Make sure nothing gets in the way of his breathing.



Other signs of newborn babies being unwell

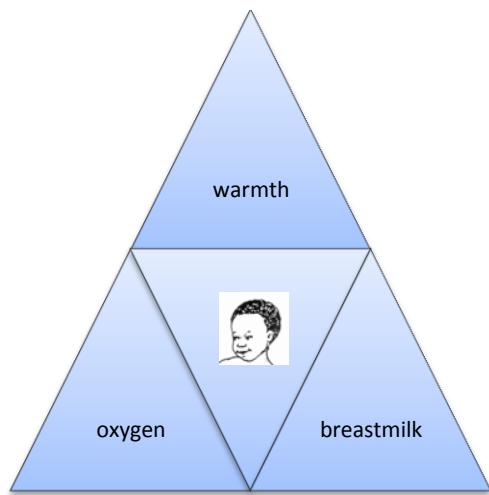
There are other things to look for when babies are not well. These do not all need immediate referral to the health centre. The family may be able to help the child with your support if necessary. The Table shows the problems and what to do.

Problem	What to do
The baby is cold to touch	Put the baby to the breast to suckle Wrap the baby between the mother's breasts against her skin Check for signs of infection (see danger signs) If the baby does not warm up, send to the health centre
The baby is hot to touch	Remove some of the wrapping if there is a lot Sponge him with tepid water Check for infection If the baby stays hot, send to the health centre
Red skin around the umbilicus	Send the baby to the health centre. He may need antibiotics
The baby does not feed well	Check that the mother holds the baby with his belly against hers so his chin is level with the nipple Check the mother is giving breastmilk only. Other things are dangerous and may stop him suckling
The eyes are sore and look sticky	Bathe them with a clean dressing or cloth and cooled boiled water Take to the health centre for treatment if they stay sticky.

Why should cold babies be fed?

There is a reason why cold babies should be fed. This is because there is a link between how warm he is, how much food he takes, and how well he breathes. A well-fed baby will stay warmer and will

get good oxygen. A baby that is not fed properly is more likely to get cold. If he is cold, he needs more food and more oxygen. The diagram shows this.



Traditions and practices

Around the world there are many traditions and practices that affect newborns. These may be to do with feeding and with daily care. Simple things like how soon babies are bathed after birth make a big difference to their survival. Babies bathed in the first day or so often get cold and may die.

Babies who are kept very close to the mother stay warmer and breast feed better. The mother may learn more quickly how her baby behaves. She may notice more quickly if there is something wrong such as a fever, abnormal breathing, or if the baby becomes less active. Babies born early or small may even breathe better when in the kangaroo position.

ACTIVITY

1. Talk together about helpful and unhelpful customs you know about in Somaliland.
2. How do you think you could help families to care for their babies in the best ways?

Helping a mother to breastfeed her baby

Most babies feed well from birth. If they do not feed well there are some ways you can help the mother.



How often is the mother offering the breast to her baby? Very young babies need to suckle about 8 times a day. The best way is to let the baby feed whenever it wants to. Babies have very small stomachs. They are about the size of the end of a man's thumb so they cannot take much at once.

The mother's first milk is very rich and good for the baby even though it looks watery in appearance and there is not much of it. This is called colostrum. Colostrum is very important for helping babies to fight off infection. It is very important that babies are allowed to take the colostrum.

The amount a woman produces is just right for her baby.

As the baby gets older, the milk changes constantly as the baby's needs change. The quantity will be right too. It is important that the baby suckles often to encourage the woman's body to provide the milk. The more the baby suckles, the more she will produce.

Babies are best satisfied if they can feed at one breast until they drop off it. Then they can feed at the other if they want. The baby then gets the richest milk and best quantity. If other substances are given to the baby, even water, he will feed less well at the breast and the milk supply will be less good.

Helping a mother to feed her baby

If the baby is not feeding well you can check the way he feeds.

- The woman should hold him so that he faces her breast.
- He should open his mouth wide when he feels the nipple against his cheek.
- He should turn to the nipple and take the whole of the brown area of the nipple into his mouth. He should not be pulling on the end of the nipple.



When feeding is more difficult

Swollen and painful breasts

All women have swollen breasts for the first 2 or 3 days after the birth. If the baby finds feeding difficult she could:

- massage the breasts to help the milk flow. She should stroke the breasts toward the nipple.
- take some milk from the breasts by hand. This is called 'expressing' milk. You learned about this in an earlier Activity. When they are softer the baby can feed more easily.

Fever

Sometimes women have a high fever and a hard red very painful area on the breast. She should continue to feed from both breasts as it is very important to keep the milk flowing. She will need to be referred for treatment if it does not improve in 6 hours.

Sore or cracked nipples

Sometimes women have sore or cracked nipples. This is usually because the baby has not fixed on well. The woman should continue feeding but check the baby's position. If she stops feeding her breasts will become very swollen and painful. This makes it harder for the baby to latch on.

Using breastmilk replacement foods / formula foods

Some women do not feed their babies at the breast, or mix this with replacement foods. There are many reasons women give for not breastfeeding. Babies are at serious risk of diarrhoeal infections

and difficult breathing illnesses. They may also be malnourished if the feeds are not made properly or substitutes fail to provide the right nutrients. If a woman is to feed substitutes there are some vital points she and the family must understand:

- Only use commercially prepared formula
- These are very expensive. **Only do this if you can afford to buy it for at least six months**
- Always buy enough to make sure the feeds are made to the correct strength
- Follow the instructions on the tin. They should be written in Somali. This is important so that the feed is made correctly
 - Right strength
 - Right quantity
- Do not add extra salt or sugar. This is very dangerous
- Feeds must only be made up with cooled boiled water
- Only make up one feed at a time just before the baby needs it
- Use only equipment that can be cleaned properly with soap and water and be sterilised by boiling for 10 minutes
- Remember the need to buy fuel to boil feeding equipment to sterilise it. **This cost must be remembered.**



Remember that babies fed on substitutes for breastmilk are at much higher risk of diarrhoeal disease. They are also at higher risk of chest and other infections. This is so even for parents who have plenty of money to buy substitutes and fuel for sterilisation. Babies are also more likely to be malnourished when parents can not afford to buy the expensive substitutes.



Whatever the woman's reasons are for not breastfeeding, or giving other foods, make sure she knows the dangers. **This is one of the most important duties you have as a CHW.**

Protecting the baby born to a mother who has HIV

Preventing mother to child transmission of HIV is often called PMTCT (see Learning unit 12).

Babies whose mothers are known to be infected with HIV need special treatment as soon as possible. If not born at the health centre, the mother and baby should be referred there. Drugs (ARVs) are usually given to help prevent infection with HIV. These are best started in pregnancy. The baby can be infected during labour.

To prevent MTCT, the mother also needs to be informed about the importance of

- exclusive breastfeeding up to 6 months
- continuing to breastfeed beyond this alongside complementary feeding.

There is a risk of the baby becoming infected through breastmilk. But it is very important for her and her husband to understand that the risks of feeding the baby with substitutes for breastmilk are

much greater than are the risks of exclusive breastfeeding. Many more babies become sick or die when fed on substitutes. They are much more likely to have

- diarrhoeal diseases
- respiratory / difficult breathing diseases
- ear infections.

In countries like Somaliland, more babies of HIV positive mothers get sick and die of these diseases than they do of HIV.

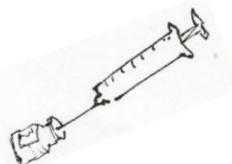


THE RISKS OF FEEDING THE BABY OF AN HIV POSITIVE MOTHER WITH SUBSTITUTES FOR BREASTMILK ARE MUCH GREATER THAN ARE THE RISKS OF EXCLUSIVE BREASTFEEDING.

Finally: key messages

Here are some key messages about your role as a CHW and how to help newborns stay healthy:

- Keeping the newborn warm and dry
- Exclusive breastfeeding immediately after birth and for six months, continuing then alongside complementary foods
- Promoting immunisation and explaining why it is important.



UNIT 17 MOTHER AND BABY CASE STUDY

These are the things you should know and be able to do after studying this learning unit:

1. Understand the issues that make a difference to childbearing women and their babies
2. Provide support and information to women, families and communities about childbearing and about newborn care
3. Gain the trust of families where women are pregnant or newly delivered, and of women themselves
4. Assess the needs of women and their babies
5. Plan ways of helping them to meet these needs
6. Prepare a simple written report in Somali
7. Present your report to an audience.

This Learning unit is just like Unit 14. A mother and baby case study is a piece of work that asks you to find out things about one mother and baby and think about their needs. You can think about their lives and how they live. You can think about how this affects their health and what might help them. You collect the information and put it together to show your trainer. You can write about them or make pictures of different issues.

You will probably carry out most of these activities in your own community. If this is not possible, you may be able to do the case study with a woman who lives near the training centre. First you will spend time in class preparing yourself with the help of other trainees and your trainer.

It is best if you are able to contact your trainer to help you if you need it and give you guidance while you do the case study. If the trainer is too far away you may be able to use a supervisor from the nearest health centre. Your trainer will help you organise this.

It is important that you look back over the Learning Units you have already studied. These will help you to prepare well for this.

You will also need to think about what you learned when doing the Family case study in Learning Unit 14. You could consider what went well and what did not. You could then decide how to make this one even better.

Some special things you will need to think about are

- You need to focus on one woman and her newborn baby
- You need to plan carefully with your trainer who you will use
 - There may not be many women who are pregnant or newly delivered
 - The best is to find a woman who is about to give birth, then continue the case study after her birth
 - If this is not possible, choose a woman who has given birth in the last month.

You need to think about many things e.g.

- the woman's family situation
- her living conditions
- how many children she already has and what happened to her with those babies
- the support people give her
- her age
- her general health
- her nutrition level, supplements she receives
- immunisation
- preparation for birth: how well prepared for the birth and emergencies the family were (or are)
- the care she is receiving
 - *pregnancy*: Does she attend antenatal clinic? What happens there? Was she well during her pregnancy? What activities did she do e.g. farming work, looking after the house?
 - *the birth*: Did she give birth at the health centre or at home? Who helped her? What happened? If she is still pregnant what are her plans? How does she plan to get to the health centre?
 - *postnatal*: Has she had home visits? If you carried out these visits, what did you find? What advice did you give? What has her health been like? What has happened to the newborn? What about feeding? Is the care the family gives to the baby good?
- special needs e.g. does she have any disabilities that make life more difficult, is she on her own, is she very young?

As well as thinking about these issues, you need to consider whether she could have done things differently. If she has not yet given birth, could her plans be improved? What are her needs and how could you help her meet them?

You should also think about how you can present your report. You need to have a report to give to your trainer. You also need to present it to an audience. This can be your the group of trainees.

A final point. It is important that you do not use the real name of the woman, her baby or her family members. You should also not use real name of the village. This is so that their privacy is guarded. You can invent new names if you wish.

UNIT 18 CHILD SPACING

These are the things you should know and be able to do after studying this learning unit:

- Promote child spacing in your community with both men and women
- Provide information about why child spacing is important
- Understand what people believe about child spacing and how they act
- Provide information about child spacing methods
- Discuss current child-spacing practices and norms with communities
- Mobilise men and women to use services that are available
- Provide services that CHWs are approved to give
- Manage commodities that are stocked by CHWs
- Keep records and report activities
- Assist at child-spacing clinics e.g. at the health centre or outreach clinic.

The CHW role

The CHW role in Somaliland is that you are

- an advocate for child-spacing
- an educator
- a communication facilitator
- an advisor
- someone who refers those who need more advice to the health centre
- a distributor of approved commodities.



Confidentiality

It is very important that you always remember to keep what people say to you confidential. They may tell you things no-one else knows. It may be very important to them that what they say stays secret. You must also make sure they can see you in private and that you preserve their dignity.

This applies too if you help at the health centre or other clinic. You must not even tell people in your community that a woman has attended the child-spacing clinic.

ACTIVITY

- How can you make sure there is privacy for your clients when they talk to you?
- Who could advise you if you meet difficulties when discussing child-spacing in the community or you can not answer some questions?



Child spacing is a topic that raises many different issues and ideas. These may be about child growth and development, about women's health or family well-being, about how appropriate child-spacing methods are in the Somali context. People in Somaliland have been aware of this for centuries and there is a long history of using child-spacing methods appropriate to Islam and to Somali culture.

It is important to be sensitive to how people feel about discussing child-spacing whether it is individually, as couples or in groups. It is helpful if you are able to encourage the community to discuss the issues among themselves and in group settings. Community dialogues can help people to be willing to think about issues where strong and different views may arise. You learned about this in Learning Unit 7.

What are the local expectations and ideas about child-spacing?

Child-spacing ideas are influenced by both Islam and by Somali tradition. Sometimes people can find it difficult to know what is Islam and what is just tradition, the way it has always been done. We look here at both traditional Somali ideas and Islamic principles.

Traditional Somali ways of spacing children

Most cultures and groups of people have their own ways of spacing children. They may do nothing to space children, they may use local methods, they may avoid intercourse for some time, they may use modern methods. It is important that you understand well what the people in your community may think and do.

ACTIVITIES

1. If you feel able, you could ask people in your community what happens there. This may be easier if you ask a group of women alone, or men alone. You can also ask what they think others do. This is easier than asking what they do themselves.
2. Discuss different beliefs and ideas with other trainees in your group. Do you think they are helpful or harmful? How could you try to change harmful or unhelpful ideas and practices?
3. When can couples start to have sexual relations again after a birth?
4. What happens locally about child-spacing following birth? You will learn more about this later.
5. How have things changed in your area in recent years? If more modern methods are available. What difference does this make to the use of traditional methods?

The Islamic view of child-spacing

In Learning unit 2 you had the opportunity to consider ethical issues and Islamic principles about health care. These are important to help you think about child-spacing.

ACTIVITIES

Think back to your own knowledge of Islam, the fundamental goals and the principles. Check back also on Learning unit 2. Discuss in your groups what the principles and goals of Islam say that help you to think about child-spacing.

You might talk about some of these issues and how they affect child spacing:

- The fundamental rights of individuals and communities
- The goal of family life and reproduction, and the importance of marriage
- The need for consent of both man and wife for child-spacing
- The need for a two-year period without pregnancy so women can breast-feed
- The sanctity of human life and its protection and preservation
- The emphasis on removing harm where possible
- The principles that
 - necessity overrides prohibition, and that
 - the lesser of two harms should be accepted if neither can be avoided
- The need for you as a CHW to work in the best interest of your patients
- The need to respect your own role and boundaries and refer people when needed.

Why is child-spacing important in Somaliland?

Child-spacing is important in different ways. It is important to women and babies, to older children, to the whole family, the community and the country.

The effect on women of many pregnancies and short gaps

Every pregnancy has an impact on women's health. Being pregnant, giving birth and raising an infant take a lot of energy from women. Women can nourish an unborn child and produce breast-milk even if badly-fed themselves. But every pregnancy can make the woman's body and blood weaker. If she has a good space between pregnancies, she has the time to restore her energy, her blood and her health. Her next baby is also more likely to be healthy. At least two years is often advised as a good gap between pregnancies.



Women who give birth frequently are unable to breastfeed their babies for long. This has a big impact on babies' health. The Quran (2:23) clearly states that a distance between children should be observed where mothers are advised to breast feed for two years and not become pregnant.

Giving birth very frequently will put a woman's life at risk as well as her and her baby's health. There are other times when women's health is more likely to be affected by pregnancy. These are

- *young age*
 - Girls younger than 17 years more often die in childbirth and so do their babies. The girls' bodies are not fully grown. Giving birth after 19 or 20 gives the young woman time to develop fully. Young women may marry very early in Somaliland, even around puberty and be pregnant within a year. These very young women more often suffer from damage. They are at more risk of long or obstructed labour especially if they have not had good food in childhood or as adolescents. When a woman has obstructed labour, the baby becomes stuck in the pelvis and cannot

move to be born. Obstructed labour can lead to brain damage to the baby or stillbirth. It can lead to the woman developing a fistula. A fistula is a hole in the vagina that allows constant leakage of urine or faeces or both.

- *older age*
 - Women who are older are in more danger especially if they have other health problems or illnesses. The safest years for giving birth are from about 20. The pregnancy and birth may be unsafe for the baby too. Risks increase after about 35 years of age for the baby. As the woman nears the menopause, the risks to her are greater, e.g. from bleeding after the birth. However many women still have babies safely when older. A lot depends on how well-nourished and healthy they are. How safe they are also depends on how many pregnancies they have had. Older women of course tend to have been pregnant more often.
- *many pregnancies*
 - It is not just when having babies very close together that women may have problems. The more babies women have, the more likely it is that their bodies do not work so well. They more often bleed heavily after the birth, and may die. The baby may be in a wrong position in the uterus so that the woman can not give birth.

The effect on families

It is well-known that families suffer badly if the mother dies or even if she is often unwell. Most newborn babies die soon after if the mother dies because of childbirth. Older babies and children usually become less healthy and may die too if the mother dies.

Families are healthier and better educated when the parents space their children. If couples space children they can have more time for each other and children can have enough care. The children benefit because

- there are more resources available to feed, clothe and house children properly
- they are more likely to have a good education
- they will feel more cared for.

The effect on the community and country

Healthy women and healthy families are important resources for the local community and for Somaliland. If they are sick they use up health system resources. They are less able to carry out their work. The community and country can be more successful if women and children remain healthy.

Promoting child-spacing and educating people

Health promotion and education for child-spacing is important. People often hold wrong information about child-spacing. They may have heard bad stories or have ideas that are not helpful or correct.

Child-spacing after a birth

A good time to promote child-spacing is to talk to women when you see them after a birth. Some women may want to talk about it while they are still pregnant.



Involving men and informing the community



It is even better if you can talk to women's husbands or the whole community as well although this may not be acceptable in your community. It is important also for women to talk to their husbands. This is difficult to do if husbands do not understand. Other family members and friends may influence them especially if the couple is young. It is better if everyone has the same correct information in a community.

The dangers of pregnancy when very young

It is very important for you to talk about this in your communities to help prevent women becoming pregnant when very young. You started to learn about this earlier and there is more here.

One of the most important things you can do is to inform people of the risks of marrying and becoming pregnant early and the best way of helping to achieve a healthy life.

You can advise families and young people that it is better to delay marrying until the woman is 18 or 19, older if possible. You can advise them that this gives her the chance to grow a strong body before becoming pregnant and for her pelvis to grow large enough for the baby to be born safely. Delaying marriage also helps young women to be better educated. This is helpful for both herself, her family and the community.

There are many ways you can work on advocacy, health promotion and education, and community mobilisation. You learned about these in Units 6 and 7. Remember what was said before about dealing with topics about which people's views may differ.

ACTIVITY

1. In your groups, talk about what happens in your communities.
2. How could you help people to think about these issues without causing difficulties?
3. How could you advise a woman who says that her husband does not permit child spacing or refuses to talk about it?

Helping couples make decisions about child-spacing

Making decisions about child-spacing is something that can be difficult for couples to do. They may not have enough information to make decisions. They may have incorrect ideas. They may have many fears. For example men may fear that their wives will be harmed by child-spacing methods. They need information and to be reassured.



It can be difficult because couples may not often talk about things like sex and child-spacing. They may not normally talk to each other, let alone to health workers. There may be other family members who try to influence them. They may worry about what others will say. Many people believe it is their duty to have large families.

Giving information will make it much easier to decide what to do. Couples need to balance the benefits of large families against the health issues for women and children. Giving couples the chance to talk with someone outside the family may also help. This person may be you. It

may need to be a nurse at the health centre who does not know them well. If a woman wants to delay her next pregnancy and her husband refuses to use child-spacing, you may need to help her decide what to do next. Keeping secret what the woman and her husband say is very important.

As a CHW you will understand that there are barriers to spacing children. This activity will help you think about these and consider ways of helping people overcome the barriers.

ACTIVITY

In your group, talk together about the barriers you think exist to using child spacing methods. To start you off, here are some ideas. You will think of others too.

- lack of information
- limited access to commodities
- fear of divorce
- that husbands may take other wives if women do not become pregnant frequently
- the need to increase members of the clan
- different understandings of Islamic principles.



What methods can men and women use to space the births of their children?

It is important to explain to people that women and their husbands that a woman can become pregnant again very soon after giving birth. This can happen even if she has not had a bleed or period. Women produce an egg before they have their first period following the birth. The only ways of delaying pregnancy are for couples to

- use the 'lactation amenorrhea' method (see below). This means breastfeeding the infant exclusively and frequently through day and night. This is not as sure a method as the methods below but is acceptable in Somaliland.
- abstain from sexual intercourse
- use a modern child-spacing method.

Child-spacing methods can be divided into four main types. Not all of them are used commonly in Somaliland.

The four main types of method are

- natural methods
- barrier methods
- hormone methods
- permanent methods.

How do child spacing methods work?

Right now it is important that you look back at Unit 3. You can then remind yourself of how the reproductive systems of men and women work. You need to think about how the egg and sperm meet, and how pregnancy starts.

CHWs need some understanding of how methods work. Women will be given advice and supplies at child-spacing clinics if they want them but may ask questions of their CHW too. They can also buy commodities (pills and condoms) from some pharmacies.

It is very important that CHWs can advise about exclusive breastfeeding as a natural method of child spacing.

Natural methods

There are several common methods that are called 'natural'. They are generally less good at delaying pregnancy than others but can still be very useful. They do not use commodities of any sort and have no side effects. We look at three here, exclusive breastfeeding, withdrawal and fertility awareness.

Exclusive breastfeeding:

When a woman is fully breastfeeding she is less likely to become pregnant than when she is not feeding fully. The hormones in her body stop her producing an egg. Her monthly bleeding (periods) do not happen. This is called amenorrhea. The method is often called the 'Lactational Amenorrhea Method' or 'LAM'. The woman needs to



- breastfeed exclusively. Anything else (even water) given to the baby can reduce how much he feeds
- breastfeed frequently day and night. The baby needs to feed at least every six hours.

Feeding less often or less well causes the hormone levels in the woman's body to drop. An egg can then be released. This egg can be fertilised so she can become pregnant.

Although pregnancy can happen despite using the method it has advantages

- there are no side-effects
- it is completely natural and acceptable to most people in Somaliland.

It is important to use other child spacing methods as well if

- the monthly bleeds start again
- the baby
 - is more than 6 months old

- is given anything other than breastmilk
- sleeps longer than 6 hours
- is left with someone else while the mother goes away for more than 6 hours. (Unless she can express milk from her breasts while away).



Withdrawal

This is a very old and traditional method of spacing children. It is acceptable to most people in Somaliland and within Islam. While it can work, it is often not done properly. For example if the man does not withdraw early enough the woman can then become pregnant. It is very important that both man and woman are willing and able to follow the practice properly. Some women can still become pregnant even if they think they use proper methods.

Fertility awareness

The woman learns when her body is most fertile. She learns to recognise the signs that tell her she is fertile and ready to start a pregnancy. She learns when she and her husband need to avoid sexual intercourse. Women and their husbands need to be careful to follow special instructions very carefully. It is not often taught in Somaliland.

Barrier methods

Barrier methods work by making sure the sperm and egg do not meet. If eggs and sperm do not meet, a pregnancy can not happen. The main barrier method available in some places in Somaliland is the condom used by men.

It is very important that condoms are used correctly otherwise the woman may still become pregnant. Your trainer will teach you the skills you need to pass on to your clients.

Condoms make it less likely for women to be infected with STIs and HIV as well as becoming pregnant. This is called 'dual protection'. There is more about this later.

Hormone child-spacing methods

Oral contraceptive pills

Oral contraceptive pills are good at preventing pregnancy until the couple is ready for it. They contain hormones that prevent the woman producing eggs while she is taking them. They also make her body less ready to become pregnant. They must be taken every day at the same time or she may become pregnant before she is ready. She must take the pill even if she does not have sex.



Once the woman stops taking these pills, she can become pregnant as easily as if she had not taken them.

How to take pills



- Start at the beginning of the menstrual cycle
- Take them every day at the same time, evening is best.

Some women have side effects at first. You should warn women of side-effects to watch for. These are shown in the drawing. Women who have side effects may need to be referred to the child-spacing clinic so they can be given different pills.



These effects usually get better after a few months. If they do not get better, the woman can try a different child spacing method

Not all women can use hormone pills. Do not give pills to women who have other health problems. You should refer the woman to the child-spacing clinic.

If a woman is breastfeeding she can take the mini-pill.

There are some ways the pills can stop working. The ways they can stop working are

- if the woman forgets to take them (see below)
- taking antibiotics
- vomiting less than three hours after taking the pill
- having severe diarrhoea
- taking a pill late (3 hours for mini-pill, 12 hours for combined pill).

If the woman forgets to take a pill, she should

- take it as soon as she remembers
- keep taking them as usual after that
- use other protection against pregnancy for 7 days (e.g. abstinence or condom).

If she has diarrhoea or vomiting, or is on antibiotics, she should

- keep taking the pills or take them again as soon as she can
- use another method until 7 days after she has
 - stopped diarrhoea or vomiting
 - finished the antibiotics.

Types of pill

There are two types of pill you may have in your kit. These are the mini-pill and the combined pill. They are shown in the Table.

Types of pills

Mini-pill such as Levonorgestrel 30 microgram tablet	Combined pill such as Ethinylestradiol 30 microgram. + Levonorgestrel 150 microgram
The mini-pill has one type of hormone	The combined pill has two types of hormone
	It gives better protection against pregnancy than the mini-pill.
It can be used by lactating women and those who can not take the combined pill.	Can be used by breast feeding women but it may reduce the milk supply
It can be started straight after childbirth.	She can start 4 weeks after childbirth.
She is not protected from pregnancy if she takes it more than 3 hours late.	She is not protected from pregnancy if she takes it more than 12 hours late.
	The combined pill may reduce the amount of milk a mother produces.
Women are not protected from pregnancy in the first 7 days of taking pills There are 28 pills in each pack. These last 4 weeks. The woman just keeps taking them all the time.	

Injections and implants

The woman is given a special injection of hormones, or hormones are placed under her skin and released slowly (an implant). Pregnancy should not happen for several months. The hormone injection most often available in Somaliland must be renewed every three months. After that, pregnancy may occur.



There are some side-effects but the methods are good at delaying pregnancy until the woman is ready. The nurse who gives the injection will explain about possible side-effects when she sees the woman.

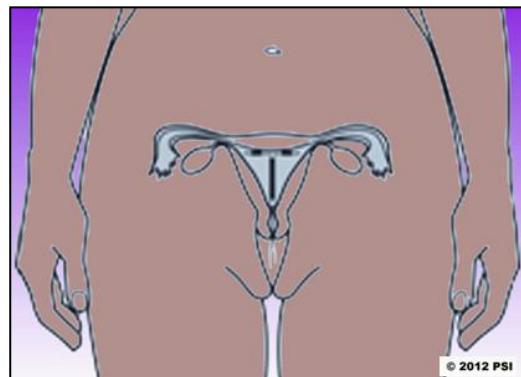
With an injection, there is nothing to show that the woman has received it.

Hormone injections are available at special pharmacies in Somaliland.



Intra-uterine device (IUD)

IUDs are very small (about 3.5cms. long), made of plastic and are inserted into the women's uterus by a nurse or doctor. The woman does not become pregnant while she has the IUD. It can stay in place for several years. They have some side-effects and women who have some health conditions can not use them. The IUD ensures the woman does not get pregnant until she has it removed by a nurse.



Permanent methods

Permanent methods prevent pregnancy from starting ever again. These methods need an operation to prevent the woman's egg from reaching her uterus. This method is not available in Somaliland except for medical reasons. Men may also have a small operation to prevent them from producing sperm but it is not normally available in Somaliland.

Some other points you need to know

Dual protection against pregnancy, STIs and HIV

Condoms are the only method that will give dual protection against pregnancy, STIs and HIV.

Emergency contraception

This is only available in a few places in Somaliland as part of the emergency treatment for rape (Post-exposure prophylaxis or PEP).

Abortion in Somaliland

Abortion is sometimes called 'termination of pregnancy'. The pregnancy is ended by a doctor during the first few months. This is only carried out in Somaliland if the woman's life is in danger. It may be done according to the Islamic principle that the woman's life must come first if it is a choice between saving her or her unborn child. Her life must not be endangered in order to save the child.

ACTIVITY

Imagine people in your community have requested information about child spacing.

1. What would you talk about?
2. How would you find out what people want to know?
3. How would you provide information?
4. Prepare a short session providing information about exclusive breastfeeding as a child-spacing method.

What services are available in Somaliland?

The Ministry of Health provides some child-spacing services in Somaliland. Others are provided by international and national NGOs with the approval of the MoH. Some are provided by private organisations. You need to know what is available in your own area. The nearest centre is probably the local health centre. This way you will be able to give the information to people in your community.

ACTIVITY

1. Talk with each other and your trainer to find out what services are provided.
2. Find out how women and men can get access to the services and commodities they need.
3. If services and commodities have to be paid for, find out what the cost is.
4. Attend a child-spacing clinic so that you can find out what happens there.
5. Decide what information you could give to people in your community about what happens in the child spacing clinic.



The CHW role in stocking and supplying child-spacing commodities

Your role may be different depending where you work. You may be asked to stock and supply condoms. Here are some points to remember:

- They must be stored somewhere that is
 - clean and dry
 - cool and out of the sun.
- Do not supply to clients any packets that have been opened.
- You will be expected to keep records as you do for all commodities and medicines.
- Records must be secure so others can not read them.

The CHW role in using oral contraceptive pills

It is not normally your role as a CHW to give out oral contraceptive pills. You may be allowed to do this if you work in a very remote area where women can not get to a Health Centre. If it is decided that you should do this, you will have some extra training given you. You need to

- know how to examine women to check that they are healthy enough
- decide what to give, how much and how often
- decide what to tell the woman
- understand what to watch for. There may be side-effects.

know how to do regular check-ups.