

# Unit C

# Animal Health

## Lesson 1

## Managing Diseases and Parasites

# Terms

- Biologics
- Contagious
- External parasites
- Internal parasites
- Intradermal
- Intramuscular
- Intrapерitoneal
- Intraruminal
- Intravenous
- Natural immunity
- Non-contagious
- Sanitation
- Species immunity
- Subcutaneous

# Terms

- Vaccinating
- Ventilation
- Zoonoses



# How do I know if my animal is sick or not?

- I. Being able to recognize when your animals need medical attention is important to the business.
  - Many diseases and parasites are treatable if caught early enough.
  - You may also keep the sickness from spreading if you act quickly at the first signs.
  - You should make observing your animals a part of your daily routine.

# How do I know if my animal is sick or not?

## A. Signs of good health include:

1. Contented animals look free from all anxiety.
- Some animals have specific signs to look for and others will take a trained eye to recognize.
  - Sheep will stay quiet and cattle will chew their cud.



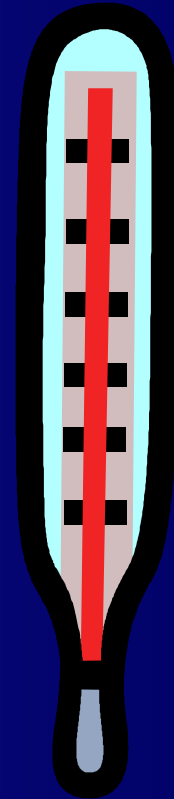
# How do I know if my animal is sick or not?

2. Normal feces and urine should be seen.
  - This will vary with diet and type of species, but anything unusual for your particular animal should be noted.



# How do I know if my animal is sick or not?

3. Body temperature, respiration, and pulse rate should be monitored because unusual highs and lows can be symptoms.
4. Alertness can be judged by checking if an animal perks its ears when you draw near.
5. The skin and coat of most animals should be oily and elastic like.





# How do I know if my animal is sick or not?

6. The animal's eyes should be bright and their membranes pinkish.
7. One of the easiest things to notice is when an animal goes off feed.
  - All healthy animals should eat aggressively when fed and ruminants should be seen chewing their cud.





# How do I know if my animal is sick or not?

## B. Signs of poor health include:

1. When animals stray off by themselves and hold their head down it is a good sign that they are not well.
2. Lower production of milk is also not good.



# How do I know if my animal is sick or not?

- 3. A rough-looking dull hair coat or skin that stays up when pinched are signs of poor health.
- 4. Discolored feces or urine can be obvious signs of trouble.



# How do I know if my animal is sick or not?

- 5. Glassy eyes are sometimes a sign of poor health.
- 6. An animal that is difficult to get up and walks slowly may also indicate that something is wrong.



# NORMAL VITAL SIGNS OF FARM ANIMALS

| Animal  | Normal Rectal Temperature |             | Normal Pulse Rate | Normal Respiration Rate |
|---------|---------------------------|-------------|-------------------|-------------------------|
|         | Average                   | Range       |                   |                         |
|         | (degrees F)               | (degrees F) | (rate/min.)       | (rate/min.)             |
| Cattle  | 101.5                     | 100.4–102.8 | 60–70             | 10–30                   |
| Sheep   | 102.3                     | 100.9–103.8 | 70–80             | 12–20                   |
| Goats   | 103.8                     | 101.7–105.3 | 70–80             | 12–20                   |
|         |                           |             |                   |                         |
| Horses  | 100.5                     | 99.0–100.8  | 32–44             | 8–16                    |
| Poultry | 106.0                     | 105.0–107.0 | 200–400           | 15–36                   |

# What diseases can I give to or get from my animals?

- II. Many diseases are passed between animals and humans.
  - They are usually transferred by way of meat, milk, or eggs.
  - Some are transferred when close contact is made and others are due to insects carrying them from one to another.



# What diseases can I give to or get from my animals?

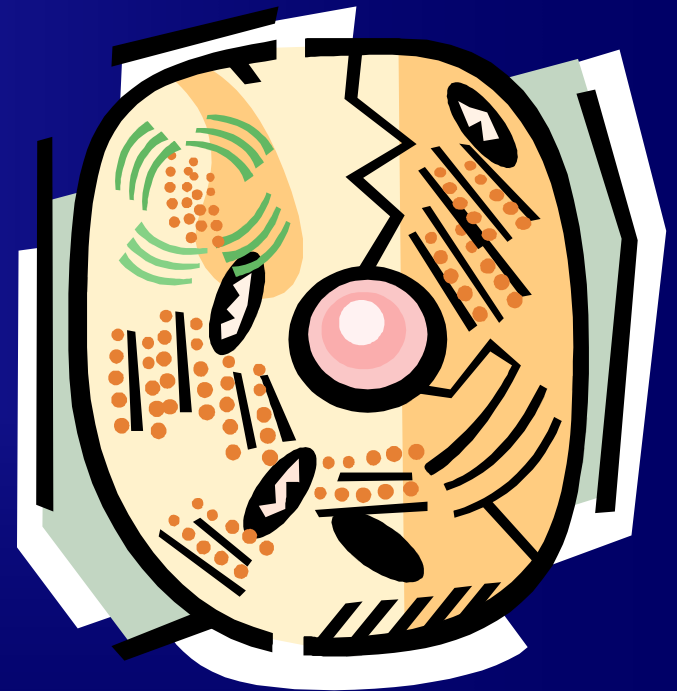
**A. Zoonoses** are diseases that animals can transmit to humans.

Some of the diseases include:

1. Tuberculosis
2. Anthrax
3. Rabies
4. Brucellosis (Bangs)
5. Nine Mile Fever (Q Fever)
6. Parasites like Ringworm

# What diseases can I give to or get from my animals?

- B. Three kinds of diseases are transferred from humans to animals.
- Protozoa, bacterial, and viral infections are the three.





# What diseases can I give to or get from my animals?

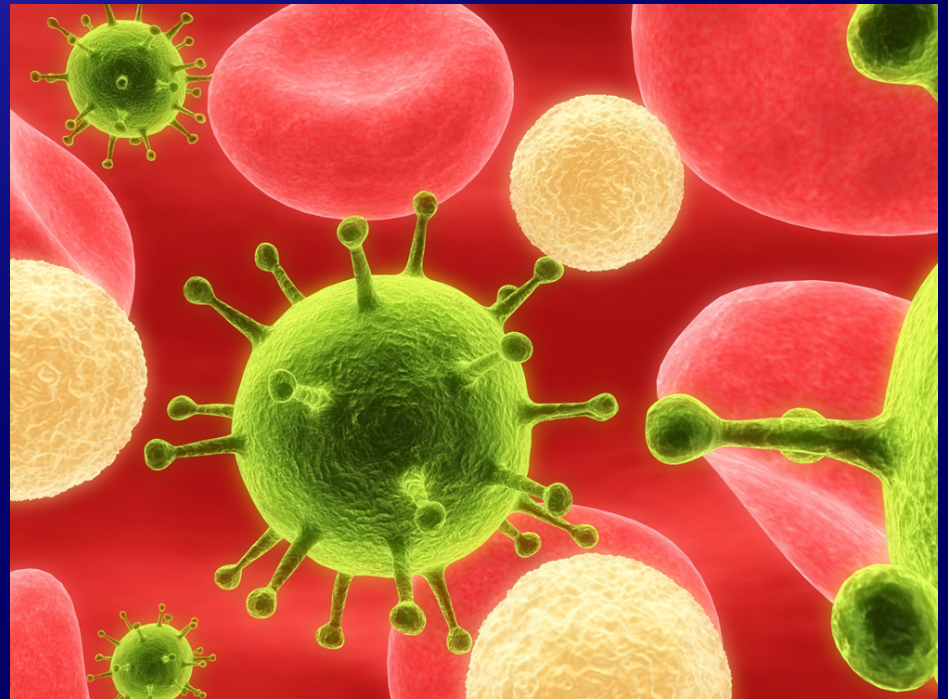
- Protozoa infections like the animal parasite that causes amoebic dysentery can be shared.
- Bacterial infections like the streptococcus that causes scarlet fever in humans can be passed to an animal and then produce large problems when humans consume milk or other products.

# What diseases can I give to or get from my animals?

- Viral infections are being researched closely for more shared ailments between humans and animals but we know that chimps can get common colds and dogs can get the mumps virus.

# What are common animal parasites and diseases?

- III. There are some common diseases and parasites with specific symptoms.



# What are common animal parasites and diseases?

- A. Diseases can be contagious or non-contagious.
  - **Contagious** diseases are diseases that can be passed from one animal to another.
  - **Non-contagious** diseases are diseases that cannot be transferred from one animal to another.

# What are common animal parasites and diseases?

- It is important to determine what kind the disease is because contagious animals need to be separated from the other animals to prevent spreading the disease.
- Even if you think the disease is non-contagious, it is still beneficial to separate the sick animal from the others just in case.
- Contagious diseases are usually caused by bacteria or viruses. They spread from animal to animal by simple contact or shared facilities.

# What are common animal parasites and diseases?

- Diseases that are not contagious, like scurvy, are sometimes caused by a vitamin or mineral deficiency.
- They may also be caused by ingestion of metal, poisonous plants or animals, or open wounds the animal may have.

# What are common animal parasites and diseases?

General symptoms specific to disease include:

1. Animal losing fetus
2. Shaking
3. Coughing
4. Poor growth or decrease in production
5. Rough coat



# What are common animal parasites and diseases?

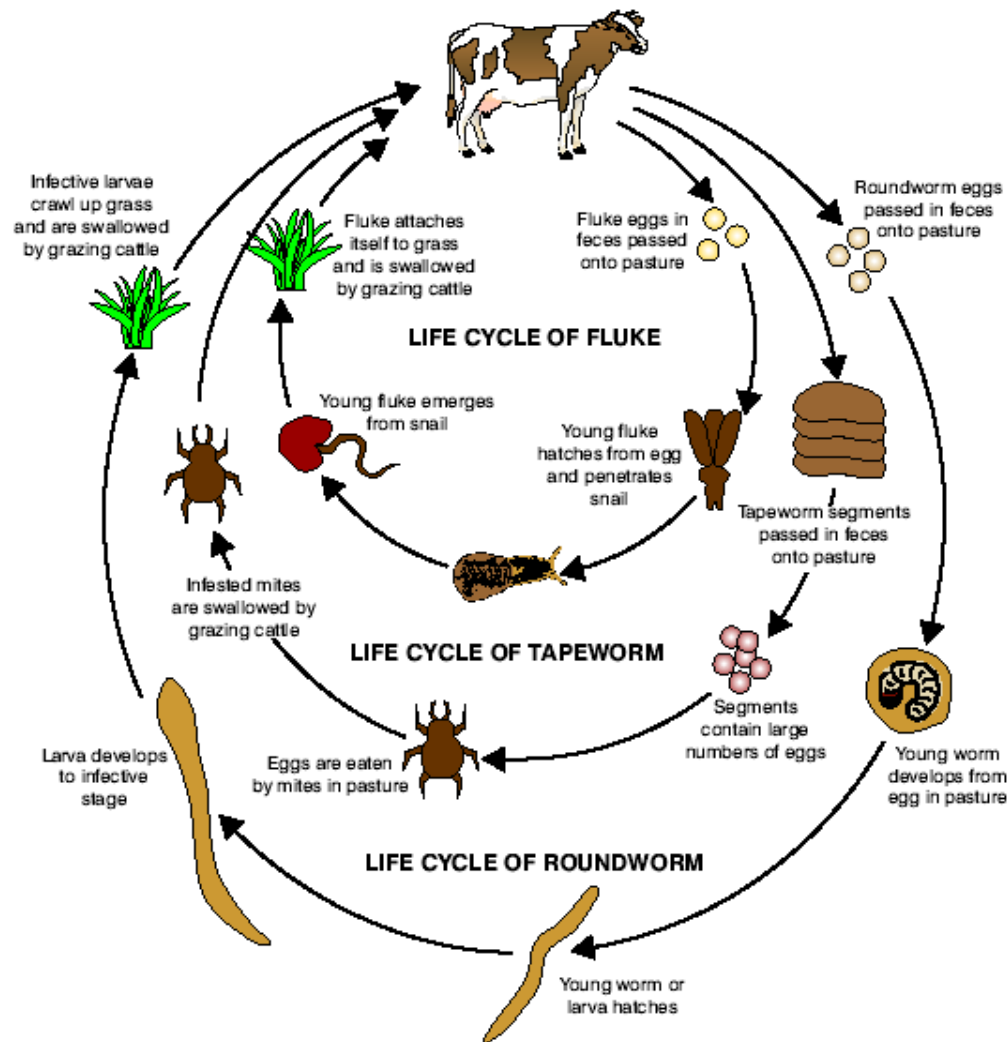
- B. Parasites can be internal or external.
  - ***Internal parasites*** are ones that live inside the animal like flukes and roundworms.
  - ***External parasites*** are ones that live outside the animal like fleas and flies.

# What are common animal parasites and diseases?

Symptoms of parasites may include:

1. Observing the parasite on an animal
2. Diarrhea, worms in feces, or bloody feces
3. Loss of weight
4. Decreased production, growth, and reproduction

# THE LIFE CYCLE OF COMMON ANIMAL PARASITES



# What are some ways to prevent and treat diseases and parasites?

- IV. Whenever possible prevention of disease should be done.
  - When it is not possible to prevent a disease or parasite, treat it as soon as possible.



# What are some ways to prevent and treat diseases and parasites?

A. There are several ways to prevent diseases and parasites.

1. **Natural immunity** is when immunity to a specific disease is inherited from parent to offspring.
- **Species immunity** is when a disease that affects one species does not affect other species.

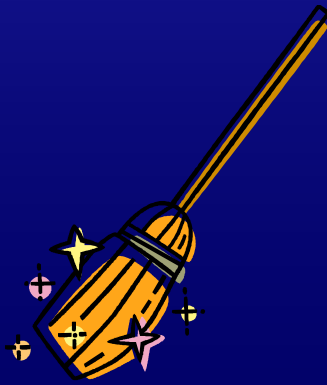
# What are some ways to prevent and treat diseases and parasites?

2. **Vaccinating** is injecting a disease organism that has been modified into an animal to prevent the animal from getting the disease later.

- **Biologics** are the medical preparations made from microorganisms and their products, like vaccinations and serums.

# What are some ways to prevent and treat diseases and parasites?

3. Sanitation management is important to preventing diseases and parasites.
  - **Sanitation** is the act of cleaning or sterilizing an area.





# What are some ways to prevent and treat diseases and parasites?

4. Ventilation is also important to manage.

– **Ventilation** is causing air to move through a building.

5. Keep all housing facilities clean and use dry bedding.



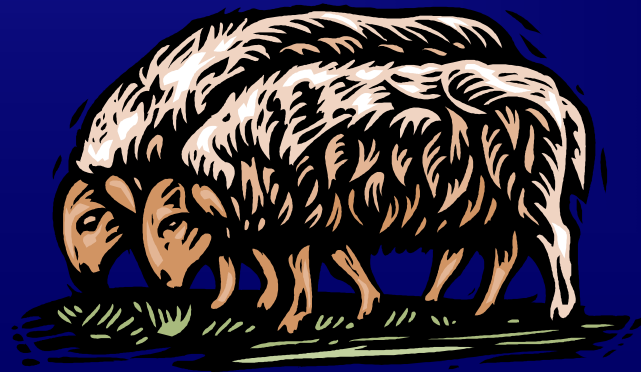
# What are some ways to prevent and treat diseases and parasites?

6. Disposal of manure is very important. If animals are made to live in their manure it will surely cause diseases to transfer rapidly because it is the optimal environment for diseases and parasites to thrive in.



# What are some ways to prevent and treat diseases and parasites?

7. Using the same pasture for the same species over and over could be dangerous. Try to rotate animals to break a parasitic life cycle.
8. Always dispose of carcasses in a sanitary way.



# What are some ways to prevent and treat diseases and parasites?

B. Since prevention does not always work, you should know how to treat your animals when they get sick.

- Above all, make sure you know what you are doing, and are qualified to treat your animal.

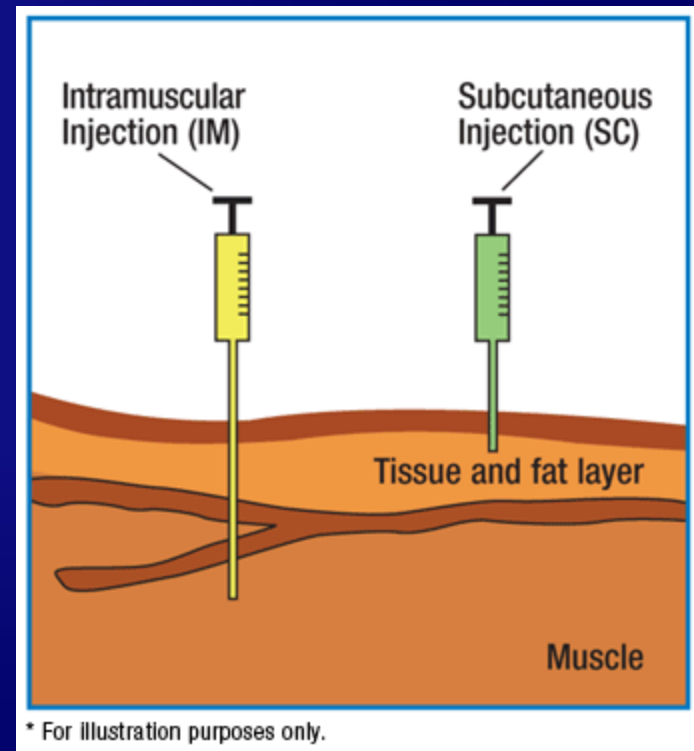
# What are some ways to prevent and treat diseases and parasites?

1. Drugs for treatment come in many forms like pills, powders, and liquids.
  - Before giving any medication, be sure to check if there is a milk or meat hold associated with the drug.



# What are some ways to prevent and treat diseases and parasites?

2. There are many ways to inject drugs. They are all named according to how they are injected.
- **Intravenous** means injected into the vein.
  - **Intramuscular** means injected into a muscle.
  - **Subcutaneous** means injected under the animal's skin.



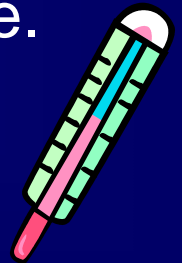
# What are some ways to prevent and treat diseases and parasites?

- ***Intradermal*** means injected between layers of skin.
- Injections into an animals rumen are called ***intraruminal***.
- Injections given in the abdominal cavity are called ***intraperitoneal***.



# What are some ways to prevent and treat diseases and parasites?

3. Taking your animals temperature is important to help diagnose if your animal is sick, and should be done rectally after you have tied a string to the thermometer.
  - Shake down the mercury and carefully place the thermometer in the animal's rectum.
  - Being forceful could make matters worse by injuring the animal.
  - After at least two minutes, read the temperature.



# What are some ways to prevent and treat diseases and parasites?

4. Checking respiration and pulse can be done without any expensive equipment.
  - For respiration, simply watch how many times the animal breathes in 1 minute.
  - For pulse you can often hold your ear against the animal and listen for the heartbeat.

# What are some ways to prevent and treat diseases and parasites?

5. Always restrain animals properly to prevent hurting the animal or yourself.
6. Certain ailments can be treated with little knowledge, but other problems require the expertise of a veterinarian.
  - A good management practice is to know your own limitations.

# *Review / Summary*

- Being able to recognize when your animals need medical attention is important to the business.
- Many diseases are passed between animals and humans.
- Zoonoses are diseases that animals can transmit to humans.
- Diseases can be contagious or non-contagious.
- Whenever possible prevention of disease should be done.