|  |  |
| --- | --- |
|  | **2019** |
|  | 1. NAME : ALUMA ALEX MARTIN 2. ADMISSIONNUMBER : SN209/11/201 3. COURSE CODE : DOO2 4. COURSE NAME : DIPLOMA IN WATER HYGIENE & SANITATION 5. NAME OF INSTITUTION : STRATEGIA NETHERLANDS .IN 6. DTAE OF SUBMISSION : 18TH FEB 2019 7. ASSIGMENT NO. : TWO |
|  |  |

**QUESTION ONE**

**Why is hand washing an essential aspect in WASH interventions?**

Hand washing is the act of cleaning hands for the purpose of removing soil, dirt and microorganisms. If water and soap is not available, hands can be cleaned with ash instead of soap.

Hand washing is essential because it prevent the spread of diarrheal diseases, that is to say, pathogen are tiny and cannot be seen on hand and water alone is not always sufficient to remove the bacteria hand washing with soap or wood ash when used with water can kill pathogens on hands and utensils.

The important times that hands should be wash with soap or wood ash to show a good personal hygiene practices are;

1. After defecating,
2. After cleaning a child who has defecated
3. Before eating or handling food.
4. Before feeding a child.

The benefits of hand washing with soap or wood ash are;

1. Helps minimize the spread of influenza and diarrhoeal disease
2. Proper hand washing practices enhance improvement in the length growth of children less than five years of age.
3. Fewer expenses related to illness.
4. Hand washing by breast feeding mothers may reduce neonatal mortality.

**QUESTION TWO**

**What are the main standards in WASH interventions in emergencies?**

The main standards in WASH interventions in emergencies situation are

1. Hygiene promotion in which all facilities and resources provided reflect the vulnerabilities, needs and preferences of the affected population. Here, the households are involved in the management and maintenance of the hygiene facilities where it is appropriate.
2. Water supply that is to say, all people have safe and equitable access to a sufficient quantity/quality of water for drinking, cooking, personal and domestic hygiene. Public water points are sufficiently close to households to enable use of the minimum water requirement.
3. Excreta disposal in which people have adequate numbers of toilets, sufficiently close to their dwellings, to allow them rapid, safe and acceptable access at all times of the day and night.
4. Vector control where all disaster-affected people have the knowledge and the means to protect themselves from disease and nuisance vectors that are likely to represent a significant risk to health or well-being.
5. Solid waste management in which people have an environment that is acceptably uncontaminated by solid waste, including medical waste, and have the means to dispose of their domestic waste conveniently and effectively.
6. Proper Drainage where people have an environment in which the health and other risks posed by water erosion and standing water, including storm water, floodwater, domestic wastewater and wastewater from medical facilities are minimized.

**QUESTION THREE**

**Waste Management is becoming one problem in the emergencies. Why?**

In emergency situation waste management has pose a serious issue due to the following reasons;

1. The lack of Garbage collection sites has made many people to dump their solid waste in open spaces, by the roadsides, in football fields and drainage channel leading to environmental health problems associated with stagnant and polluted surface water.
2. Households from affected population do not have access to containers for regular collection creating a depressing and ugly environment not suitable for human settlement.
3. Lack of health and environmental education to the affected population with regards to burring of waste to prevent it from attracting vectors such as flies and rodents and becoming their breeding places.
4. Lack of engagement by public health officers with the affected population to manage solid waste materials.
5. Poor drainage systems where surface water is contaminated by leaking toilets and sewers, vector breeding and drowning, this increases the risk of contamination of the affected population.

**QUESTION FOUR**

**Discuss how environmental health and sanitation affect the nutritional status of the vulnerable groups.**

Vulnerable groups such as women, children, older people, the disable people and people living with HIV/AIDS in the contexts of environmental health and sanitation could be affected positively or negatively depending on the health standards being put in place by the health practitioners to the community. That is to say,

1. Poor management of solid waste disposal can affect the vulnerable groups negatively as it creates breeding places for vectors that would ease the spread of diarrheal diseases through oral transmission when they eat contaminated food and become sick.
2. Unclean and polluted air environment also create unpleasant situation particularly to the pregnant mothers which may affect their feeding through the loss of appetite hence leading to malnutrition.
3. Poor or lack of sanitation facilities in the community can negatively affects the nutritional status of vulnerable group through faecal- oral diseases. Vulnerable groups particularly the children may be defecating in open spaces and without proper hand washing with soap before eating and after defecation are prone to disease infection.
4. The burden of disease caused by poor environmental health and sanitation negatively affects the nutritional status of the vulnerable people. That is to say, the sick vulnerable group cannot do some productive work to get food which may results to starvation and deaths.
5. Also diarrhea amongst vulnerable people working in Agriculture or among their children reduces their availability in food production leading to malnutrition.
6. Drinking of unclean water by the vulnerable groups during or after meals may results to infection by water borne related diseases and this reduces their ability to produce food to meet their family’s needs.
7. However, if environmental health and sanitation standard are good, then the

Vulnerable groups’ nutritional status will improves and not suffer from water borne and sanitation related diseases. These practices includes

1. Safe disposal of faeces
2. Correct hand washing
3. Safe drinking water

**QUESTION FIVE**

**Assuming you have been appointed to head an organization dealing with health development in your area, describe the critical factors that you will consider in planning for health service in that area.**

The critical factors that need to be taken into account would include:

1. Diagnosing and investigating environmental public health problems and health hazards in the community through conducting need assessment to identify the key health risk factors to be address and this assessment will includes also the resources available to the population as well as local behaviors, knowledge and the practices so that , the messages are relevant and practical.
2. The vulnerabilities and capacities of the disaster –affected population, the groups which are most frequent at health risk such as children, pregnant women, disable people and people living with HIV/AIDS should be taken in to account based on their specific need are to participate in identifying health risky practices and conditions and take responsibility to measurably reduce these the risks.
3. Resource mobilization for the implementation of the project activities, this will be done through soliciting funds from donor agency, fundraising and use of the local resources to facilitate the implementation of environmental public health services to the population.
4. Vector control measures to be taken into account by reducing the opportunities for vector breeding places through the proper disposal of human and animal excreta, proper disposal of refuse to control flies and rodents and the drainage of the standing water to control mosquitoes and this will have a positive impact on the population density of the vectors.
5. Disposal of human excreta is also a priority as it eases the spread of excreta-related diseases which should be address very first before it becomes a serious health issue in the community. In a situation where the population has no traditional toilets, there will be need to conduct educational/promotion campaign to encourage the use of toilets and which will create a demand for more toilets to be constructed.
6. . Informing, educating and empowering people about environmental public health issues through health education to promote health and enable people to make inform decisions about health –related activities at all times of the disaster –management cycle. For instance the risk of flooding in areas where people have settlement. Hence reduce the risk of communicable diseases and its transmission.
7. To mobilize community partnerships and actions by identifying and solving health issues through soliciting of key stakeholders to provide inputs into training and education approaches to meet the available resources and the full implementation time periods.
8. There is also need to link people to the needed environmental public health services and assure the provision of environmental public health services. For instance, Enforcement of laws and regulations that protect environmental public health and ensure safety of the people.
9. To put in place competent environmental public health workforce with much expertise in the field of environmental public health services to ensure efficient and cost effective health services to the community.
10. Developing of policies and plans that support individual and community environmental public health efforts for instance, use of communication strategy to coordinates plans with internal staff, external vendors, partners and associates to reinforce corporates values during the project implementation from initial assessment throughout post –implementation periods.
11. Monitoring of environmental and health status by identifying and solving community environmental public health problems. The monitoring exercise will measure the frequency and content of implementation to ensure prudent and appropriate use of resources. Besides, reporting is also an important tool on whether the project is staying on time and within the budget, barrier encountered, and the propose approaches to overcome the obstacles are address.
12. To conduct research for new insights and innovative solutions to environmental public health problems and come up with proper mechanism to address them.

**References:**

1. Pruss-Ustun, A,.,Bos, R,Gore,F, Bartram,J. 2008, Page 32.
2. UNICEF. 2010. Child survival fact sheet: Water and sanitation. http://www.unicef.org/media/media\_21423.html (accessed August 4, 2010).
3. Water and Sanitation Program. 2007. Th e handbook: A guide for developing a hygiene promotion program to increase hand washing with soap. Washington, DC: WSP
4. Website: [www.spherestandards.org](http://www.spherestandards.org)
5. Efficacy and effectiveness of water, sanitation, and hygiene interventions in emergencies in low- and middle-income countries: a systematic review. <https://www.developmentbookshelf.com>
6. Water, Sanitation and Hygiene for Populations at Risk. ACF, 2005 [www.actionagainsthunger.org](http://www.actionagainsthunger.org)