

# WATER, SANITATION & HYGIENE FACILITATOR'S GUIDE

FIRST EDITION

#### **PREFACE**

According to different health managers and scientists, the hygiene is defined as a science regarding prevention and maintenance of health. This definition meets the impact on health of safe hygiene practices. These practices can imply a good health since they help to prevent the spread of bacteria and viruses from polluted water, air, surfaces, contaminated food and drinks, The various research and reports from the governments and its stakeholders show that infections caused by a lack of poor hygiene are among the top 5 leading causes of deaths; especially among children under 5.

If the people, especially those who prepare and serve food to others, handle in a hygienic matter the spread of diseases would be limited, including the consequences.

One of the strategies able to mitigate the spread of contamination for people is to give the basic hygiene information to communities. This training will empower them to spread the word to friends or families.

This chapter will cover the hygiene aspect in general but in 5 major aspects including:

- Personal hygiene including hand washing
- Food hygiene
- Water hygiene
- Environmental hygiene

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# UNIT 1: DISEASES PREVENTION THROUGH SAFE HYGIENE

#### HAND WASHING

#### Introduction

Good hand washing practices is one of the measure used to reduce the incidence of diseases notable: Pneumonia, trachoma, scabies, skin and eye infection, diarrhoea diseases: Worms, cholera, dysentery The promotion of hand-washing with soap is also a key strategy for controlling the spread of Avian Influenza (bird flu).

The participants need to be able to contribute to the prevention hygiene related issues due to lack and poor hygiene especially infections transmitted through unclean hands.

#### SPECIFIC OBJECTIVES

At the end of this session, the participants will be able to:

- Explain the importance of regular hand washing
- Cite at least 4 diseases transmitted via unclean hands
- Cite at least 4 events indicated for hand washing
- Describe how the hands can be properly washed

#### TIME REQUIRED

30 minutes

#### MATERIALS REQUIRED

- Flip chart + markers
- Masking tape
- Audio-visual aid
- Water, soap and other necessary materials for demonstration

#### **METHODOLOGY**

- Greet your audience and introduce your subject.
- Ask if there is someone who can explain the importance of hand washing.
- Present your learning objectives and ask someone to read them loudly.
- Explain each objective.
- After presentation, ask someone to a question related to the first learning objective.
- Explain the background of the objectives.
- Continue until the end of all objectives.
- Organize a demonstration exercise regarding hand washing
- Make an evaluation and summarize the session.

#### NOTE FOR FACILITATOR

The most important times that hands should be washed with soap and water are:

- After defecating.
- After cleaning a child who has defecated.
- Before and after eating or handling food.

- After contact with contaminated surface (rubbish, cleaning clothes food contaminated)
- After handling pets and domestic animals
- After wiping or blowing the nose or sneezing into the hands
- After handling soil tissues (self or others)
- After contact with blood or organic fluids
- Before and after taking care of wounds
- Before and after giving care to another person.

#### PERSONAL HYGIENE

#### Introduction

What is personal hygiene? Personal hygiene is a set of hygienic practices an individual can perform to become or prevent diseases and infections. It is an approach to protect a person from illness and infection. Personal hygiene involves taking care of your body by keeping it clean and healthy.

At the end of the training the participants should be able to contribute to prevent diseases/infections resulting from a lack or poor hygiene and sanitation.

#### SPECIFIC OBJECTIVES

At the end of this session the participants will be able to:

- Explain the importance of respect safe hygiene practice
- Mention and describe at least 3 healthy habits in personal hygiene
- Describe the importance of hand washing

#### TIME REQUIRED

30 minutes

#### MATERIALS REQUIRED

- Flip chart + markers
- Masking tape
- Audio-visual aid

#### METHODOLOGY

- 1. Greet your audience and introduce your subject.
- 2. Tell them that you are going to discuss 'Hygiene".
- 3. Ask if there is someone who can give the definition of hygiene or describe what it means
- 4. Ask other person what are the consequences experienced or seen from lack of hygiene.
- 5. Present the objectives and give explanation for each objective.
- 6. Make an evaluation and summarize the session

#### NOTE FOR FACILITATOR

#### BASIC PERSONAL HYGIENE HABITS

When you want to increase your personal hygiene, following instructions can help.

1. Wash your hands. Wash your hands before preparing or eating food, after going to the bathroom, after coughing or sneezing, and after handling garbage, this will prevent the spread of bacteria

- and viruses. Keep a hygiene product, like an alcohol-based sanitizing gel, with you when soap and water isn't available.
- 2. Bathe regularly. Wash your body and your hair regular, with intervals that work for you.
- 3. Trim your nails. Keeping your finger and toenails trimmed and in good shape. Dirt and other materials cannot go underneath your nails in that case. Keep your feet clean and dry.
- 4. Brush and floss. Ideally, you should brush your teeth twice a day for two minutes and floss daily. Brushing minimizes the accumulation of bacteria in your mouth, which can cause tooth decay and gum disease. To maintain a healthy smile, visit the dentist at six-month intervals for check-ups and when needed cleanings.

#### GOOD HABITS HELP KEEP YOU HEALTHY

For most people, good hygiene is so much a part of their daily routines that they think little about it. They bathe, they brush their teeth, visit the dentist and doctor for regular checkups, and wash their hands when preparing or eating food and handling unsanitary items. To keep those you care about healthy and safe, help them learn, and be sure that they are practicing, good personal hygiene.

### **UNIT 2: FOOD HYGIENE**

#### HYGIENE AND FOOD

#### Introduction

The hygiene is necessary in every aspect for human being. The contamination from food enters directly in the body and the microbes attack the immune system after some hours or minutes. The food is easily contaminated when it is not covered and conserved in clean material or manipulated by someone with contaminated hands without washing. The Social Entrepreneurs will be trained on how to protect the food from any contamination

When this unit is over the participants should be able to contribute to the reduction of child morbidity and mortality due to contaminated foods

#### SPECIFIC OBJECTIVES

At the end of this session, the Social Entrepreneurs will be able to:

- Explain why it is necessary to ensure the food hygiene
- Mention at least 3 diseases which can be transmitted from contaminated food
- Describe who they can do to prevent the food from contamination

#### TIME REQUIRED

30 minutes

#### MATERIALS REQUIRED

- Flip chart + markers
- Masking tape
- · Audio-visual aid

#### **METHODOLOGY**

- 1. Greet the Social Entrepreneurs and introduce your subject.
- 2. Tell them that you are going to discuss food hygiene"
- 3. Justify the reason why it's more important to integrate this topic into the session
- 4. Ask someone to tell you what they realize with the expression' "Food hygiene"
- 5. Thank him/her for answer and ask another one.
- 6. Ask other person what are the consequences from lack of food hygiene.
- 7. Thank them and ask: What do you for protecting food from contamination
- 8. Listen to them and note the answer
- 9. Present the objectives and give explanation for each objective
- 1. 10 Discuss with them basing on your notes
- 10. Present the notes for every objective
- 11. Allow a time to pose some questions
- 12. Answer to the questions accordingly
- 13. Thank them for their inputs

#### NOTE FOR FACILITATOR

Three things to bear in mind;

#### KEEP YOUR HANDS CLEAN

- Always wash your hands with soap after meals and after you go to toilet. Dry up your hands with a clean cloth otherwise dry them in the air.
- Wash your hands thoroughly before handling food to prevent contamination
- Wash your hands after handling raw food

#### KEEP YOUR FOOD CLEAN AND FREE FROM CONTAMINATION

- Before cooking or eating, make sure you wash your vegetables and fruits thoroughly. This will remove dirt and other contaminants.
- Wash raw leafy vegetables them before eating
- Wash coated fruits skin like apples, grapes and etc. with water before eating them raw
- Use separate spoons or chopsticks while having meals to prevent contamination
- Do not dip the used spoons, forks or chopsticks into the food while the food is still cooking. They might not be fully cooked yet.
- Prevent contaminating food with pathogens spreading from people and pets.
- Separate raw and cooked food to prevent contamination.
- Store food at the appropriate temperature.
- Use safe water and raw materials.

#### KEEP YOUR KITCHEN CLEAN

- Kitchen utensils such as cutting boards, spatulas, sinks, countertops should be kept clean. Dry them to prevent the accumulation of dirt and harboring of bacteria.
- Keep kitchen garbage into bags and dispose them regularly
- Do not accumulate kitchen waste in your kitchen or backyard as it attracts insects, ants, flies, cockroaches and rats. It can also be a source of contamination
- Dry out aprons, tablecloths and kitchen gloves under the sun to avoid mold and bacteria.

# **UNIT 3: WATER HYGIENE**

#### Introduction

Water is one of our major health determiners. No human and animal being can live without water. Even the plants (grasses and trees) they live because of water run water or water from fountain. The physiologist says that the 2/3 of our body is water. It is main component of organism/body. It very benefit for our body when we protect it from pollution or microbes.

It is a very important nutriment. It helps to eliminated food waste products

However, in some circumstances, it is harmful because it becomes a taxi or vehicle the microbe towards the human being. This session will help the Social Entrepreneurs to understand it important and how we are challenged to protect it and use it safely

Therefore, it is important to perform routine measures to limit bacteria or lead contamination and to implement other best management practices for drinking water

#### SPECIFIC OBJECTIVES

At the end of this session, the participants will be able to:

- Describe how to ensure the use of safe water in family
- Explain top 5 actions to protect drinking water at school level

#### TIME REQUIRED

20 minutes

#### MATERIALS REQUIRED

- Flip chart + markers
- Masking tape
- Audio-visual aids

#### **METHODOLOGY**

- 1. Greet your audience and introduce your subject.
- 2. Tell them that you are going to discuss a about environment health"
- 3. Ask if there is someone who can give the signification of environment health
- 4. Thank him/her and ask another one. Thank them for their responses
- 5. Present the objectives and explain them clearly
- 6. Ask the Social Entrepreneurs what hygiene practices to use for getting safe water to drink
- 7. Note all answers given
- 8. Give the appropriate answers after all response given by some of group members
- 9. Ask another question related to how the water become our enemy
- 10. Not the answer until the end. Give your inputs when they finish
- 11. Ask if they can tell who the safe water can be found ensured at school level
- 12. Handle it as you did to step no 9.
- 13. At the end, give your inputs accordingly and ask if they have any question
- 14. Give an answer if any.
- 15. Make an evaluation and summarize the matter.

#### NOTE FOR FACILITATOR

Water is a good and indispensable for our body and all of living creatures. But the man contemns it until it becomes the vehicle for the pathogenic microbe. The health managers gave a proposal of what safe hygiene practices to perform for protecting the water for drinking and using for other needs/issues.

#### ADVANTAGES FROM WATER

- See information card on EH
- It forms the base of body fluids
- It regulates the body temperature
- It prevent from constipation

#### DISADVANTAGES FROM POLLUTED WATER

- All water born diseases are can be ingested if they drink it without cleaning it;
- Some diseases are among others: Dysentery, amoeba, worms, cholera, polio, and bilharzias...

#### SAFE DRINKING WATER

- Use clean materials
- Treatment: Boiling, using disinfect (Sur Eau, pure), filtration, solar disinfection
- Protect the sources/fountains
- Clean the rank

#### 5 THINGS TO DO TO ENSURE SAFE DRINKING WATER AT SCHOOL

- 1. Clean drinking water fountains daily using procedures found in this guide.
- 2. Clean debris out of all outlet screens or aerators on a regular basis using the procedures found in this guide.
- 3. Test the facility's drinking water for lead. If lead is present, follow the actions for addressing lead contamination outlined in this guide.
- 4. Evaluate your facility for the presence of cross-connections and address any issues related to cross-connections by following the recommendations found in this guide.
- 5. If elevated lead levels are found, regularly flush all water outlets used for drinking or food preparation and install point-of-use devices, to provide additional treatment of drinking water at the outlet. Bacteria are present throughout our environment.

N.B. Some bacteria may survive and enter the distribution system (the building's pipes and plumbing). They can grow within plumbing system

It is better to clean I the water fountain, faucets and hot water tanks. The lead may also be harmful for our body when it is too much. It is more danger to infants, young child and to pregnant women.

Bacteria can also grow within the plumbing system, water fountains and faucets. Therefore, it is important to regularly clean your facility's water fountains, faucets and hot water tanks.

# **UNIT 4: ENVIRONMENT HYGIENE**

#### Introduction

Environmental health refers to the aspects of human health determiners related to physical, biological, social and psychological factor in the environment. To have a good health requires ensuring the hygiene in your environment: mental, body, toilet, good waste management, clean water, clean houses etc.

#### SPECIFIC OBJECTIVES

At the end of this session, the Social Entrepreneurs will be able to:

- Give definition of concept, "environment health"
- Explain how our health are determined by our environment
- Cite at least the benefits from water as a part of our environment
- Explain how we can protect our environment for better living

#### TIME REQUIRED

30 minutes

#### MATERIALS REQUIRED

- Flip chart + markers
- Masking tape
- Audio-visual aid

#### **METHODOLOGY**

- 1. Greet your audience and introduce your subject.
- 2. Tell them that you are going to discuss a about environment health"
- 3. Ask if there is someone who can give the signification of environment health
- 4. Thank him/her and ask another one. Thank them for their responses
- 5. Present the objectives and explain them clearly

#### GROUP DISCUSSION

- 1. Divide the audience into 3 small groups and give to them the assignment.
- The first group will discuss on how our environment can be protected
- The second group will discuss on consequences related to our environment
- The third group will discuss on how a good environment can be ensure at home
- 2. Have them choose a team leader and note taker
- 3. Allow 15 minutes for discussion and call them for returning in hall/room

#### PLENARY SESSION

- 1. Ask the first group to present
- 2. When he/she finish, ask the audience if there is no other element to add
- 3. Give your inputs accordingly
- 4. Call the second group. When she/he finishes, ask if there is no observations
- 5. Note the responses and give answers accordingly
- 6. Use the same methodology for the third group
- 7. Ask if there is another question. Answer accordingly

#### 8. Make an evaluation and summarize the session

#### NOTE FOR FACILITATOR

According to WHO, the EH comprise 4 determiners of health: physical, biological, social and psychological factors. The risk factors in health domain are related to those four aspects

#### ADVANTAGES FROM SAFE DRINK WATER

- Drinking
- Cleaning the body (human): Washing the body, washing the dresses,
- Clean the houses
- Cooking
- Clean the utensils
- Human and animal physiology
- Intervene in digestion of human being and animals

- Clean utensils used to the table and function of body
- Protection of body (clean the waste)
- Building
- Treatment in case of dehydration or other diseases

#### WATER RELATE DISEASES

Water, sanitation and hygiene have important impacts on both health and disease. Water-related diseases include:

- Those due to micro-organisms and chemicals in water people drink;
- Worms, cholera, dysentery, kidney diseases, or heart diseases due to some mineral such as cooper and lead
- Diseases like schistosomiasis which have part of their lifecycle in water;
- Diseases like malaria with water-related vectors:
- Poliomyelitis

Each day, more than 6,000 children under age 5 die from diseases spread by unsafe water or lack of basic sanitation and hygiene. More than half of these deaths are preventable through basic interventions, including the provision of clean water, basic sanitation and hygiene education

#### SANITATION

Sanitation refers to the provision of facilities and services for the safe disposal of human urine and feces. It refers also the system of maintenance of hygiene conditions waste management and garbage collection

When we say sanitation in EH we mean the system of managing the domestic waste and storm water drainage.

#### DOMESTIC HYGIENE

Domestic hygiene is related to the cleanliness at home: toilet, waste management, wastewater drainage, utensils for table and kitchen and other areas in house, outside and around your house.

# PRE-TEST AND POST- TEST

#### **UNIT 1: HAND WASHING**

- 1. Hand washing can prevent diarrheal diseases
- 2. Diphtheria can be transmitted through unclean hands
- 3. Washing hands without soap is also enough to clean the hands

#### **UNIT 2: PERSONAL HYGIENE**

- 4. Brushing teeth after every meal is necessary for preventing diseases
- 5. Lack of mouth and teeth can affect the gums.
- 6. Hand washing practices is efficient measure for preventing from diarrheal diseases

#### **UNIT 3: FOOD HYGIENE**

- 7. Washing the vegetable and fruit before eating can prevent from many diseases
- 8. Covering cooked and hot food is not necessary since the bacteria cannot enter into food
- 9. It is not necessary to separate the raw and cooked food avoiding contamination
- 10. Cleaning the kitchen is one of hygienic measures to limit the spread of infection

#### **UNIT 4: WATER HYGIENE**

- 11. A big proportion of our body weight is watery
- 12. Water helps to clean our body and for a better function
- 13. Water regulate the body temperature
- 14. Water can transmit the disease to people
- 15. Dysentery, cholera and amoeba are among the water -borne diseases
- 16. Use clean materials, treatment, boiling are the ways to protect the water from contamination

#### **UNIT 5: ENVIRONMENTAL HEALTH**

- 17. Environmental health refers to: physical, psychological, social ecology
- 18. Waste management is one of national policy in health area
- 19. Sanitation means a system of managing cleanly our surrounding, drainage, etc.