

# Knowing all About

# Water, Sanitation & Hygiene (WASH)

### INTRODUCTION

#### WASH means Water (WA), Sanitation (S) & Hygiene (H)

*Water* is essential for life. The amount of fresh water on the earth is limited, and its quality is under constant pressure. Preserving the quality of fresh water is important for drinking-water supply, food production and recreational use. Water quality can be compromised by the presence of infectious agents, toxic chemicals, and radiological hazards.

Sanitation generally refers to the provision of facilities and services for the safe and efficient disposal of human urine and faeces. Inadequate sanitation is a major cause of disease world-wide and improving sanitation is known to have a significant beneficial impact on health, both in households and across communities. The word 'sanitation' also refers to the maintenance of hygienic conditions, through services such as garbage collection and wastewater disposal.

*Hygiene* refers to conditions and practices that help to maintain health and prevent the spread of diseases. Medical hygiene therefore includes a specific set of practices associated with this preservation of health, for example environmental cleaning, sterilization of equipment, hand hygiene, water and sanitation and safe disposal of medical waste.

#### Why are WATER, SANITATION and HYGIENE important?

- Research reveals that 80 per cent of childhood diseases are related, directly or indirectly, to unsafe drinking water, inadequate hygiene and open defecation.
- Almost 90 per cent of all child deaths from diarrhoeal disease or about 1.1 million per year are related to unsafe water and inadequate sanitation.
- Diarrhoeal disease is responsible for 15 per cent of deaths worldwide among under-five children.
- Yet, around 1.2 billion people in the world do not have access to adequate sanitation facilities.
- ✤ About half of all pneumonia deaths of children 750,00 per year also result from poor hygiene.

Each day, nearly 1,000 under-5 children die from diarrhoea caused by contaminated water, poor sanitation, and improper hygiene. More than half of these deaths are preventable through basic interventions, including the provision of clean water, basic sanitation and hygiene education.

### WATER CLEANLINESS: BASICS

Source

Usage



Ways of Contamination





Means of Infection



Contamination



**Preventive Measures** 



## WATER CLEANLINESS: BASICS

**Sources of Water**: The main source of water is rain. Streams, wells and rivers also provide water.

Uses of Water: We use water for drinking, bathing, cooking, washing clothes and uensils.

**Water Contamination:** We contaminate water through bathing, washing clothes, cleaning clothes, cleaning pets and animals in or near the water sources like rivers, wells and canals.

**Components of Contaminated Water:** Contaminated water contains harmful bacteria, viruses and other agents which cause several infections to humankind.

**How We get Infections due to Poor Hygiene and Sanitation:** The sources of infection are open defeacation, contaminated water, lack of hygiene, unclean & unhealthy souroundings, non-disposal of waste, improper sanitation and unhealthy habits & practices.

**Preventive Measures:** Proper sanitation, protected water source, treatment & storage of water, good personal hygiene, healthy souroundings, solid waste management, healthy habits & practices, food hygiene & safety and controlling of flies and other harmful insects and agents away from food etc.

### HOW TO KEEP WATER SAFE

**Protection of Water Source** 

Treatment

**Use of Treated Water** 







Prevention of Contamination

Conservation

Safe Storage







# How to Keep Water Safe

Protect Water sources from Contamination	:	Water gets contaminated due to defecation, disposal of waste near or into the source. Toilets should not be constructed close to water sources and waste should not be thrown near or into water sources
Treat Water	:	Purify and or boil water before you drink it.
Use of Treated Water	:	While taking water, do not dip your hand. Take water froma pot either with a jug having has a long handle, or take it from a pot witha tap. Be economical in using water.
Store Treated Water	:	Keep/store treated water in tubs, buckets, cans etc with proper lids. Otherwise, dust and mosquitos will get accumulated on the same.
Water Conservation	:	You should always conserve rain water, Water used for daily chores such as washing clothes, utensils, bathing etc. should be used for agriculture or watering plants or other purposes. Every house should have a harvesting pit to conserve and save ground water

### **ENVIRONMENTAL HYGIENE**

Say 'No' to Open Defeacation

Protected Water Suppy



Keeping Flies and Animals Away From Food





Food Hygiene Measures from Production to Consumption



**Proper Disposal of Waste** 



Healthy Home Environment



### **ENVIRONMENTAL HYGIENE**

Environmental healthcomprises those aspects of human health, including quality of life, that are determined by physical, chemical, biological, social and psychosocial factors in the environment.

Components of Environmental Health:

- ✤ Safe Water
- Human Waste Management
- Solid Waste Management
- Vector Control
- Food Hygiene
- Tidy Home & Surrounding

Water Supply: Adequacy, safety (chemical, bacteriological & physical) of water for domestic, drinking and recreational use

Sanitation: Proper sanitation facilities like toilet with water connection, roof and good sewage system.

Solid Waste Management: Proper application of storage, collection & disposal of waste.

Vector Control & Management: Control of rodents and arthropods (insects such as flies and other creatures like mites) that transmit disease.

Food Hygiene: Food safety and wholesomeness from production, storage, preparation, distribution and sale, until consumption.

Healthy Home Environment: Pest-free, well-maintained, well-ventilated, clean and dry.



### **PERSONAL HYGIENE**

Personal hygiene involves practices performed by an individual to care for his / her bodily health and wellbeing, through cleanliness.

- Personal hygiene is a concept that is commonly used in medical and public health practices.
- It is also widely practised at the individual level and at home.
- It involves maintaining the cleanliness of one's body and clothes. Personal hygiene is personal, as implies.
  In this regard, personal hygiene is defined as 'a condition promoting sanitary practices to the self'.
- Everybody has their own habits and standards that they have been taught or that they have learned from others.
- Generally, the practice of personal hygiene is employed to prevent or minimize the incidence and spread of communicable diseases.

Personal Hygiene is nothing but Brushing the teeth, Taking bath, Combing hair, Wearing shoes/slippers and Washing hands on a regular basis.

Communicable diseases like diarrhoea, trachoma can be prevented through proper personal hygiene. You need to learn the proper practice of personal hygiene to help you prevent and control various diseases that are prevalent in your locality.







#### What is menstruation?

Menstruation is a normal phenomenon in a female's body. Menarche (first menstrual period) occurs between 10 to 16 years of age. Menstruation is a natural part of the reproductive cycle, in which menstrual bleeding occurs for a period of 2-7 days every month in different cycles. There is nothing to feel anxious, scared or embarrassed about it.

#### Why menstruation occurs only in women:

The bodies of males and females are different. Girls have reproductive organs which include uterus, ovaries, fallopian tubes, cervix, and vagina. Boy's have a penis, scrotum (sack), and testicles. Ovaries produce eggs that start their journey through the fallopian tubes to reach the uterus, where they meet the sperm to produce a baby. During this time, the lining of the uterus increases in thickness making a place for the egg to connect with the mother, to grow. If the egg does not fertilize, it does not attach to the wall of the uterus. When this happens, the uterus sheds the extra tissue lining. The blood, tissue, and unfertilized egg leave the uterus, going through the vagina on their way out of the body.

#### **Menstrual Cycle:**

The monthly cycle varies from woman to woman. It begins with the first day of the monthly bleeding. This cycle happens almost every month except when a female is pregnant. The complete cycle takes about 28 to 30 days, but could be shorter or longer.

#### Why to learn about menstrual hygiene:

Although menstruation is a natural process, it is linked with several misconceptions and practices, which sometimes result in adverse health outcomes including suffering from infections, white discharge (leucorrhoea), itching/burning, swelling of ovaries, and frequent urination.

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Washing Napkins/Pads



Drying Them in Sun



Disposal of Used Pads/Napkins

#### **Protecting Yourself**

You can use sanitary napkins/pads to absorb blood. Sanitary napkins are specially-made pads to absorb the menstrual blood. They are made with clean material. Make sure you change the napkin frequently based on the frequency of the bleeding. Used napkins are to be disposed of safely. Avoid reuse of napkins. Always store sanitary napkins in a clean and dry place.

Sanitary napkins are available with ASHA Didi, or with local SHGs or with AWW. Use sanitary napkins to ensure that you have a comfortable and clean period.

#### How to Dispose of Sanitary Napkins

Sanitary napkins must be disposed of properly. They should be:

- **A.** Buried in a deep pit. This will ensure that the napkins are properly covered and do not pose any health hazard by being centres for bacterial growth, Or
- **B.** Incinerated. Burning kills the germs completely. However, this must be done in a properly installed incinerator.

#### In case of using cloth or re-usable cloth:

- Ensure that clean, soft, dry and absorbent cloth is used during menstruation
- In case it is being reused, it must be washed in hot water thoroughly and dried in private, but in the sun
- After drying, if possible, it shoud be ironed
- Store in a clean and dry place; do not share these cloth with anyone
- After multiple use, dispose of the cloth
- Used napkins/pads shoud not be thrown into the toilets, particularly the water closet
- After use, wrap them in an old newspaper and dispose them of.
- In case there is no such disposal mechanism prevalent in your locality, you may dispose it of in your backyard itself either by burrying or burning.

### **MENSTRUAL HYGIENE-STAY ACTIVE**



**Tracking Menstruation** 



**General Hygiene** 





- Tracking Menstruation Track menstruation every month to check whether it occurs on a regular basis or not.
- Stay Active Continue routine work like walking, running, working etc., to keep yourself active
- General Hygiene during Menstruation: To stay healthy, one should also keep oneself clean by doing what is given below:
  - Take bath everyday
  - Change napkins/pads for every six hours. During heavy menses, you may need to change it every 3-4 hours.
  - Do not keep till it gets completely soaked.
  - Wash the genital area after each use of the toilet and also after urination.
  - Wash both hands before & after changing pads/napkins.

#### Take-home messages

- Menstruation is a normal body process, there is no need to be ashamed of it or feel guilty.
- Stay clean, stay healthy
- Taking care of your body is your responsibility
- Eat well and exercise regularly. Playing, running and skipping should not be restricted during periods.
- Use clean sanitary protection. Always take care to store in a clean, dry place.
- It is better to use sanitary napkins as they are assured to be clean and germ free.
- Dispose of sanitary napkins properly in a deep pit, away from a water body or burn in an incinerator.



### HAND HYGIENE: WHY, HOW & WHEN?

#### WHY?

Keeping hands clean is one of the most important steps we can take to avoid getting sick and spreading germs to others. Many diseases and conditions are spread by not washing hands with soap and clean running water. Hand hygiene is, therefore, the most important measure to avoid transmission of harmful germs and prevent infections.

Handwashing with soap removes germs from hands. This helps to prevent infections because:

- People frequently touch their eyes, nose, and mouth without even realizing it. Germs can get into the body through the eyes, nose and mouth and make them sick.
- Germs from unwashed hands can get into foods and drinks while people prepare or consume them. Germs can multiply in some types of foods or drinks, under certain conditions, and make people sick.
- Germs from unwashed hands of one can be transferred to other objects like handrails, table tops, or toys, and then transferred to another person's hands.
- Removing germs through handwashing, therefore, helps to prevent diarrhea and respiratory as well as skin and eye infections.

Teaching people about handwashing helps them and their communities stay healthy.

#### HOW?

- Wash your hands with soap and water when hands are visibly dirty and everytime you use the toilet.
- Wet your hands under warm running water and apply soap.
- Dry your hands thoroughly with a clean towel.

### **HOW TO WASH HANDS**





Rub fingers and thumbs



Rub nails and palms



Rub thumbs against your palms

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Rub fingers in your palms

### SIX STEPS TO EFFECTIVE HANDWASHING

- **Step 1** : Wet your hands and apply soap. Rub palms together until soap is bubbly.
- **Step 2** : Rub each palm over the back of the other hand.
- **Step 3 :** Rub between your fingers on each hand.
- **Step 4** : Rub your hands with the fingers together.
- **Step 5 :** Rub around each of your thumbs
- **Step 6 :** Rub in circles on your palms. Then rinse and dry your hands

### WHEN TO WASH YOUR HANDS

#### **Before Cooking**

**Before Eating** 



Before & After Dressing Wound/Cut





Before & After Using Toilet



Before & After Taking Care of Sick Person



After Changing Diapers



### WHEN TO WASH YOUR HANDS

As you touch people, surfaces and objects throughout the day, you accumulate germs on your hands. In turn, you can infect yourself with these germs by touching your eyes, nose or mouth. Although it's impossible to keep your hands germ-free, washing hands frequently can help limit the transfer of bacteria, viruses and other microbes.

#### Always wash your hands:

- Before preparing food
- Before and after eating food
- Before and after caring for someone who is sick
- Before and after treating a cut or wound
- After using the toilet
- After changing diapers or cleaning up a child who has used the toilet
- After blowing your nose, coughing, or sneezing
- While inserting or removing contact lenses
- After handling garbage and anything that contaminate
- Shaking hands with others
- After touching an animal, animal feed, or animal waste
- In addition, wash your hands whenever they look dirty

### WASH: HEATHLY HABITS & PRACTICES (TAKE-HOME MESSAGES)

**Disposal of Waste** 



**Proper Toilet Facilities** 





**Proper Sanitation** 

**Good Hygiene Practices** 

Hand Washing





### WASH: HEALTHY HABITS & PRACTICES (TAKE-HOME MESSAGES)

- Wash your hands to prevent infections.
- Do not defecate in the open. Have your own toilet with running water connection and roof.
- Clean the toilet with disinfectants on a regular basis
- Mop the floor in the home everyday
- Keep footwear outside
- Cover your mouth with a hand-kerchief while sneezing or coughing
- Keep adequate dustbins
- Wash clothes regularly
- Take bath daily
- Save trees and water
- Keep surroundings clean
- Use purified water for drinking and cooking
- Keep the animals/ pets in their sheds, away from house.
- Keep animals/pets clean and vaccinate them regularly
- Personal and environmental hygiene play a vital role in keeping good health
- Menstrual hygiene is very important to prevent reproductive tract infections etc

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• Good personal hygiene keeps you confident during menstruation