

# Safety Tips

## Water

Much of the ill health in the underdeveloped countries is largely due to lack of safe drinking water. There can be no state of positive community health and well being without safe water supply.

### **Safe and Wholesome water:**

Water needed for human consumption should be safe and wholesome. Water should not harm the consumer and be potable. Drinking water should be

- Free from pathogens.
- Free from harmful chemical substances.
- Pleasant to taste.
- Usable for domestic purpose.

Water is said to be contaminated, when it contains infective and parasitic agents, poisonous chemical substances, industrial or other waste and sewage.

### **Safety tips for water Borne Diseases**

#### **1. Boil water for drinking:**

Boiling removes the temporary hardness by expelling carbon-di -oxide and precipitating the insoluble calcium carbonate. It kills all bacteria spores, cyst and ova. The water must be brought to a " rolling boil" for 5-10 mins.

#### **2. Water should be chlorinated to kill germs**

Chlorination is one of the greatest advances in water purification. Chlorine kills Pathogenic bacteria, it oxidises iron manganese and hydrogen sulphide. It controls algae and slime organisms and aids coagulation.

#### **3. After boiling filter the water so that sediments in water are separated.**

Filter candles remove bacteria found in water. It also helps in separation of sediments from water.

#### **4. Avoid drinking water directly from lakes, rivers and swimming pools.**

### **Hazards of water pollution:**

Man's health may be affected by the ingestion of contaminated water.

1. Biological: water borne diseases caused by the presence of infectious agents Viral: hepatitis, poliomyelitis.

- Bacterial: cholera, typhoid, paratyphoid, E.coli diarrhoea, bacillary dysentery, rota virus diarrhoea in infants.
- Helmenthic: Roundworm, whipworm, thread worm, leptospirosis
- Cyclops: Guinea worm, tape worm
- Snail: Schistosomiasis

2. Chemical: These pollutants due to stagnation of sewage water and industrial waste. Contamination include detergent solvents, cyanides heavy metals, minerals, pigments nitrogenous substances, sulphides. If there is block in house drains, public sewers or storm water drains, it will lead to spread of diseases.