

# Community

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## Environment and Health

The term of environment involves all the external factors living and non-living, material and non-material which surround human. Proper environmental management is the key to avoid the quarter of all preventable illnesses which are directly caused by environmental factors. The environment affects our health in many ways through exposure to physical, chemical and biological risk factors, and through related changes in our behavior in response to those factors.

### *Definition of "The Environment" according to Public Health*

All that which is external to the individual host. It can be divided into physical, biological, social, and cultural factors, any or all of which can influence health status in populations.

1. **Physical:** Water, air, soil, housing, wastes, radiation, etc.
2. **Biological:** Plant and animal life including bacteria, viruses, insects, and animals.
3. **Social:** Customs, culture, habit, income, occupation, religion, etc.

*The purpose* of environmental health is to create and maintain ecological conditions that will promote health and thus prevent disease.

## ***Pollution of Water***

A more serious aspect of water pollution is that caused by human activity-urbanization and industrialization. The sources of pollution resulting from these are: sewage, industrial waste, agricultural pollutants, and physical pollutants.

## ***Water Related Diseases***

Ingestion of contaminated water either directly or through food may affect man's health by causing water related diseases. Such

diseases may be classified as:

### ***A. Biological water-borne diseases***

1. Those caused by the presence of an infective agent:

a. Viral, b. Bacterial, c. Protozoal, d. Helminthic

2. Those due to the presence of an aquatic host:

a. Snail: b. Cyclops:

### ***B. Chemical***

These include industrial and agricultural wastes. Such pollutants include detergents solvents, cyanides, heavy metals, minerals and organic acids, nitrogenous substances, bleaching agents, dyes, pigments, sulfides, ammonia, and toxic of organic compounds of great variety. These pollutants affect health, directly and indirectly by accumulating in foods which are consumed by human beings, e.g. fishes.

## **Purification of Water**

It comprise of one or more of the following measures:

1. Storage 2. Filtration 3. Disinfection

### **Storage**

Water is drawn out from the source and impounded in natural or artificial reservoirs. As a result of storage, a very considerable amount of purification takes place.

### **Filtration**

By filtration apart other impurities, 98-99 percent of the bacteria are removed.

### **Chlorination**

Chlorine kills pathogenic bacteria, but it has no effect on spores and certain viruses except in high doses. It has limited effectiveness against protozoans that form cysts in water.