Sanitation and Disease

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Sanitation is very important for community health. Sanitation involves mainly the disposal of the solid and liquid wastes.

Most diseases are caused by pollutants and disease - causing microorganisms in water.

- Water gets polluted due to its mixing with
 - ✤ domestic sewage
 - excretion of infected persons/animals
 - Pesticides and insecticides
 - Industrial wastes
- A large population in our country defecates in open-on dry riverbeds, fields, near railway tracks, etc.
- Animal and human excreta are health hazards. They pollute both soil and water.
- When it rains, such excreta get washed down to the rivers, ponds and pollute the water there in. When polluted water seeps into the ground, it contaminates the ground water.
- We use groundwater in many forms such as well water, tube well water, spring water, and hand pump water etc. Thus the polluted groundwater becomes a source of water- borne disease. Typhoid, jaundice, diarrhea, dysentery, etc. are some typical water-borne diseases.

Vermi-processing Toilets

In the vermi-processing toilets, human excreta is treated by earthworms in a pit. The earthworms usually eat up all organic matter present in human excrete and turn it into compost. These are tow water use toilets for the safe processing of human.

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Alternate Arrangement for Sewage Disposal

Low cost outside the sewage disposal system has been developed to take care of places where there is no sewage system, e.g. rural areas, isolated buildings. These are described below:

1. Septic tanks: Septic tank is a low-cost onsite sewage disposal system. Septic tanks are suitable where there is no sewerage made. These tanks need cleaning every four to six months.

A septic tank usually consists of a big, covered underground tank made of concrete having an inlet pipe at one end and on outlet pipe at the other end. The toilet seat is connected to the inlet pipe of the septic tank. The human excreta from the toilet seat enter into the septic tank through the inlet pipe. The solid part of excreta keeps on collecting at the bottom of the septic tank in the form of a sludge whereas watery waste remains above it.

The anaerobic bacteria breakdown most of the solid organic matter present in human excreta due to which the volume of solid waste is reduced too much. The digested solid waste keeps on depositing at the bottom of septic tank. The watery waste is also cleaned by anaerobic bacteria. The excess water goes out of the septic tank through the outlet pipe and get absorbed in soil.

2. Composting pits: These are self-sustained human waste disposal units which is not connected to a sewer line or a septic tank. A composting toilet breaks down and dehydrates human waste to compost.

3. Chemical toilets: These toilets have limited storage capacity for human waste and need to be emptied periodically. These are the toilets which use chemically treated reservoir located just below the toilet seats. The chemicals reduce the foul smell coming out of human excrete and carry out partial disinfection of human waste.

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Sanitation at Public Places

- There are numerous places in our country which are very busy such as airports, railway stations and bus depots.
- Many times large gatherings such as fairs and festivals are also organized where a large number of people visit.
- This results in the generation of large amounts of waste and if the waste is not treated properly it can lead to several diseases and even an epidemic.
- Hence we should all become aware and contribute to maintaining sanitation not only in our homes but also at public places.
- If we adopt certain practices at public places we can help in maintaining their sanitation, for instance:
- We should not throw garbage in public places and always use the dustbins.
- We should not spit around in a public place.