

CBSE Class 9 Science

Revision Notes

CHAPTER – 13

Why do we fall ill?

1. **Health** is a state of being well enough to function well physically, mentally, and socially.

2. **Disease** (disturbed ease) means being uncomfortable. One or more systems of the body will change, give rise to “Symptoms” (Cough, loose motions, pus formation, headache, fever, breathlessness, vomiting, fits, unconsciousness, inflammation, swelling and general effects - a Doctor look for the basis of symptoms). Diseases are basically two types- Acute Disease & Chronic Disease.

3. **Acute Disease**: The disease which lasts for only a short period of time is called Acute Disease Ex. Common Cold.

4. **Chronic Disease**: The disease which lasts for long period of time is called Chronic Disease Ex. Tuberculosis.

Acute Disease	Chronic Disease
They are short duration disease	They are long lasting disease
Patient recovers completely after the cure	Patient does not recover completely
There is no loss of weight or feeling of tiredness afterward	There is often loss of weight or feeling of tiredness
There is short duration loss of work and efficiency	There is a prolonged loss of work and efficiency

5. **Causes of Diseases** : Most of the diseases have many causes, rather than one single cause, like unclean water, nourishment, genetic differences, genetic abnormalities e.g. Based on the causes diseases are of two types: Non-Infectious Diseases and Infectious Diseases.

6. **Non-Infectious Diseases**: Not caused by infectious agents, mostly internal and non-

infectious cause. Ex. Cancer

7. Infectious Diseases: Caused by infectious agents.

Type Of Disease

- **Bacterial diseases** - Typhoid, Cholera, Tuberculosis, Acne, Anthrax,
- **Viral diseases** - Common Cold, Influenza, Dengue fever, AIDS, Japanese encephalitis or brain fever
- **Fungal diseases**: Skin diseases
- **Protozoan diseases** -Malaria (Plasmodium), Kalaazar (Leishmania), Sleeping sickness(Trypanosomes)
- **Worm diseases** - Ascariasis (Round worm), Elephantiasis(Wuchereria)

8. The infectious diseases spread by agents are called as **Communicable Diseases**.

SNo	Type of Disease	Example
1.	Air born Diseases	Pneumonia, common cold, Tuberculosis;
2.	Water born diseases	Cholera, hepatitis
3.	Sexual Diseases	HIV, Syphilis
4.	Animal born Disease	- Rabbits. *(Vector- the animal carrying infectious agent from a sick person to another potential host without getting affected Ex. Mosquito carrying Malaria Parasite)

9. Principles of Treatment

1. **Antibiotics**- many bacteria make a cell wall to protect themselves, the antibiotic (Penicillin) blocks the bacterial process that builds cell wall and blocks the biochemical

pathways. Antibiotics do not work against viral infections. Antiviral medicine is harder than making Antibacterial medicine because Virus has only few biochemical mechanisms of their own. Other medicines bring down fever, reduce pain or loose motions. We can take bed rest to conserve energy.

10 Principles of Prevention :Following three limitation are normally confronted while treating an infectious disease:

- Once someone has disease, their body functions are damaged and may never recover completely.
- Treatment will take time, which means that someone suffering from a disease is likely to be bedridden for some time even if we can give proper treatment.
- The person suffering from an infectious disease can serve as the source from where the infection may spread to other people.

General ways of preventing infectious disease

- Air-borne – We can prevent exposure by providing living condition that are not over crowded.
- Water-borne – prevent by providing safe drinking water. This is done by treating the water to kill any microbial contamination.
- Vector-borne – We can provide clean environment, which would not allow mosquito breeding.

Proper nutrition is essential to maintain body immunity. There are vaccines against tetanus, diphtheria, whooping cough, measles, polio and many other diseases.

12. Prevention of disease is better than cure. Hygiene is the basic key to maintain good health.

Vaccination is another way to prevent the disease in which killed microbes are introduced into the body to develop antibodies and can prevent occurrence of disease during actual entry of disease causing microbes.