

CLASS 5 BASIC SCIENCE

AWAY FROM DISEASES NOTES

Question: What are communicable diseases?

Answer: Communicable diseases are those which spread from one person to others.

Question: What is a pandemic?

Answer: When communicable diseases spread to other countries or continents, and affect a large number of people, it is called a pandemic. Smallpox, tuberculosis, plague, Covid 19 etc. are some of the pandemics that we have survived.

Question: Are we more likely to get affected when we come into contact with someone who is sick?

Answer: Yes, we are more likely to get affected when we come into contact with someone who is sick because the disease causing micro-organism can enter our body and make us sick.

Question: What causes communicable diseases?

Answer: Most communicable diseases are caused by microorganisms like bacteria, viruses, and fungi that are called pathogens because they cause diseases.

Question: Are all microorganisms harmful?

Answer: No, not all microorganisms are harmful. There are many beneficial bacteria in our body that help in the digestion and absorption of our food.

Question: Give an example of how microorganisms can be useful to us.

Answer: One example is that dosa batter is fermented by certain bacteria. Bacteria and fungi also break down organic matter and add it to the soil.

Question: Name two types of fungi that we are familiar with.

Answer: Bread mold and black mold found on clothes are two types of fungi that we are familiar with.

Question: Why do we cover our nose and mouth with a handkerchief when we cough or sneeze?

Answer: We cover our nose and mouth with a handkerchief when we cough or sneeze to prevent the spread of disease- causing microorganisms.

Question: What are vectors?

Answer: Vectors are organisms that bring disease carrying microorganisms into our body, such as houseflies, rat fleas, mosquitoes, and bats.

Question: Name two ways through which disease - causing microorganisms can enter the human body.

Answer: Disease causing microorganisms can enter the human body through soil, air, water, and food, or through vectors like mosquitoes and houseflies.

Write down the conditions in which vectors multiply.

| Vectors | Conditions in which they multiply |
|----------|---|
| Housefly | |
| Mosquito | Mosquitoes breed in discarded plastic bags, bottles, coconut shells and stagnant water. |
| Rat | |

| **Housefly** | Houseflies breed in garbage, rotting organic matter, and animal waste. |

| **Rat** | Rats multiply in dirty, unhygienic environments, especially where there is leftover food, clutter, and hiding places. |

Question: What can we do to control vectors?

Answer: To control vectors, we can eliminate breeding conditions, such as avoiding water logging, removing grass and weeds, and cleaning drains. Additionally, maintaining hygiene in our surroundings helps prevent the spread of diseases carried by vectors.

Question: Is it enough to eliminate mosquito breeding conditions only in our home?

Answer: No, it is important to eliminate mosquito breeding conditions both in our homes and in our surroundings to effectively control mosquito populations and prevent diseases.

Question: What are some precautions to avoid mosquito bites?

Answer: Precautions to avoid mosquito bites include keeping doors and windows closed in the evening, using mosquito nets, electric fans, wearing long -sleeved clothing, and using mosquito repellents.

Question: Will the hygiene of our surroundings be enough to prevent the spread of disease?

Answer: Maintaining hygiene in our surroundings is important, but personal hygiene and other preventive measures are also necessary to prevent the spread of diseases.

Question: How can we prevent diseases that spread through food and water?

Answer: To prevent diseases that spread through food and water, we should wash fruits and vegetables before use, keep food items covered, and drink boiled water.

Question: How can we prevent diseases that spread through air and contact?

Answer: To prevent diseases that spread through air and contact, we should avoid contact with sick people, not use their handkerchiefs or clothes, use masks, and maintain personal hygiene.

Question: How can we prevent diseases that spread through soil and sewage?

Answer: To prevent diseases that spread through soil and sewage, we should use footwear, avoid contact of wounds with sewage, and wash hands and legs with soap if they get dirty.

Question: What can you do to ensure that your home, school, and washrooms are clean to prevent disease?

Answer: To ensure cleanliness, regularly clean and disinfect surfaces, dispose of waste properly, keep washrooms clean, and maintain personal hygiene.

Question: Do communicable diseases affect only humans?

Answer: No, communicable diseases also affect animals and plants. For example- lumpy skin disease in cattle, canine distemper in dogs, swine flu in pigs, bird flu, brown leaf spot disease in rice, mosaic disease in pea plants, and bud rot of coconut.

Question: Which of these are good health habits? Tick them.

Answer:

- ☐ Wash hands only after meals. (No)
- ☐ Brush teeth every night after meals. (Yes)
- ☐ Do not trim the nails of feet and hands. (No)
- ☐ Use footwear when walking outside. (Yes)
- ☐ Eat fruits that are gnawed by birds. (No)
- ☐ Do not consume snacks and drinks kept open. (Yes)
- ☐ Spit in public places. (No)
- ☐ Bathe daily. (Yes)

Question: What is natural immunity?

Answer: Natural immunity is the body's natural ability to control and fight pathogens once they enter the body. This ability varies from person to person.

Question: What is acquired immunity?

Answer: Acquired immunity is the immunity developed by taking vaccinations against certain diseases for which the body cannot develop natural immunity, such as polio and hepatitis B.

Question: Which diseases should be vaccinated against?

Answer: Diseases like polio, hepatitis B, smallpox, plague, and others should be vaccinated against to prevent epidemics and ensure immunity.

Question: Which are the mandatory vaccines to be taken by the age of 16?

Answer:

BCG Bacillus Calmette-Guerin

OPV Oral Polio Vaccine

Hep B Hepatitis B

FIPV Polio Vaccine - Fractional Dose

RVV Rotavirus Vaccine

PCV Pneumococcal Conjugate Vaccine

MR Measles Rubella Vaccine

DPT Diphtheria Pertussis Tetanus Vaccine

TD Tetanus Diphtheria Vaccine

Question: What can we do to spread awareness about the transmission of diseases and methods of prevention?

Answer: We can use various methods such as drama, puppetry, cartoons, and posters to spread awareness about the transmission of diseases and methods of prevention.

Question: Do you agree that personal and social hygiene are important in preventing communicable diseases? Please elaborate.

Answer: Yes, personal and social hygiene are important in preventing communicable diseases because they help reduce the spread of pathogens and maintain a healthy environment.

Question: Do you agree with the following precautions to control vector borne diseases?

Eliminate conditions that cause sewage accumulation. (Yes)

Dispose of garbage in public places. (No)

If water retention is unavoidable, breed fish such as Guppy and Gambusia in it. (Yes)

Food items need not be kept covered. (No)

Use food items only after washing. (Yes)

Drink boiled water. (Yes)

Keep the house and surroundings clean. (Yes)

Practice proper waste disposal at the source. (Yes)

Question: What are the conditions in which mosquitoes multiply?

Answer: Mosquitoes breed in discarded plastic bags, bottles, coconut shells, and stagnant water.

Question: What are the conditions in which houseflies multiply?

Answer: Houseflies multiply in conditions where there is decaying organic matter, such as garbage and food waste.

Question: What are the conditions in which rats multiply?

Answer: Rats multiply in areas with available food sources and shelter, such as garbage dumps and poorly maintained buildings.