

*This is the **Higher Combined** version — includes Higher Tier content. Some Separate-only details are omitted.*

Communicable diseases are caused by pathogens that can spread between hosts. Understanding transmission is key to prevention.

- Bacteria: produce toxins. Treated with antibiotics. Examples: salmonella, TB, gonorrhoea
- Viruses: invade host cells, replicate, lyse cell. Not treated with antibiotics. Examples: HIV, measles, influenza
- Fungi: grow on/in host. Examples: athlete's foot, rose black spot
- Protists: often spread by vectors. Example: malaria (Plasmodium, Anopheles mosquito)
- HIV: attacks T helper lymphocytes → immune system fails → AIDS
- Prevention: vaccines, antibiotics (bacteria only), safe sex, vector control, clean water/food

### Key Terms

<b>Pathogen</b>	Organism causing disease — bacteria, virus, fungus or protist
<b>Vector</b>	Organism transmitting pathogen (e.g. mosquito for malaria)
<b>HIV</b>	Virus attacking immune system — leads to AIDS

■ **Exam Tip:** Antibiotics **ONLY** kill bacteria. They do **NOT** kill viruses. This is the most tested fact in this topic section.