
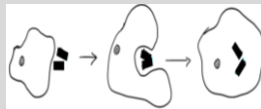




## Key points to learn

1. Bacteria	Large microbe Living
	Divide by splitting in two
	May produce toxins to make us ill
	Cause: <ul style="list-style-type: none"> <li>Salmonella – food poisoning</li> <li>Gonorrhoea – sexually transmitted disease (STD)</li> </ul>
2. Viruses	Smallest microbe Not alive 
	Live and reproduce inside cells
	Cause: <ul style="list-style-type: none"> <li>Measles – can be fatal</li> <li>HIV – can turn into AIDS</li> <li>Tobacco mosaic virus (TMV) affects photosynthesis in plants</li> </ul>
3. Fungi	The other type of microbe. Living
	Cause: <ul style="list-style-type: none"> <li>Rose black spot – affects photosynthesis in plants</li> </ul>
4. Pathogens	Microbes/microorganisms that cause diseases
	Spread by air, contact and water
5. Communicable diseases	Infectious diseases that can be passed from one person to another
	Caused by pathogens
6. Malaria	Is a protist disease. Spread by mosquito bites

## Key points to learn

7. Causes of ill health	Pathogens, diet, stress, life situations/conditions
8. Non-communicable diseases	Cannot be transmitted from one person to another
	Eg heart disease, arthritis
9. Ignaz Semmelweis	Doctor in mid-1850s who persuaded doctors to wash their hands
10. Louis Pasteur	Showed that microbes caused disease. Developed vaccines
11. Vaccines	An inactive form of a pathogen used to prepare your immune system
12. Human defences against pathogens	<ol style="list-style-type: none"> <li>Skin barrier - covers your body</li> <li>Nose - hair and mucus act as trap</li> <li>Trachea and bronchi – covered in cilia and mucus</li> <li>Stomach - makes acid to destroy</li> <li>Immune system – white blood cells defend us in three ways</li> </ol>
13. Trachea	Pipe from mouth to bronchi
14. Bronchi	Pipe into each lung
15. Cilia	Tiny hair-like cells
16. White blood cells	<u>1. Phagocytosis</u> ingest microbes 
	<u>2. Produce antibodies</u> chemicals to destroy microbes 
	<u>3. Produce antitoxins</u> chemicals to cancel-out toxins made by pathogens 

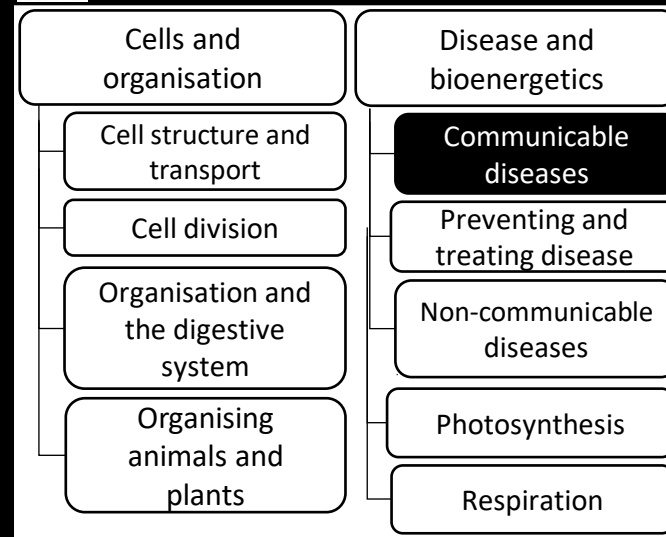
## Trilogy B5: Communicable diseases

Part of: Infection and response

### Knowledge Organiser



### Big picture (Biology Paper 1)



### Background

Nobody likes getting ill. To better avoid diseases, we need to understand what causes and how our bodies try and defend us from them.

### Additional information

This topic links really well with B6 which is all about how we can further defend against these diseases.