

10 Pathogens and defences – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English	Write it 3 times (English)		
pathogen	_____	_____	_____
disease	_____	_____	_____
transmissible dis- ease	_____	_____	_____
host	_____	_____	_____
direct contact	_____	_____	_____
body fluids	_____	_____	_____
contaminated	_____	_____	_____
skin	_____	_____	_____
mucus	_____	_____	_____
stomach acid	_____	_____	_____
white blood cells	_____	_____	_____

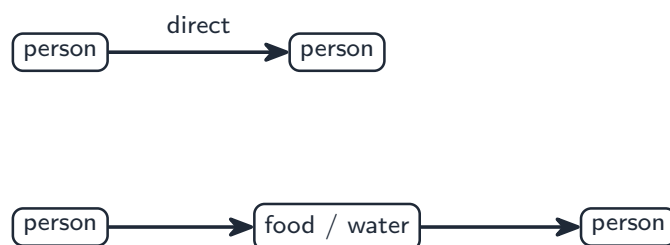
Recall

A **pathogen** _____ is an organism that causes **disease** _____. A **transmissible disease** _____ can pass from one **host** _____ to another.

New ideas

Read these first, then do the Practice.

■ 1 How pathogens spread

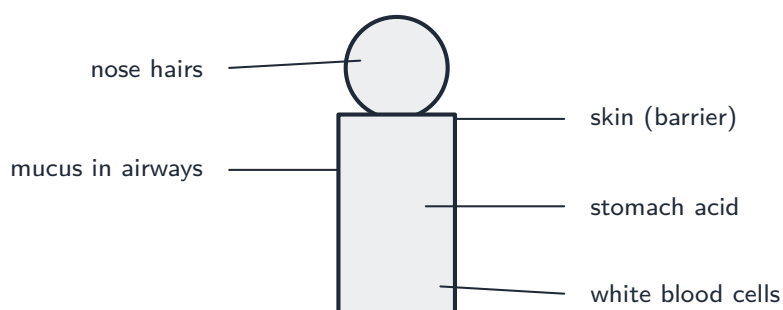


indirect: through food, water or air

- by **direct contact** – for example through **body fluids** ;
- **indirectly** – through **contaminated** food, water, surfaces or air.

■ 2 The body's defences

Your body keeps most pathogens out, and destroys any that get in:



- **skin** – a barrier that covers the body;
- hairs and **mucus** in the airways – trap pathogens;
- **stomach acid** – kills pathogens in food;
- **white blood cells** – destroy pathogens that get inside.

Watch out: defences come in two kinds – *barriers* that keep pathogens out (skin, mucus, stomach acid) and *white blood cells* that destroy any that get in. A **transmissible** disease is one that can pass from host to host.

Practice

Try these in order.

10.1 What is a *pathogen*? [1]

10.2 Give one way a pathogen can spread by direct contact. [1]

10.3 Give one way a pathogen can spread indirectly. [1]

10.4 How does the skin defend the body? [1]

10.5 What does stomach acid do to pathogens in food? [1]

10.6 Challenge. The skin and stomach acid are both defences, but they work in different ways. Explain the difference. [2]