

B6 – Preventing and treating infections

<u>Question</u>	<u>Answer</u>
Describe how bacterial infections are treated	Antibiotics.
Describe how viral infections are treated	Vaccinations/antiretroviral drugs.
Explain why antibiotics cannot be used to treat viral infections	It is difficult to develop drugs that kill viruses without damaging the body's tissues.
Describe what painkillers do	Treat symptoms but don't kill pathogens.
Explain how does vaccine works	Contains dead/inactive pathogens. White blood cells make antibodies that kill the pathogen. White blood cells remember the antibodies and respond quicker to future infections.
Define herd immunity	Reducing the spread of a disease by vaccinating a large proportion of a population. Reduces the spread of the pathogen.
Define Penicillin	An antibiotic produced from <i>Penicillium</i> mould.
Give the name of the person who discovered penicillin	Alexander Fleming.
Name the drug that comes from foxgloves	The heart drug digitalis.
Name the drug that comes from willow	The painkiller aspirin.
Define antibiotic resistant bacteria	Strains of bacteria that have evolved resistance to antibiotics.
Explain how antibiotic resistant strains of bacteria are produced	Overusing, not finishing a full course of or sharing antibiotics.
Name 3 things that new drugs are tested on during preclinical trials	Cells, tissues and animals.

Name 3 things that new drugs are tested for	Toxicity, efficacy and dose.
Define clinical trials	Research studies involving human patients.
Give the stages of clinical trials	<ol style="list-style-type: none"> 1. Test on healthy volunteers to check side effects. 2. Test on patients with the disease to check it works and to find the best dosage.
Define a placebo	A medicine that does not contain the active drug.
Define a double blind trial	When the doctor and patient don't know who receives the drug. Reduces bias.
Describe what must happen before a drug can be sold	<p>Results from clinical trials are published.</p> <p>Results are reviewed by independent scientists.</p>

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