

How are infectious diseases spread?

Health and Disease	
Health	Being free from
	illness or injury.
	A condition caused
	by any part of an
Disease	organism not
	functioning
	properly.
	A disease which can
	be transmitted
Communicable disease	between organisms;
	also known as an
	infectious or
	contagious disease.
	A disease that is not
	transmissible
	directly from person
	to person. Can be
	caused by poor
Non-	lifestyle choices (e.g
communicable	Type 2 diabetes),
disease	inheriting a genetic
	disorder (e.g. sickle
	cell anaemia), or
	body processes
	malfunctioning (e.g.
	cancer).
Microorganism	Organism which can
	only be seen using a
	microscope.
Pathogen	Disease-causing
	microorganism.
Spread of com	municable diseases
Spread of pathogens in animals	Through cuts in sking
	by being ingested or
	breathed in; during
	sexual intercourse.

Council of	Via vectors (carriers)
	e.g. insects; direct
	contact with
Spread of pathogens in	infected sap;
	infected fungal
plants	spores or seeds
	being spread by the
	wind.
Droplet infection	Method of disease
	transmission;
	pathogens are
	spread by airborne
	droplets from
	mouth/nose.
Diagnosis	Identifying a disease
	in a plant or animal.
	The time between a
	pathogen entering
	your body and
Incubation	symptoms
period	appearing.
	Pathogens
	reproduce in this
	time.
	The number of new
Incidence of	cases of a disease,
disease	per unit population,
	per unit time.

Type of pathogen	Animal disease example	Plant disease example
Bacteria	Tuberculosis	Crown gall disease
Fungi	Athlete's foot	Powdery mildew
Viruses	Influenza (flu)	Tobacco mosaic disease
Protozoa	Malaria	Coffee phloem necrosis

Preventing spread of communicable	
d	iseases
Covering coughs/sneezes; not touching infected materials; using condoms to prevent STIs; not sharing needles; washing hands; cooking food correctly; drinking clean water; burning diseased plant material; using chemical dips on farms.	
Huma	n infections
Food poisoning	Caused by bacteria and the toxins they produce. Campylobacter, salmonella and E.coli 0157 can all cause illness. Symptoms include vomiting, diarrhoea and fever. The bacteria are killed by thorough cooking
Sexually transmitted infections (STIs)	Chlamydia - caused by bacteria. Gonorrhoea - caused by bacteria. Genital herpes - caused by a virus. HIV - caused by a virus. Symptoms - weakened immune system; often develops into AIDS, when the body can no longer fight lifethreatening infections.

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Vaccinations			1
	Vac	cinations	

	Contain small
	amounts of weakened or dead
	pathogen, or
Vaccine	instructions on how
	body cells can
	construct surface
	antigen of the
	pathogen
	When the body can
	rapidly make
	antibodies against a
Immunity	specific pathogen it
·	has encountered
	before, destroying it
	before it makes you
	feel ill.
Destroy	ing pathogens
	Chemicals that kill or
	neutralise all types
Antiseptic	of pathogen, but do
	not damage human
	tissue.
Antiviral	Drugs that destroy
	viruses.
Antibiotic	Drugs that destroy
	bacteria.
	Technique used to
	ensure that no
Aseptic technique Zone of inhibition	foreign
	microorganisms are
	introduced into a
	sample being tested.
	Area on an agar
	plate that bacteria
	cannot grow.
Developing new medicines	
	Stages of testing
Clinical trials	Stages of testing required to approve
Clinical trials	Stages of testing required to approve a drug for use.
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