

active acquired
immunity

the body undergoes the
immune response and
memory cells are
produced

advanced symptoms

symptoms that occur when a
disease has been present in the
body for an extended period of
time without any successful
treatment

agar plate technique

a method of using
nutrient agar in order to
grow colonies of micro-
organisms

analytical studies

epidemiological studies that
collect data that can be
statistically analysed to try to
determine the cause of a
disease

anthrax bacillus

the bacterium that
causes the disease,
anthrax

antibodies	protein molecules produced by plasma cells that are specific to a particular antigen and will bind with that antigen
antibody-mediated (humoral) immunity	immune response that involves that action of the B cells to defend the body against invading antigens
antigen	any molecule that triggers an immune response
antigen-antibody complex	formed when a specific antibody attaches to its matching antigen; deactivates the antigen
bacteria	a single-celled prokaryotic organism that has a cell wall

B cells

lymphocytes that are involved in the immune response; produced and mature in the bone marrow

broad-spectrum antibiotics

antibiotics that act on a wide range of bacteria and are used when the identity of the bacteria causing the infection not known

case control studies

epidemiological studies that compare people with the disease to people without the disease and look for differences in exposure to the possible cause of the disease

cell-mediated immunity

the immune response that involves the action of T cells to defend the body against invading antigens

chemical barriers

chemicals produced by the body to prevent the entry of pathogens

cilia	tiny, hair-like structures lining the respiratory tract that beat in an upward direction
clonal selection theory	B cells and T cells for all possible antigens are already present in a very small amount in the immune system; when an antigen is present in the body, the B cell and the T cell specific to that antigen are activated, then cloned, and the antigen is destroyed
cohort studies	epidemiological studies that study two groups of people who are free of the disease over an extended period of time; one group is exposed to the potential cause of the disease and the other is not
complement proteins	the proteins that make up the complement system
complement system	a group of 20 proteins that activate the non-specific defence adaptations such as phagocytosis

Creutzfeldt-Jacob disease (CJD)

a disease caused by a prion; affects the brain and is always fatal

cystic fibrosis

a non-infectious disease that is caused by a mutation of the cystic fibrosis transmembrane conductance regulator (CFTR) gene

cytokines

chemicals secreted by cells of the immune system to control the actions of other cells

cytotoxic T cells (Tc cells)

T cells, with specific antigen receptors, that move to infected cells and release chemicals that destroy the infected cells

descriptive study

a type of epidemiological study that describes many different aspects associated with the disease