

AIDS 101 Glossary

AIDS: Acquired Immune Deficiency Syndrome.

Antibody: A protein (immunoglobulin) that is secreted and produced by B lymphocytes when it finds an antigen. Antibodies can bind to and, in turn, destroy certain antigens. When you test positive for HIV, they are actually testing for antibodies.

Antigen: A substance that is recognized as foreign by the immune system. Antigens are either whole microorganisms, or they can be a portion of an organism or virus.

B Cells: Lymphocytes that produce antibodies.

Benign: Harmless. Remaining confined to its original area--usually referring to cancer.

CDC: Centers for Disease Control and Prevention.

Cellular Immunity: A collection of cell types that provide protection against certain types of antigens.

Cofactor: Factors or agents that are necessary or that increase the probability of the development of disease in the presence of the basic etiologic agent of that disease.

Cytokines: Cytokines are chemical substances that are secreted by lymphocytes, monocytes and macrophages. Some common cytokines include lymphokines (from lymphocytes) and monokines (from monocytes and macrophages).

Cytotoxic T Cells: A type of T cell that kill cells that are infected by viruses or cancer. They are also known as T8 cells.

Dendritic Cells: White blood cells that are found in the spleen and other lymphoid organs. These cells have "tentacles," which they use to present antigens to T4 cells.

DNA: Deoxyribonucleic Acid.

ELISA: A test that detects the presence of antibodies to HIV.

Etiological Agent: The organism that causes a disease.

HIV: Human Immunodeficiency Virus.

Immune Response: The reaction of the immune system to abnormal particles

Incidence: The number of cases recorded in a specific time frame.

Leukocytes: All white blood cells are leukocytes. These include neutrophils, lymphocytes and monocytes (phagocytes).

Lymph Nodes: Part of the body that helps prevent the spread of infection.

Lymphadenopathy: Swelling of the lymph nodes. One of the first signs of the progression to AIDS.

Lymphocytes: These are a specific type of leukocytes that are mononuclear. They are a critical part of immune response because they provide the specificity and memory that is needed for long-term immunity. The two main types of lymphocytes are T cells and B cells.

Lymphokines: Chemical messengers produced by T and B cells.

Macrophages: A large cell that acts as a "microbe-devouring phagocyte, an antigen-presenting cell and an important source of immune secretions."

Monocytes: A type of phagocyte that, upon entering tissue, develops into a macrophage.

Opportunistic Infection (OI): A normally benign microbe or virus that becomes pathogenic in persons with a suppressed immune system.

Pathogenic: Harmful and disease causing.

Phagocytes: These are another type of white blood cell. They contribute to the immune defense by ingesting microbes or other cells and foreign particles.

Provirus: The genome of an animal virus integrated into the chromosome of the host cell, and thereby replicated in all of the host cell's daughter cells.

Retrovirus: Viruses that contain RNA and produce a DNA analog of their RNA using an enzyme known as reverse transcriptase.

Reverse Transcriptase: An enzyme produced by retroviruses that allows them to produce a DNA analog of their RNA, which may then be incorporated into the host cell.

RNA: Ribonucleic Acid.

Splicing: Cutting out nucleotide sequences that exist between exons and bringing the exons together.

STD: Sexually transmitted disease.

Suppressor T Cell: A subset of T cells that is responsible for turning off the immune response.

Syndrome: A set of symptoms that occur together.

T Helper Cells: Also referred to as T4 cells. These are the essential conductors of the immune system, and turn on antibody production.

T Lymphocytes: T cells mediate cellular reactions.

Therapeutic Vaccine: A vaccine given to people who are HIV positive to boost the immune system or slow the progression to AIDS.

Transcription: The synthesis of messenger RNA on a DNA template.

Translation: The production of proteins from messenger RNA amino acid code.

Virus: Any large group of submicroscopic agents capable of infecting plants, animals and bacteria. They are characterized by a total dependence on living cells for reproduction and by a lack of independent metabolism.

Western Blot: A blood test that is used to detect the presence of specific antigens. The Western Blot is used to confirm the results of an ELISA test, because it is much more specific.