



# Glossary

of HIV/AIDS-Related Terms

OCTOBER 2011 • 7TH EDITION

U.S. Government Source for HIV/AIDS  
Medical Practice Guidelines, Clinical Trials,  
and Other Research Information



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# Table of Contents

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**Introduction** .....i

**Terms and Definitions** .....1

**Appendices**

    Abbreviations and Acronyms .....172

    HIV/AIDS-Related Resources .....179

    FDA-Approved Antiretroviral HIV Drugs .....202

# Introduction

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Window period, immunosuppression, viral load...the vocabulary of HIV/AIDS can be daunting. Key to understanding HIV is a grasp of the terminology used to describe the virus, the infection it causes, and strategies used to diagnose, treat, and prevent HIV/AIDS. In addition, to appreciate groundbreaking HIV/AIDS studies, it is helpful to understand research-related terms. The 7th Edition of the *AIDSinfo Glossary of HIV/AIDS-Related Terms* provides people living with HIV, their families and their friends, health care professionals, and students a guide to understanding this complex disease.

The 7th Edition of the *Glossary* includes concise definitions for over 700 terms. To ensure a comprehensive selection of terms, *AIDSinfo* reviewed a variety of sources, including federally approved medical practice guidelines and the latest findings from HIV-related research studies. Term definitions were developed on the basis of health information from trusted government sources, including the National Institutes of Health (NIH), the National Library of Medicine (NLM), the Centers for Disease Control and Prevention (CDC), and the Food and Drug Administration (FDA). *AIDSinfo* consulted with content experts in HIV to ensure the accuracy of definitions for some highly technical terms.

In general, terms in the *Glossary* are defined in the context of HIV/AIDS. For example, a cancer may be identified as an AIDS-related cancer, or an adverse event may be described as a possible consequence of using some antiretroviral HIV drugs. To enhance understanding of some terms, readers are referred to related terms in the *Glossary*.

New additions to the 7th Edition of the *Glossary* include the following:

- 151 new terms and accompanying definitions.

- Addition of several new terms and changes to definitions for some existing terms on the basis of updates to medical practice guidelines on use of antiretroviral HIV drugs in adults, adolescents, children, and pregnant women.
- A revamped resources section that offers a more comprehensive list of federal HIV/AIDS-related resources. All resources listed in the resources section include up-to-date Web addresses, contact information, and, as appropriate, hours of operation and availability of services in Spanish or other languages.
- A new appendix that lists all FDA-approved antiretroviral HIV drugs classified according to drug class and identified by generic name, brand name, and acronym.

The *Glossary* is also available on the *AIDSinfo* Web site in a variety of formats.

## About AIDSinfo

*AIDSinfo*, a service of the U.S. Department of Health and Human Services (HHS), offers health care providers, researchers, people affected by HIV/AIDS, and the public easy access to current federally approved medical practice guidelines, HIV treatment and prevention clinical trials, and other research information. Features of the *AIDSinfo* Web site include medical practice guidelines in both printer and Web friendly formats, easy-to-understand consumer health information based on the medical practice guidelines, a search capability to help users quickly find HIV/AIDS-related clinical trials, and a drug database offering comprehensive information on HIV-related medications. Information is also available on *infoSIDA*, the *AIDSinfo* Spanish-language companion site. *AIDSinfo* sponsors include the Office of AIDS Research (OAR), the National Institute of Allergy and Infectious Diseases (NIAID), and the National Library of Medicine (NLM)—three

entities within the National Institutes of Health (NIH); the Health Resources and Services Administration (HRSA); and the Centers for Disease Control and Prevention (CDC).

**AIDSinfo:** [www.aidsinfo.nih.gov](http://www.aidsinfo.nih.gov)

**Mobile Site:** [m.aidsinfo.nih.gov](http://m.aidsinfo.nih.gov)

**infoSIDA:** [www.aidsinfo.nih.gov/infosida/](http://www.aidsinfo.nih.gov/infosida/)

**Mobile Site:** [m.aidsinfo.nih.gov/infosida/](http://m.aidsinfo.nih.gov/infosida/)

## Contact AIDSinfo:

English- and Spanish-speaking AIDSinfo health information specialists offer free, confidential, and individualized responses to questions about HIV/AIDS treatment and clinical trials, and provide assistance navigating the AIDSinfo and infoSIDA Web sites. Information specialists are available by telephone, TTY/TDD, Live Chat, e-mail, and postal mail.

**Hours of Operation:** Monday through Friday, Eastern Standard Time  
Telephone and TTY/TDD: 12:00 p.m. to 5:00 p.m.  
Live Chat: 12:00 p.m. to 4:00 p.m.

**Telephone:** Toll Free: 800-HIV-0440 (800-448-0440)  
International: 301-315-2816

**TTY/TDD:** 888-480-3739

**Fax:** 301-315-2818

**Live Chat:** <http://aidsinfo.nih.gov/LiveHelp/>

**E-mail:** [ContactUs@aidsinfo.nih.gov](mailto:ContactUs@aidsinfo.nih.gov)

**Mail:** AIDSinfo  
P.O. Box 6303  
Rockville, MD 20849-6303

# Terms and Definitions

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A  
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## **Absolute Contraindication**

When a particular treatment or procedure should not be used under any circumstance because of the severe and potentially life-threatening risks involved.

**SEE RELATED TERM(S):** Contraindication

## **Acanthosis Nigricans**

A skin disorder characterized by velvety, light brown-to-black markings that develop mainly in the folds of the body, such as in the armpits, groin, and creases of the neck. Acanthosis nigricans can be an inherited condition or can occur as the result of an endocrine disorder, cancer, or use of certain medications.

## **Acquired Immunity**

Immunity that develops during a person's lifetime. There are two types of acquired immunity: active immunity and passive immunity.

**SEE RELATED TERM(S):** Active Immunity, Immunity, Passive Immunity

## **Acquired Immunodeficiency Syndrome (AIDS)**

A disease of the immune system due to infection with HIV. HIV destroys the CD4 T lymphocytes (CD4 cells) of the immune system, leaving the body vulnerable to life-threatening infections and cancers. Acquired immunodeficiency syndrome (AIDS) is the most advanced stage of HIV infection.

**SEE RELATED TERM(S):** AIDS Case Definition, HIV Progression, Human Immunodeficiency Virus

## **Acquired Resistance**

**ALSO KNOWN AS:** Secondary Resistance

When a drug-resistant strain of HIV emerges while a person is on antiretroviral therapy (ART) for the treatment of HIV infection.

**SEE RELATED TERM(S):** Drug Resistance, Transmitted Resistance

## Active Immunity

Immunity that develops after exposure to a disease-causing infectious microorganism or other foreign substance, such as following infection or vaccination.

**SEE RELATED TERM(S):** Acquired Immunity, Passive Immunity

## Acute HIV Infection

**ALSO KNOWN AS:** Primary HIV Infection

Early stage of HIV infection that extends approximately 2 to 4 weeks from initial infection until the body produces enough HIV antibodies to be detected by an HIV antibody test. Because the virus is replicating rapidly, HIV is highly infectious during this stage of infection.

**SEE RELATED TERM(S):** Acute Retroviral Syndrome, HIV Progression

## Acute Infection and Early Diseases Research Program (AIEDRP)

A federally funded research program that studies how HIV infects humans and how the disease progresses to AIDS.

## Acute Inflammatory Demyelinating Polyneuropathy

**ALSO KNOWN AS:** Guillain-Barré Syndrome

## Acute Retroviral Syndrome

Flu-like symptoms of acute HIV infection that may appear approximately 2 to 4 weeks after infection. Symptoms such as fever, headache, fatigue, and swollen lymph nodes can last from a few days to 4 weeks, and then subside. During the acute stage of HIV infection, many, but not all, people will have symptoms of acute retroviral syndrome.

**SEE RELATED TERM(S):** Acute HIV Infection

## Adenopathy

Any disease involving swollen glands, especially the lymph nodes.

**SEE RELATED TERM(S):** Lymph Nodes



## Adenovirus

A group of viruses that use DNA as their genetic material and commonly cause respiratory and eye infections. People with weakened immune systems, including people with HIV, have a greater risk for serious complications from an adenovirus infection than people with healthy immune systems.

**SEE RELATED TERM(S):** Virus

## Adherence

Taking medications exactly as prescribed. Poor adherence to an HIV treatment regimen increases the risk for developing drug-resistant HIV and virologic failure.

**SEE RELATED TERM(S):** Drug Resistance, Virologic Failure

## Adjuvant

A substance added to a drug to enhance the effects of the drug. Adjuvant also refers to a substance added to a vaccine to boost the body's immune response to the vaccine.

## Adverse Drug Reaction (ADR)

Any unintended, undesirable response to a drug taken at a normal dose for normal use. Adverse drug reactions (ADRs) are classified by onset, severity, and type.

## Adverse Event (AE)

Any undesirable experience associated with the use of a drug or other medical product.

**SEE RELATED TERM(S):** Adverse Drug Reaction

## Agammaglobulinemia

Total or near-total absence of gamma globulins in the blood. Gamma globulins are a class of blood proteins that include most antibodies. Agammaglobulinemia may be due to certain genetic diseases or to acquired diseases such as HIV/AIDS.

**SEE RELATED TERM(S):** Gamma Globulin

## **Agency for Healthcare Research and Quality (AHRQ)**

A federally funded agency that supports research to improve the quality, safety, efficiency, and effectiveness of health care in the United States.

## **Agranulocytopenia**

**ALSO KNOWN AS:** Granulocytopenia

## **AIDS Case Definition**

Diagnostic criteria for AIDS established by the Centers for Disease Control and Prevention (CDC). To be diagnosed with AIDS, a person with HIV must have an AIDS-defining condition or have a CD4 count less than 200 cells/mm<sup>3</sup> (regardless of whether the person has an AIDS-defining condition).

**SEE RELATED TERM(S):** Acquired Immunodeficiency Syndrome, AIDS-Defining Condition, CD4 Count, Human Immunodeficiency Virus

## **AIDS Clinical Trials Group (ACTG)**

Formerly called Adult AIDS Clinical Trials Group (AACTG). Federally funded program that supports the largest network of HIV/AIDS researchers and clinical trial units in the world. AIDS Clinical Trials Group (ACTG) develops and conducts research related to HIV infection and its complications.

## **AIDS Dementia Complex (ADC)**

**ALSO KNOWN AS:** AIDS Encephalopathy, HIV-Associated Dementia, HIV Encephalopathy

A progressive neurological condition associated with advanced HIV infection or AIDS. Symptoms include memory loss, slowed movements, and behavioral changes.

## **AIDS Drug Assistance Programs (ADAPs)**

Federally funded programs that provide medications and other HIV-related services to low-income, uninsured, and underinsured people with HIV/AIDS. Services of AIDS Drug Assistance Programs (ADAPs) are available in all 50 states and U.S. territories.

## **AIDS Education and Training Centers (AETCs)**

Regional centers that conduct education and training programs for health care providers who treat people living with HIV/AIDS. Training is targeted to providers who serve minority populations, the homeless, rural communities, prisoners, community and migrant health centers, and Ryan White HIV/AIDS Program-funded sites. AIDS Education and Training Centers (AETCs) serve all 50 states and many U.S. territories.

## **AIDS Encephalopathy**

**ALSO KNOWN AS:** AIDS Dementia Complex

## **AIDS Service Organization (ASO)**

A non-governmental organization that provides services related to the prevention and treatment of HIV/AIDS.

## **AIDS-Defining Cancer**

A type of cancer that when diagnosed in a person with HIV marks the development of AIDS. AIDS-defining cancers include Kaposi sarcoma, non-Hodgkin lymphoma, and invasive cervical cancer.

**SEE RELATED TERM(S):** Acquired Immunodeficiency Syndrome

## **AIDS-Defining Condition**

Any HIV-related illness included in the Centers for Disease Control and Prevention's (CDC) list of diagnostic criteria for AIDS. AIDS-defining conditions include opportunistic infections and cancers that are life-threatening in a person with HIV.

**SEE RELATED TERM(S):** Acquired Immunodeficiency Syndrome, Centers for Disease Control and Prevention, Opportunistic Infection

## **AIDSinfo**

The federal source for HIV/AIDS medical practice guidelines, clinical trials, and other research information for health care providers, researchers, people affected by HIV/AIDS, and the general public. Information is available via the Web, phone, e-mail, and postal mail.

**SEE RELATED TERM(S):** *infoSIDA*

## AIDS-Related Cancer

A type of cancer that is more likely to occur in people with HIV/AIDS than in people with healthy immune systems. AIDS-related cancers include lung cancer, anal cancer, and Hodgkin lymphoma.

**SEE RELATED TERM(S):** Acquired Immunodeficiency Syndrome

## AIDS-Related Complex (ARC)

Symptoms that signal the transition from asymptomatic HIV infection to symptomatic HIV infection (but not full-blown AIDS). Symptoms can include recurring fever, unexplained weight loss, swollen lymph glands, diarrhea, or fungal infection of the mouth.

**SEE RELATED TERM(S):** Acquired Immunodeficiency Syndrome, Human Immunodeficiency Virus

## Alanine Aminotransferase (ALT)

**ALSO KNOWN AS:** Serum Glutamate Pyruvate Transaminase

An enzyme found primarily in the liver. Alanine aminotransferase may be measured as part of a liver function test.

**SEE RELATED TERM(S):** Liver Function Test

## Albumin

A protein made by the liver and found in high concentrations in blood. This protein may be measured as part of a liver function test.

**SEE RELATED TERM(S):** Liver Function Test

## Alkaline Phosphatase (ALP)

An enzyme found throughout the body, especially in the liver and bone. Alkaline phosphatase may be measured as part of a liver function test.

**SEE RELATED TERM(S):** Liver Function Test

## Alopecia

Loss of hair. Alopecia may be an adverse effect of some antiretroviral (ARV) drugs.

## American Trypanosomiasis

**ALSO KNOWN AS:** Chagas Disease

## Amino Acids

The chemical building blocks of proteins.

**SEE RELATED TERM(S):** Peptide, Protein

## Anemia

A blood disorder caused by reduced number or function of red blood cells. Symptoms may include shortness of breath, fatigue, and rapid heartbeat. HIV-associated causes of anemia include progression of HIV disease, opportunistic infections, and certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Red Blood Cell

## Anorexia

Lack or loss of appetite. Anorexia is also commonly used to refer to anorexia nervosa, which is an eating disorder.

## Antenatal

**ALSO KNOWN AS:** Prenatal

## Antepartum

The time period before childbirth. Antepartum refers to the mother.

## Antibiotic

A drug used to kill or suppress the growth of microorganisms, such as bacteria and fungi.

**SEE RELATED TERM(S):** Microorganism

## Antibody

**ALSO KNOWN AS:** Immunoglobulin

A protein produced by B lymphocytes (B cells) in response to an antigen. Antibodies bind to and help destroy antigens.

**SEE RELATED TERM(S):** B Lymphocyte, Humoral Immunity

## Anticoagulant

**ALSO KNOWN AS:** Blood Thinner

A drug used to prevent the blood from clotting.

## Antifungal

A drug used to kill or suppress the growth of fungi.

**SEE RELATED TERM(S):** Fungus

## Antigen

Any substance that is foreign to the body and triggers an immune response. Antigens include bacteria, viruses, and allergens, such as pollen.

**SEE RELATED TERM(S):** Immune Response

## Antigen-Antibody Complex

**ALSO KNOWN AS:** Immune Complex

## Antigen-Presenting Cell (APC)

A type of immune cell that enables a T lymphocyte (T cell) to recognize an antigen and mount an immune response against the antigen.

Antigen-presenting cells (APCs) include macrophages, dendritic cells, and B lymphocytes (B cells).

**SEE RELATED TERM(S):** Antigen, Immune Response, T Lymphocyte

## Antineoplastic

A drug used to inhibit the growth or spread of tumors or cancer cells.

## Antiprotozoal

A drug used to kill or suppress the growth of protozoans.

**SEE RELATED TERM(S):** Protozoan

## Antiretroviral (ARV)

A drug used to prevent a retrovirus, such as HIV, from replicating.

The term primarily refers to antiretroviral (ARV) HIV drugs.

**SEE RELATED TERM(S):** Drug Class, Retrovirus

## Antiretroviral Pregnancy Registry

A project established to monitor prenatal exposures to antiretroviral (ARV) drugs and to detect any potential increase in the risk of related birth defects. Pregnant women exposed to ARV drugs voluntarily enroll in the Registry through their health care providers. Information provided to the Registry includes no identifying patient information.

## Antiretroviral Therapy (ART)

**ALSO KNOWN AS:** Combination Therapy, Combined Antiretroviral Therapy, Highly Active Antiretroviral Therapy

The recommended treatment for HIV infection. Antiretroviral therapy (ART) involves using a combination of three or more antiretroviral (ARV) drugs from at least two different HIV drug classes to prevent HIV from replicating.

**SEE RELATED TERM(S):** Drug Class

## Antiretroviral Toxic Neuropathy

Nerve damage that is due to antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Neuropathy

## Antisense Antiviral

A drug made of short segments of DNA or RNA that can bind to and alter or suppress the function of viral DNA or RNA. Antisense antivirals prevent viruses from replicating.

## Antiviral

A drug used to prevent the growth or replication of viruses.

**SEE RELATED TERM(S):** Virus

## Aphthous Ulcer

**ALSO KNOWN AS:** Canker Sore

An open sore that develops on parts of the mouth (inner surface of the cheeks and lips, tongue, soft palate, or base of the gums). Although aphthous ulcers are non-contagious and non-life-threatening, they can be very painful. Aphthous ulcers are more common and more likely to reoccur in people with HIV.

## Apoptosis

**ALSO KNOWN AS:** Programmed Cell Death

The deliberate, programmed death of a cell. Apoptosis is a normal biological process that helps the body stay healthy by eliminating old or damaged cells. One of the ways that HIV infection gradually destroys the immune system is by causing apoptosis of CD4 T lymphocytes (CD4 cells).

**SEE RELATED TERM(S):** CD4 T Lymphocyte

## Approved Drug

A drug approved by the Food and Drug Administration (FDA) for sale in the United States. The extensive FDA drug approval process includes many steps, including laboratory and animal studies, clinical trials for safety and efficacy, filing of a New Drug Application by the drug manufacturer, FDA review of the application, and FDA approval or rejection of the application.

**SEE RELATED TERM(S):** Clinical Trial, Food and Drug Administration, New Drug Application

## Area Under the Curve (AUC)

A measure of how much drug reaches a person's bloodstream in a given period of time after a dose is given. The information is useful for determining dosing and for identifying potential drug interactions.

**SEE RELATED TERM(S):** Drug Interaction

## Arm

Any of the treatment groups in a clinical trial.

**SEE RELATED TERM(S):** Clinical Trial

## Arrhythmia

Any irregularity in rhythm or rate of the heartbeat.

## Arthralgia

Joint pain with additional symptoms such as redness, tenderness to touch, loss of motion, or swelling. Arthralgia is a common symptom of HIV infection and may be caused by drugs used to treat HIV and opportunistic infections.

## Artificial Insemination

**ALSO KNOWN AS:** Intrauterine Insemination

## Aspartate Aminotransferase (AST)

**ALSO KNOWN AS:** Serum Glutamic-Oxaloacetic Transaminase

An enzyme found especially in heart, muscle, and liver cells. Aspartate aminotransferase may be measured as part of a liver function test.

**SEE RELATED TERM(S):** Liver Function Test



## Aspergillosis

An infection caused by the fungus *Aspergillus*. Invasive aspergillosis is a serious lung infection that can spread to other parts of the body. It occurs almost exclusively in people with low blood levels of neutrophils, a type of white blood cell, and weakened immune systems. Invasive aspergillosis in a person with HIV is rare.

**SEE RELATED TERM(S):** Opportunistic Infection

## Asthenia

Weakness; lack or loss of energy or strength.

## Asymptomatic HIV Infection

**ALSO KNOWN AS:** Clinical Latency

Stage of HIV infection during which there are no symptoms of HIV infection. During this stage of HIV infection, which varies in length of time from person to person, HIV slowly destroys the immune system. Antiretroviral therapy (ART) can prevent the onset of symptomatic HIV infection and AIDS.

**SEE RELATED TERM(S):** HIV Progression

## Ataxia

Impaired coordination of voluntary muscle movements. Ataxia may be an adverse effect of drugs used to treat either HIV or opportunistic infections or may be caused by neurological conditions associated with HIV.

## Atherosclerosis

The gradual build-up of plaque inside of artery walls. (Plaque is made up of fat, cholesterol, calcium, and other substances found in blood.) Over time, the plaque hardens and narrows the arteries, decreasing the flow of oxygen-rich blood to organs and other parts of the body.

## Attenuated

**ALSO KNOWN AS:** Live Attenuated

## **Autoimmune Disorder**

A condition that occurs when the immune system mistakenly attacks and destroys healthy body tissue. Autoimmune disorders may be caused by drugs used to treat opportunistic infections.

**SEE RELATED TERM(S):** Immune System

## **Avascular Necrosis (AVN)**

Death of bone tissue (osteonecrosis) due to a lack of blood supply.

Avascular necrosis (AVN) most commonly affects the hip. Symptoms include pain in the affected area of the body, limited range of motion, joint stiffness, muscle spasms, and limping. AVN is associated with several medical conditions, including cancer and HIV infection.

**SEE RELATED TERM(S):** Osteonecrosis

## B Cell

ALSO KNOWN AS: B Lymphocyte

## B Lymphocyte

ALSO KNOWN AS: B Cell

A type of lymphocyte. B lymphocytes (B cells) produce antibodies to help the body fight infection.

SEE RELATED TERM(S): Antibody, Lymphocyte

## b.i.d.

ALSO KNOWN AS: BID

## Bactericide

A drug used to kill bacteria.

SEE RELATED TERM(S): Bacterium

## Bacteriostat

A drug used to prevent the growth of bacteria. Bacteriostats do not kill bacteria.

SEE RELATED TERM(S): Bacterium

## Bacterium

A single-celled microorganism. Bacteria occur naturally almost everywhere on earth, including in humans. Some bacteria can cause disease in humans. People with weakened immune systems, including people with HIV, are at a higher risk for bacterial infections than people with healthy immune systems.

## Bartonellosis

A group of infections caused by the bacteria *Bartonella*. Examples of the various infections include cat scratch disease, trench fever, bacillary angiomatosis (BA), and bacillary peliosis hepatitis. BA and bacillary peliosis hepatitis occur only in people with weakened immune systems, such as people with HIV.

SEE RELATED TERM(S): Opportunistic Infection

## Baseline

An initial measurement used as the basis for future comparison. For people infected with HIV, baseline testing includes CD4 count, viral load (HIV RNA), and resistance testing. Baseline test results are used to guide HIV treatment choices and monitor effectiveness of antiretroviral therapy (ART).

## Basic Chemistry Profile

**ALSO KNOWN AS:** Comprehensive Metabolic Panel

## Basophil

A type of white blood cell that helps the body fight infection by triggering an inflammatory response to an antigen.

**SEE RELATED TERM(S):** Antigen, White Blood Cell

## B-Cell Lymphoma

A type of lymphoma (cancer of the lymphatic system) that starts in the B lymphocytes (B cells). People with weakened immune systems, including people with HIV, are at a higher risk for B-cell lymphomas than people with healthy immune systems. In people infected with HIV, certain B-cell lymphomas are considered AIDS-defining conditions.

**SEE RELATED TERM(S):** AIDS-Defining Cancer, AIDS-Defining Condition, B Lymphocyte, Lymphoma

## Beta-2 Microglobulin (B2M)

A protein found on the surface of many cells, including white blood cells. Beta-2 microglobulin (B2M) levels increase during infection with some viruses, including HIV.

## bid

**ALSO KNOWN AS:** BID

## BID

**ALSO KNOWN AS:** bid, b.i.d.

An abbreviation meaning “two times a day.” The abbreviation is commonly used in drug dosing instructions.

## Bilirubin

A reddish-yellow substance produced during the normal breakdown of red blood cells. Bilirubin is normally processed through the liver and eventually excreted from the body. Excess bilirubin in the blood may indicate liver damage or disease.

**SEE RELATED TERM(S):** Jaundice, Liver, Liver Function Test

## Bioavailability

A measure of the rate and extent to which a drug is absorbed and becomes available at the site of drug action in the body.

**SEE RELATED TERM(S):** Pharmacology

## Biopsy

Removal of tissue, cells, or fluid from the body for examination under a microscope. Biopsies are used to diagnose disease.

## Black Box Warning

**ALSO KNOWN AS:** Boxed Warning

## Black Label Warning

**ALSO KNOWN AS:** Boxed Warning

## Blip

A temporary, detectable increase in the amount of HIV in the blood (viral load) that occurs after antiretroviral therapy (ART) has effectively suppressed the virus to an undetectable level. Isolated blips are not considered a sign of virologic failure.

**SEE RELATED TERM(S):** Undetectable Viral Load, Viral Load, Virologic Failure

## Blood-Brain Barrier

A semi-permeable layer of tightly joined cells that separate the brain from circulating blood. The blood-brain barrier prevents potentially dangerous substances in the blood, such as disease-causing organisms or chemical compounds, from entering the brain tissue. Certain antiretroviral (ARV) drugs can cross the blood-brain barrier and may help stop or slow HIV damage to the brain.

## Blood Sugar

**ALSO KNOWN AS:** Glucose

## Blood Thinner

**ALSO KNOWN AS:** Anticoagulant

## Body Habitus Changes

Noticeable physical changes in body shape or appearance. In people with HIV, these changes may be due to HIV infection, opportunistic infections, or antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Gynecomastia, Lipodystrophy, Wasting Syndrome

## Bone Density Test

**ALSO KNOWN AS:** Dual Energy X-Ray Absorptiometry

## Bone Marrow

The soft, sponge-like tissue in the center of bones. There are two types of bone marrow: yellow (made up of mostly fat cells) and red (the source of red blood cells, platelets, and most white blood cells).

## Bone Marrow Suppression

**ALSO KNOWN AS:** Myelosuppression

## Boosting

Using an antiretroviral (ARV) drug to increase the effectiveness of another ARV drug. For example, drugs in the protease inhibitor (PI) ARV drug class are often boosted with the ARV drug ritonavir.

**SEE RELATED TERM(S):** Protease Inhibitor

## Boxed Warning

**ALSO KNOWN AS:** Black Box Warning, Black Label Warning

The strongest form of warning required by the Food and Drug Administration (FDA) for prescription drug labeling. A boxed warning alerts health care providers and consumers to increased risk of serious adverse reactions associated with use of a drug or to restrictions on use of a drug. The boxed warning is presented in a box surrounded by a black border and is placed on the drug label and any package inserts or promotional materials intended for the prescriber or patient.

**SEE RELATED TERM(S):** Food and Drug Administration, Package Insert

## Brain Attack

**ALSO KNOWN AS:** Stroke

## Bronchopneumonia

**ALSO KNOWN AS:** Pneumonia

## Bronchoscopy

A procedure used to look inside the airways of the lungs. The procedure is done using a bronchoscope, a flexible tube that has a camera on one end of it. A bronchoscopy may be used to diagnose HIV-related infections or cancer.

## Bronchospasm

Sudden, involuntary contraction of the muscles of the bronchii (airways in the lungs).

## Budding

The sixth of seven steps in the HIV life cycle. During budding, new HIV RNA and HIV proteins made by the host cell move to the surface of the host cell and assemble into an immature (noninfectious) HIV. After the immature HIV is formed, the virus pushes itself out of the host cell, taking with it part of the host cell's outer membrane.

**SEE RELATED TERM(S):** Life Cycle

## Buffalo Hump

**ALSO KNOWN AS:** Dorsocervical Fat Pad

## Burkitt Lymphoma

**ALSO KNOWN AS:** Burkitt's Lymphoma

A fast-growing type of B-cell non-Hodgkin lymphoma (cancer of the lymphatic system). In people with HIV, Burkitt lymphoma is considered an AIDS-defining cancer.

**SEE RELATED TERM(S):** AIDS-Defining Cancer, Lymphoma, Non-Hodgkin Lymphoma

## Burkitt's Lymphoma

**ALSO KNOWN AS:** Burkitt Lymphoma

## Cachexia

Physical wasting (loss of body weight and muscle mass) frequently associated with chronic disease, such as cancer or AIDS.

## Campylobacteriosis

An enteric (intestinal) infection caused by the bacterium *Campylobacter*. Symptoms of campylobacteriosis, if any, include diarrhea (often bloody), abdominal cramping and pain, nausea and vomiting, fever, and fatigue. Some people with campylobacteriosis may develop Guillain-Barré syndrome. Certain bacterial enteric infections, including campylobacteriosis, occur at a much higher rate in people with HIV than in the general population.

**SEE RELATED TERM(S):** Guillain-Barré Syndrome

## Candidiasis

**ALSO KNOWN AS:** Yeast Infection

A fungal infection caused by overgrowth of the yeast *Candida* (usually *Candida albicans*) in moist areas of the body. Candidiasis can affect the mucous membranes of the mouth, vagina, and anus. In people with HIV, candidiasis of the bronchi, trachea, lungs, or esophagus is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Opportunistic Infection

## Canker Sore

**ALSO KNOWN AS:** Aphthous Ulcer

## Cardiomyopathy

Disease of the heart muscle. Cardiomyopathy weakens the heart muscle, making it hard for the heart to pump blood to the rest of the body. HIV infection or use of some antiretroviral (ARV) drugs may cause cardiomyopathy.

## Cardiovascular

Relating to or involving the heart and blood vessels. Use of some antiretroviral (ARV) drugs may increase the risk of cardiovascular disease.



## CARE Act

**ALSO KNOWN AS:** Ryan White HIV/AIDS Program

## CCR5

**ALSO KNOWN AS:** Chemokine Receptor 5

A protein on the surface of certain immune system cells, including CD4 T lymphocytes (CD4 cells). CCR5 can act as a coreceptor (a second receptor binding site) for HIV when the virus enters a host cell.

**SEE RELATED TERM(S):** CCR5 Antagonist, Coreceptor, Fusion, Life Cycle

## CCR5 Antagonist

**ALSO KNOWN AS:** CCR5 Inhibitor, CCR5 Receptor Blocker

Antiretroviral (ARV) HIV drug class. CCR5 antagonists block the CCR5 receptor on the surface of certain immune cells, such as CD4 T lymphocytes (CD4 cells). This prevents HIV from entering the cell.

**SEE RELATED TERM(S):** CCR5, Drug Class

## CD4 Count

**ALSO KNOWN AS:** CD4 Cell Count, CD4 T Lymphocyte Count

A laboratory test that measures the number of CD4 T lymphocytes (CD4 cells) in a sample of blood. In people with HIV, the CD4 count is the most important laboratory indicator of immune function and the strongest predictor of HIV progression. The CD4 count is one of the factors used to determine when to start antiretroviral therapy (ART). The CD4 count is also used to monitor response to ART.

**SEE RELATED TERM(S):** CD4 Percentage, CD4 T Lymphocyte, HIV Progression

## CCR5 Inhibitor

**ALSO KNOWN AS:** CCR5 Antagonist

## CCR5 Receptor Blocker

**ALSO KNOWN AS:** CCR5 Antagonist

## CD4 Cell

**ALSO KNOWN AS:** CD4 T Lymphocyte

## CD4 Cell Count

**ALSO KNOWN AS:** CD4 Count

## **CD4 Cell Percentage**

**ALSO KNOWN AS:** CD4 Percentage

## **CD4 Percentage**

**ALSO KNOWN AS:** CD4 Cell Percentage, CD4 T Lymphocyte Percentage

Percentage of white blood cells that are CD4 T lymphocytes (CD4 cells). In certain cases, such as during acute HIV infection or HIV infection in children younger than 5 years of age, CD4 percentage is used rather than CD4 count to assess HIV progression or response to antiretroviral therapy (ART).

**SEE RELATED TERM(S):** CD4 Count, CD4 T Lymphocyte, HIV Progression

## **CD4 Receptor**

A protein found primarily on the surface of CD4 T lymphocytes (CD4 cells). To enter a host cell, HIV binds to a CD4 receptor and a coreceptor (either CCR5 or CXCR4) on the host cell.

**SEE RELATED TERM(S):** CCR5, CD4 T Lymphocyte, CXCR4, Fusion, Life Cycle

## **CD4 T Lymphocyte**

**ALSO KNOWN AS:** CD4 Cell, Helper T Cell

A type of lymphocyte. CD4 T lymphocytes (CD4 cells) help coordinate the immune response by stimulating other immune cells, such as macrophages, B lymphocytes (B cells), and CD8 T lymphocytes (CD8 cells), to fight infection. HIV weakens the immune system by destroying CD4 cells.

**SEE RELATED TERM(S):** CD4 Count, CD4 Percentage, Lymphocyte, T Lymphocyte

## **CD4 T Lymphocyte Count**

**ALSO KNOWN AS:** CD4 Count

## **CD4 T Lymphocyte Percentage**

**ALSO KNOWN AS:** CD4 Percentage

## **CD8 Cell**

**ALSO KNOWN AS:** CD8 T Lymphocyte

## CD8 T Lymphocyte

**ALSO KNOWN AS:** CD8 Cell, Cytotoxic T Lymphocyte, Killer T Cell

A type of lymphocyte. CD8 T lymphocytes (CD8 cells) recognize and destroy cells infected with microorganisms, such as bacteria or viruses.

**SEE RELATED TERM(S):** Lymphocyte, T Lymphocyte

## CDC-INFO

A service of the Centers for Disease Control and Prevention (CDC) that disseminates health information on a wide variety of disease prevention and health promotion topics to the general public, health care providers, and partners worldwide. Information is available via the Web, phone, e-mail, and postal mail.

**SEE RELATED TERM(S):** Centers for Disease Control and Prevention

## Cell-Mediated Immunity

**ALSO KNOWN AS:** Cellular Immunity

Type of immune response that is produced by the direct action of immune cells, such as T lymphocytes (T cells), rather than by antibodies.

**SEE RELATED TERM(S):** Humoral Immunity, T Lymphocyte

## Cellular Immunity

**ALSO KNOWN AS:** Cell-Mediated Immunity

## Centers for Disease Control and Prevention (CDC)

A federal agency that protects the health and safety of people at home and abroad through health promotion; prevention and control of disease, injury, and disability; and preparedness for new health threats.

**SEE RELATED TERM(S):** CDC-INFO, Centers for Disease Control and Prevention-National Prevention Information Network

## Centers for Disease Control and Prevention-National Prevention Information Network (CDC-NPIN)

**ALSO KNOWN AS:** National Prevention Information Network

A service of the Centers for Disease Control and Prevention (CDC) that disseminates information on HIV/AIDS, viral hepatitis, other sexually transmitted diseases, and tuberculosis (TB). Information is available via the Web, phone, e-mail, and postal mail.

**SEE RELATED TERM(S):** Centers for Disease Control and Prevention

## **Centers for Medicare and Medicaid Services (CMS)**

**ALSO KNOWN AS:** Health Care Financing Administration

A federal agency that administers the Medicare program and monitors the Medicaid programs offered by each state, including the Children's Health Insurance Program.

## **Central Nervous System (CNS)**

The part of the nervous system that is made up of the brain and spinal cord. The central nervous system (CNS) serves as the main processing center for the entire nervous system and coordinates all body functions. HIV infection or use of some antiretroviral (ARV) drugs can cause damage to the CNS.

## **Cerebrospinal Fluid (CSF)**

A clear, nutrient-rich fluid that surrounds the brain and spinal cord. Cerebrospinal fluid (CSF) acts as a cushion, protecting the brain and spinal cord from injury.

## **Cervical Cancer**

A type of cancer that develops in the cervix. Cervical cancer is almost always caused by the human papillomavirus (HPV), which is spread through sexual contact. In women with HIV, invasive cervical cancer is an AIDS-defining cancer.

**SEE RELATED TERM(S):** AIDS-Defining Cancer, Cervix, Human Papillomavirus

## **Cervix**

The lower, narrow end of the uterus (womb), which forms a canal between the uterus and vagina.

## **Cesarean Delivery**

Delivery of a baby by a surgical incision through the mother's abdominal wall and uterus. In some pregnant women infected with HIV, a scheduled Cesarean delivery may reduce the risk of mother-to-child transmission of HIV.

**SEE RELATED TERM(S):** Cesarean Section, Prevention of Mother-to-Child Transmission

## Cesarean Section

**ALSO KNOWN AS:** C-Section

Surgical incision through the abdominal wall and uterus to deliver a baby.

**SEE RELATED TERM(S):** Cesarean Delivery

## Chagas Disease

**ALSO KNOWN AS:** American Trypanosomiasis, South American Trypanosomiasis

A disease caused by the parasite *Trypanosoma cruzi* (a type of protozoa). Chagas disease is most commonly transmitted when people come into contact with the feces of an infected reduviid bug, a blood-sucking insect that feeds on humans and animals. In the earliest stage of infection, Chagas disease usually has few signs or symptoms.

However, if untreated, the disease becomes a lifelong infection. In people with HIV, reactivation of chronic Chagas disease infection can cause inflammation of the brain and meninges (meningoencephalitis).

**SEE RELATED TERM(S):** Opportunistic Infection

## Chancroid

A sexually transmitted infection caused by the bacterium *Hemophilus ducreyi*. Chancroid causes genital ulcers (sores), which increase the risk of HIV transmission.

## Chemokine Receptor 4

**ALSO KNOWN AS:** CXCR4

## Chemokine Receptor 5

**ALSO KNOWN AS:** CCR5

## Chemokines

Small proteins secreted by cells to mobilize and activate infection-fighting white blood cells. Chemokines are involved in many immune and inflammatory responses.

## Chemoprevention

**ALSO KNOWN AS:** Chemoprophylaxis

Use of specific drugs, vitamins, or other substances to reverse, suppress, or prevent a disease.

## Chemoprophylaxis

**ALSO KNOWN AS:** Chemoprevention

## Chemotherapy

Use of chemicals to treat a disease. Although chemotherapy is used to describe any therapy involving the use of chemical-based agents, most often it refers to the use of chemical-based agents to treat cancer.

## Child-Pugh Score

**ALSO KNOWN AS:** Child-Turcotte-Pugh Classification System

## Child-Turcotte-Pugh Classification System

**ALSO KNOWN AS:** Child-Pugh Score

A classification system used to measure liver function, especially in people with chronic liver disease. The system may be used to assess liver function in people who have HIV/hepatitis C virus (HCV) coinfection.

## Chlamydia

A common sexually transmitted infection caused by the bacterium *Chlamydia trachomatis*. Chlamydia often has mild or no symptoms, but if left untreated, it can lead to serious complications, including infertility. Chlamydia may increase the risk of HIV transmission.

**SEE RELATED TERM(S):** Sexually Transmitted Infection

## Cholangiopathy

Bile duct disease. (Bile ducts are tubes that carry bile from the gallbladder to the small intestine, where the bile is used to digest fats.) Cholangiopathy may occur as a complication of AIDS or may be caused by certain opportunistic infections.

## Cholesterol

A waxy, fat-like substance that is made by the liver or absorbed from animal food sources such as eggs, meat, and dairy products. The body uses cholesterol to insulate nerves, make cell tissues, and produce certain hormones. Excess cholesterol, however, can clog the arteries and lead to heart disease. Some antiretroviral (ARV) drugs may cause high cholesterol levels.

**SEE RELATED TERM(S):** Atherosclerosis

## Chromosome

A thread-like structure found within a cell. Chromosomes, which are made of DNA coiled around proteins, carry all of the genetic information essential to the life of the cell.

## Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)

A rare neurological disorder in which the immune system mistakenly attacks part of the peripheral nervous system. Chronic inflammatory demyelinating polyneuropathy (CIDP) primarily destroys the myelin that covers the peripheral nerves, causing the nerve signals to slow down. This damage can gradually weaken the legs and, to a lesser extent, the arms. CIDP has been associated with advanced HIV infection.

**SEE RELATED TERM(S):** Myelin, Peripheral Nervous System

## Circumoral

Pertaining to the area of the face around the mouth.

## Clade

**ALSO KNOWN AS:** Subtype

## Class-Sparing Regimen

An antiretroviral (ARV) drug regimen that purposefully excludes all ARV drugs from a specific drug class. Class-sparing regimens are used to save specific ARV drugs for future use in case a regimen needs to be changed because of toxicity or drug resistance. A class-sparing regimen may also be used to avoid adverse effects associated with a specific drug class.

**SEE RELATED TERM(S):** Drug Class

## Clastogenic

Causing breaks in chromosomes, which results in sections of a chromosome being deleted or rearranged. Before being approved, drugs—including antiretroviral (ARV) drugs—are tested to assess their potential for clastogenic effects.

**SEE RELATED TERM(S):** Chromosome

## Clinical Alert

An early notice of urgent findings from federally funded clinical trials. Clinical alerts are disseminated in a variety of ways, including online, to advise health care professionals and others of research findings that could affect patient care.

**SEE RELATED TERM(S):** Clinical Trial

## Clinical Endpoint

**ALSO KNOWN AS:** Endpoint, Outcome Measure

In a clinical trial, an outcome or event used to objectively measure the effect of a drug or other intervention being studied. Common endpoints include severe toxicity, disease progression, and death.

**SEE RELATED TERM(S):** Clinical Trial, Surrogate Endpoint

## Clinical Failure

A type of HIV treatment failure. The occurrence or recurrence of an HIV-related complication, usually an AIDS-defining condition, after 3 months of antiretroviral therapy (ART) is considered clinical failure.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Antiretroviral Therapy, Treatment Failure

## Clinical Latency

**ALSO KNOWN AS:** Asymptomatic HIV Infection

## Clinical Progression

Advance of disease that can be measured by observable and diagnosable signs or symptoms. For example, HIV progression can be measured by change in CD4 count.

**SEE RELATED TERM(S):** CD4 Count, HIV Progression

## Clinical Trial

A research study that determines whether a new drug (or other intervention) is both safe and effective for humans. There are two main types of clinical trials: interventional trials and observational trials.

**SEE RELATED TERM(S):** Interventional Trial, Observational Trial, Phase I Trial, Phase II Trial, Phase III Trial, Phase IV Trial



## ClinicalTrials.gov

An online, searchable database of up-to-date information on thousands of federally and privately supported clinical trials for a wide range of diseases and conditions, including HIV infection. The site provides information about a trial's purpose, who may participate, study site locations, and contact information. ClinicalTrials.gov is managed by the federal government.

**SEE RELATED TERM(S):** Clinical Trial

## Cmax

**ALSO KNOWN AS:** Peak Concentration

A pharmacokinetic measure used to determine drug dosing. Cmax is the highest concentration of a drug in the blood, cerebrospinal fluid, or target organ after a dose is given.

**SEE RELATED TERM(S):** Cmin, Pharmacokinetics

## Cmin

**ALSO KNOWN AS:** Trough Concentration, Trough Level

A pharmacokinetic measure used to determine drug dosing. Cmin is the lowest concentration of a drug in the blood, cerebrospinal fluid, or target organ after a dose is given.

**SEE RELATED TERM(S):** Cmax, Pharmacokinetics

## CMV Retinitis

**ALSO KNOWN AS:** Cytomegalovirus Retinitis

## Coagulopathy

A disease or condition that affects the blood's ability to coagulate (clot) normally.

## Coccidioidomycosis

**ALSO KNOWN AS:** Desert Fever, San Joaquin Valley Fever, Valley Fever

An infection caused by breathing in spores of the fungus *Coccidioides immitis*. The infection starts in the lungs but can spread to other parts of the body, including the skin, brain, bones, and heart. In people with HIV, disseminated (extrapulmonary) coccidioidomycosis is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Opportunistic Infection

## **Cognitive Impairment**

Difficulty thinking, reasoning, or remembering. Some people with HIV may have cognitive impairment.

## **Cohort**

A group of individuals with certain characteristics in common, such as age or disease risk factor. For example, participants for a clinical trial may be recruited from a particular cohort, such as women of child-bearing age, children under 5 years old, or males with high blood pressure.

**SEE RELATED TERM(S):** Clinical Trial

## **Coinfection**

When a person has two or more infections at the same time. For example, a person infected with HIV may be coinfecting with hepatitis C (HCV) or tuberculosis (TB) or both.

**SEE RELATED TERM(S):** Monoinfection

## **Colitis**

Inflammation of the colon (large intestine). Symptoms can include abdominal pain, nausea, and diarrhea. Colitis may be associated with HIV infection or related opportunistic infections.

## **Combination Therapy**

**ALSO KNOWN AS:** Antiretroviral Therapy

## **Combined Antiretroviral Therapy**

**ALSO KNOWN AS:** Antiretroviral Therapy

## **Common Logarithm**

**ALSO KNOWN AS:** Log10

## **Communicable Disease**

An infectious disease that is contagious.

**SEE RELATED TERM(S):** Contagious Disease, Infectious Disease

## **Community Programs for Clinical Research on AIDS (CPCRA)**

A federally sponsored program that conducts HIV-related clinical research through a national network of community-based research units. A primary objective of Community Programs for Clinical Research on AIDS (CPCRA) is to involve community-based primary care providers and their patients in HIV/AIDS research.

## **Community-Based Organization (CBO)**

A public or private nonprofit organization that provides services to local community members of an identifiable group, such as people with HIV.

## **Comorbid Condition**

**ALSO KNOWN AS:** Comorbidity

## **Comorbidity**

**ALSO KNOWN AS:** Comorbid Condition

When a person has two or more diseases or conditions at the same time. For example, a person with high blood pressure may also have heart disease.

## **Compassionate Use**

**ALSO KNOWN AS:** Expanded Access

## **Complementary and Alternative Medicine (CAM)**

Health care practices and products that are not considered part of conventional (Western) medicine. Complementary medicine refers to use of nonstandard treatments together with conventional treatments. Alternative medicine refers to use of nonstandard treatments in place of conventional treatments. Examples of complementary and alternative medicine (CAM) include use of herbal medicines, acupuncture, and massage therapy.

**SEE RELATED TERM(S):** National Center for Complementary and Alternative Medicine

## **Complete Blood Count (CBC)**

A blood test that measures the following components in a sample of blood: red blood cells, white blood cells, platelets, and hemoglobin. A complete blood count (CBC) with differential also measures the levels of the five types of white blood cells found in blood: neutrophils, lymphocytes, monocytes, eosinophils, and basophils. The CBC is used to assess overall health and to diagnose and guide treatment of numerous diseases.

## **Comprehensive International Program of Research on AIDS (CIPRA)**

A federal program that provides long-term support to developing countries to conduct HIV/AIDS research relevant to their populations.

## **Comprehensive Metabolic Panel (CMP)**

**ALSO KNOWN AS:** Basic Chemistry Profile

A blood test that measures several parameters, including blood sugar (glucose), proteins, electrolytes (such as sodium and potassium), waste products (such as blood urea nitrogen [BUN] and creatinine), and enzymes. The comprehensive metabolic panel is used to assess overall health and to diagnose and guide treatment of numerous diseases.

## **Concentration**

**ALSO KNOWN AS:** Drug Concentration

## **Concordant Couple**

Sexual partners in which both partners are infected with a sexually transmitted infection, such as HIV.

**SEE RELATED TERM(S):** Discordant Couple

## **Condom**

**ALSO KNOWN AS:** Prophylactic

A device used during sexual intercourse to block semen from coming in contact with the inside of the vagina. Condoms are used to reduce the likelihood of pregnancy and to prevent the transmission of sexually transmitted infections, including HIV. The male condom is a thin rubber cover that fits over a man's erect penis. The female condom is a polyurethane pouch that fits inside the vagina.

## Condyloma Acuminatum

**ALSO KNOWN AS:** Genital Warts

## Conjunctivitis

**ALSO KNOWN AS:** Pink Eye, Red Eye

Inflammation or infection of the conjunctiva, which is the mucous membrane that lines the inner surface of the eye. Conjunctivitis is commonly caused by a bacterial or viral infection, an allergic reaction, or a blocked tear duct (in babies). Conjunctivitis can also occur as part of a hypersensitivity reaction to certain antiretroviral (ARV) drugs.

## Contagious

**ALSO KNOWN AS:** Contagious Disease

## Contagious Disease

**ALSO KNOWN AS:** Contagious

An infectious disease that can be transmitted from person to person. Transmission can occur through direct physical contact, such as by touching or having sex with an infected person; through indirect contact, such as by touching or using an object that an infected person has touched or used; or through close proximity, such as being exposed to an infected person's sneeze or cough.

**SEE RELATED TERM(S):** Infectious Disease, Sexual Transmission

## Contraindication

A symptom or condition that makes a particular treatment or procedure inadvisable because of potential for harm. There are two types of contraindications: relative and absolute.

**SEE RELATED TERM(S):** Absolute Contraindication, Relative Contraindication

## Control Arm

In a clinical trial, the group of participants that is not given the experimental treatment being studied. The control arm receives either the standard treatment for the disease or a placebo. The control arm is compared to the experimental treatment arm to determine whether the experimental treatment works.

**SEE RELATED TERM(S):** Clinical Trial, Controlled Trial, Experimental Arm, Placebo

## Controlled Trial

A type of clinical trial that includes a control arm. The control arm is compared to the experimental treatment arm to determine whether the experimental treatment works.

**SEE RELATED TERM(S):** Clinical Trial, Control Arm, Experimental Arm

## Core

**ALSO KNOWN AS:** HIV Viral Core

The bullet-shaped center of HIV. The viral core contains the genetic information (two single strands of RNA) and three enzymes needed for HIV to replicate.

**SEE RELATED TERM(S):** p24

## Coreceptor

A protein on the surface of a cell that serves as a second binding site for a virus or other molecule. In order to enter a host cell, HIV must bind to two sites on the cell: the primary CD4 receptor and either the CCR5 or CXCR4 coreceptor.

**SEE RELATED TERM(S):** CCR5, CXCR4, Receptor

## Coronary Risk Profile

**ALSO KNOWN AS:** Lipid Profile

## Cross Resistance

Resistance to one or more drugs that occurs as a result of previous exposure to a similar drug. For example, HIV resistance to one non-nucleoside reverse transcriptase inhibitor (NNRTI) drug may produce resistance to all drugs in the NNRTI drug class, including drugs never used. Excluding all drugs in a drug class from an HIV regimen (drug sparing) is a strategy used to prevent cross resistance.

**SEE RELATED TERM(S):** Class-Sparing Regimen, Drug Resistance

## Cross Sensitivity

A sensitivity reaction to a drug that predisposes a person to react similarly to a different, but related, drug. For example, a person who has an allergic reaction to penicillin may also have an allergic reaction to amoxicillin, a related antibiotic.

## Cryoablation

**ALSO KNOWN AS:** Cryotherapy

## Cryotherapy

**ALSO KNOWN AS:** Cryoablation

A minimally invasive treatment in which liquid nitrogen or argon gas is used to freeze and destroy diseased tissue.

## Crypto

**ALSO KNOWN AS:** Cryptosporidiosis

## Cryptococcal Meningitis

A life-threatening infection caused by the fungus *Cryptococcus neoformans*, which infects the membranes surrounding the brain and spinal cord. Symptoms include fever, malaise, and headache. Cryptococcal meningitis most often affects people with weakened immune systems, including people with HIV. In people with HIV, cryptococcal meningitis is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Opportunistic Infection

## Cryptococcosis

**ALSO KNOWN AS:** Torulosis

An infection caused by the fungus *Cryptococcus neoformans*. The fungus enters and infects the body through the lungs. Cryptococcosis may go away on its own, remain in the lungs, or spread throughout the body (disseminate). Most cases of cryptococcosis are in people with weakened immune systems, such as people with HIV. In people with HIV, cryptococcosis is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Cryptococcal Meningitis, Opportunistic Infection

## Cryptosporidiosis

**ALSO KNOWN AS:** Crypto

An infection caused by the protozoan *Cryptosporidium*. Symptoms of cryptosporidiosis include diarrhea, nausea, vomiting, and lower abdominal cramping. In people with weakened immune systems, such as people with HIV, cryptosporidiosis can lead to severe and life-threatening loss of muscle and body mass and malnutrition. In people with HIV, chronic cryptosporidiosis (lasting more than 1 month) is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, *Cryptosporidium*, Opportunistic Infection

## Cryptosporidium

The protozoan parasite that causes the diarrheal disease cryptosporidiosis. *Cryptosporidium* lives in the intestines of infected animals and humans and may be found in soil, food, water, or surfaces that have been contaminated with the feces from infected humans or animals.

**SEE RELATED TERM(S):** Cryptosporidiosis, Protozoan

## Crystalluria

Crystals in the urine. (Crystals are tiny stones composed of chemicals such as calcium.) Use of antiretroviral (ARV) drugs may cause crystalluria.

## C-Section

**ALSO KNOWN AS:** Cesarean Section

## Cutaneous

Pertaining to the skin.

## CXCR4

**ALSO KNOWN AS:** Chemokine Receptor 4, Fusin

A protein on the surface of certain immune system cells, including CD4 T lymphocytes (CD4 cells). CXCR4 can act as a coreceptor (a second receptor binding site) for HIV when the virus enters a host cell.

**SEE RELATED TERM(S):** Coreceptor, Fusion, Life Cycle



## CYP3A4

**ALSO KNOWN AS:** Cytochrome P450 3A4

An enzyme that plays a key role in the metabolism of approximately half the drugs in use today. CYP3A4 is a member of the cytochrome P450 family of enzymes.

**SEE RELATED TERM(S):** Cytochrome P450

## Cystoisosporiasis

**ALSO KNOWN AS:** Isosporiasis

## Cytochrome P450 (CYP450)

A group of enzymes involved in the breakdown of drugs in the liver. Many drugs can inhibit or enhance the activity of these enzymes, causing drug levels in the blood to increase or decrease. Cytochrome P450 (CYP450) enzymes metabolize all protease inhibitors (PIs) and non-nucleoside reverse transcriptase inhibitors (NNRTIs) and can cause drug interactions that may result in adverse effects.

**SEE RELATED TERM(S):** Drug Interaction

## Cytokine

A family of proteins produced by cells, especially by immune cells. Cytokines act as chemical messengers between cells to regulate immune responses.

**SEE RELATED TERM(S):** Interferon, Interleukin-2, Interleukin-7

## Cytomegalovirus (CMV)

A herpesvirus that can cause infection in many parts of the body. Typically, only people with weakened immune systems become seriously ill from cytomegalovirus (CMV) infection. In people with HIV, CMV can cause serious illnesses, including pneumonia (infection of the lungs), gastroenteritis (infection of the gastrointestinal tract), encephalitis (inflammation of the brain), or retinitis (infection of the eye). CMV infection that affects a body part other than the liver, spleen, or lymph nodes is an AIDS-defining condition in people with HIV.

**SEE RELATED TERM(S):** Cytomegalovirus Retinitis, Herpesviruses

## **Cytomegalovirus Retinitis**

**ALSO KNOWN AS:** CMV Retinitis

Viral inflammation of the retina of the eye caused by cytomegalovirus (CMV). Symptoms, if any, include blurred vision, floaters, and blind spots. In people with HIV, CMV retinitis (with loss of vision) is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Cytomegalovirus, Opportunistic Infection, Retina

## **Cytopenia**

A lower-than-normal number of blood cells, including red blood cells, white blood cells, or platelets.

## **Cytotoxic**

Having the ability to kill cells.

## **Cytotoxic T Lymphocyte**

**ALSO KNOWN AS:** CD8 T Lymphocyte

## Data and Safety Monitoring Board (DSMB)

A committee of clinical research experts, such as physicians and statisticians, and patient advocates who monitor the progress of a clinical trial and review safety and effectiveness data while the trial is ongoing. This committee is independent of the people, organizations, and institutions conducting the clinical trial. Data and Safety Monitoring Boards (DSMBs) can recommend that a trial be stopped early because of concerns about participant safety or because the main research question has been answered.

**SEE RELATED TERM(S):** Clinical Trial

## Definitive

For certain; without a doubt. An initial positive HIV antibody test must be confirmed by a positive Western blot test for a person to have a definitive diagnosis of HIV infection.

**SEE RELATED TERM(S):** Presumptive

## Dendritic Cell

A type of antigen-presenting cell found in many tissues throughout the body. Dendritic cells capture antigens with their threadlike tentacles and present the antigens to T lymphocytes (T cells), stimulating an immune response.

**SEE RELATED TERM(S):** Antigen-Presenting Cell

## Dendritic Cell Vaccine

An experimental vaccine that uses dendritic cells to boost the immune system. Dendritic cell vaccines are currently being studied as a possible way to treat people with HIV.

**SEE RELATED TERM(S):** Dendritic Cell

## Deoxyribonucleic Acid (DNA)

One of two types of genetic material found in all living cells and many viruses. (The other type of genetic material is RNA.) Deoxyribonucleic acid (DNA) carries the genetic instructions for the development and function of an organism. DNA allows for the transmission of genetic information from one generation to the next.

**SEE RELATED TERM(S):** Ribonucleic Acid

## Department of Health and Human Services (HHS)

The primary federal agency for protecting the health of all Americans and providing essential human services. The Department of Health and Human Services (HHS) works closely with state and local governments, and many HHS-funded services are provided at the local level by state or county agencies, or through private sector grantees. The agency's 11 operating divisions, including the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), and the National Institutes of Health (NIH), collectively administer more than 300 HHS programs.

**SEE RELATED TERM(S):** Centers for Disease Control and Prevention, Food and Drug Administration, National Institutes of Health

## Depression

A mood disorder characterized by sadness, inactivity, and inability to take pleasure or interest in usual activities. The changes in mood can interfere with daily life and normal functioning. Use of some antiretroviral (ARV) drugs may cause depression.

## Desensitization

Preventing or reducing a hypersensitivity reaction to a drug by gradually increasing the dose of the drug.

**SEE RELATED TERM(S):** Hypersensitivity, Rechallenge

## Desert Fever

**ALSO KNOWN AS:** Coccidioidomycosis

## Diabetes

**ALSO KNOWN AS:** Diabetes Mellitus

A group of diseases characterized by high levels of blood sugar (glucose). Type I diabetes occurs when the body fails to produce insulin, which is a hormone that regulates blood sugar. Type II diabetes occurs when the body either does not produce enough insulin or does not use insulin normally (insulin resistance). Common symptoms of diabetes include frequent urination, unusual thirst, and extreme hunger. Use of some antiretroviral (ARV) drugs may increase the risk of diabetes.

**SEE RELATED TERM(S):** Hyperglycemia, Insulin Resistance

## Diabetes Mellitus

**ALSO KNOWN AS:** Diabetes

## Directly Observed Therapy (DOT)

A method of drug administration in which a health care professional watches as a person takes each dose of a medication. Directly observed therapy (DOT) is used to ensure the person receives and takes all medications as prescribed and to monitor response to treatment. DOT is widely used to manage tuberculosis (TB) disease. In HIV treatment, DOT is sometimes called directly administered antiretroviral therapy (DAART).

**SEE RELATED TERM(S):** Self-Administered Therapy

## Discordant Couple

Sexual partners in which only one partner is infected with a sexually transmitted infection, such as HIV, and the other partner is not infected.

**SEE RELATED TERM(S):** Concordant Couple, Sexually Transmitted Infection

## Disseminated

When an infection or disease has widely dispersed in a tissue, an organ, or the entire body.

## Division of Acquired Immunodeficiency Syndrome (DAIDS)

A federal program that supports research on the following: how HIV is transmitted and causes disease; the development of therapies for HIV infection, its complications, and co-infections; and the development of vaccines and other prevention strategies.

**SEE RELATED TERM(S):** National Institute of Allergy and Infectious Diseases

## D/M-Tropic Virus

**ALSO KNOWN AS:** Dual-Tropic Virus

## Dorsocervical Fat Pad

**ALSO KNOWN AS:** Buffalo Hump

An accumulation of fat on the back of the neck between the shoulders. A dorsocervical fat pad may be due to use of some antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Lipodystrophy

## **Dosage**

The administration of individual doses of a medication as part of a medication regimen, usually expressed as quantity per unit of time. For example, a prescribed dosage might consist of 25 mg of a medication given 3 times a day for 6 days.

## **Dose**

The quantity of a medication to be given at one time, or the total quantity of a medication administered during a specified period of time. For example, a patient might receive an initial medication dose of 50 mg, and, during the entire course of treatment, receive a total medication dose of 500 mg.

## **Dose-Ranging Trial**

A type of clinical trial. In dose-ranging trials, different doses of a drug are tested. Trial results are compared to determine which dose is most safe and effective.

**SEE RELATED TERM(S):** Clinical Trial

## **Dose-Response Relationship**

The association between the dose of a drug and the body's corresponding response to that dose.

## **Double-Blind Study**

**ALSO KNOWN AS:** Double-Masked Study

A type of clinical trial in which neither the participants nor the researchers know which participants are receiving the experimental treatment and which participants are receiving the control treatment.

**SEE RELATED TERM(S):** Clinical Trial, Control Arm, Single-Blind Study

## **Double-Masked Study**

**ALSO KNOWN AS:** Double-Blind Study

## Drug Antagonism

**ALSO KNOWN AS:** Drug Opposition

An interaction between two or more drugs that have opposite effects on the body. Drug antagonism may block or reduce the effectiveness of one or more of the drugs.

**SEE RELATED TERM(S):** Drug Synergism

## Drug Class

A group of drugs that share common properties, which may include a similar mechanism of action, chemical structure, or approved use. Antiretroviral (ARV) HIV drugs are classified into six drug classes on the basis of how each drug interferes with the HIV life cycle. These six classes include the nucleoside reverse transcriptase inhibitors (NRTIs), non-nucleoside reverse transcriptase inhibitors (NNRTIs), protease inhibitors (PIs), fusion inhibitors, CCR5 antagonists, and integrase strand transfer inhibitors (INSTIs).

**SEE RELATED TERM(S):** CCR5 Antagonist, Fusion Inhibitor, Integrase Strand Transfer Inhibitor, Life Cycle, Non-Nucleoside Reverse Transcriptase Inhibitor, Nucleoside Reverse Transcriptase Inhibitor, Protease Inhibitor

## Drug Concentration

**ALSO KNOWN AS:** Concentration

The amount of a drug in a given volume of blood plasma, measured as the number of micrograms per milliliter.

## Drug Formulation

**ALSO KNOWN AS:** Formulation

## Drug Holiday

**ALSO KNOWN AS:** Structured Treatment Interruption

## Drug Hypersensitivity Syndrome

**ALSO KNOWN AS:** Hypersensitivity Syndrome

## Drug Interaction

A change in a drug's effect on the body when taken with certain other drugs, supplements, or food, or when taken together with certain medical conditions. A drug interaction may cause the drug to be less effective, cause adverse effects, or increase the action of the drug.

Potential drug interactions are considered when selecting antiretroviral (ARV) drugs to include in an HIV treatment regimen.

**SEE RELATED TERM(S):** Drug-Drug Interaction, Drug-Food Interaction

## Drug Opposition

**ALSO KNOWN AS:** Drug Antagonism

## Drug Reaction with Eosinophilia and Systemic Symptoms

**ALSO KNOWN AS:** Hypersensitivity Syndrome

## Drug Resistance

**ALSO KNOWN AS:** Resistance

When a bacteria, virus, or other microorganism mutates (changes form) and becomes insensitive to (resistant to) a drug that was previously effective. Drug resistance can be a cause of HIV treatment failure.

**SEE RELATED TERM(S):** Acquired Resistance, Drug-Susceptible, Transmitted Resistance, Treatment Failure

## Drug Synergism

**ALSO KNOWN AS:** Synergism, Synergy

An interaction between two or more drugs that causes the total effect of the drugs to be greater than the sum of the individual effects of each drug. A synergistic effect can be beneficial or harmful.

**SEE RELATED TERM(S):** Drug Antagonism

## Drug Toxicity

**ALSO KNOWN AS:** Toxicity



## Drug-Drug Interaction

A change in a drug's effect on the body when the drug is taken together with a second drug. A drug-drug interaction can delay, decrease, or enhance absorption of either drug. This can make either or both of the drugs less effective or more active, or cause adverse effects.

**SEE RELATED TERM(S):** Drug Antagonism, Drug Interaction, Drug Synergism

## Drug-Food Interaction

A change in a drug's effect on the body when the drug is taken together with certain foods or beverages. Not all drugs are affected by food, and some drugs are affected by only certain foods. A drug-food interaction can delay, decrease, or enhance absorption of a drug. This can cause the drug to be less effective, cause adverse effects, or increase the action of the drug.

**SEE RELATED TERM(S):** Drug Interaction

## Drug-Susceptible

When a strain of HIV is sensitive to one or more antiretroviral (ARV) drugs. Antiretroviral therapy (ART) will likely be effective against a drug-susceptible strain of HIV.

**SEE RELATED TERM(S):** Drug Resistance

## Dual Energy X-Ray Absorptiometry (DXA)

**ALSO KNOWN AS:** Bone Density Test

A test that uses low-dose x-rays to measure bone mineral density, including calcium content, in a section of bone. Dual energy x-ray absorptiometry (DXA) scans are used to detect osteoporosis and predict the risk of bone fracture.

**SEE RELATED TERM(S):** Osteoporosis

## Dual-Tropic Virus

**ALSO KNOWN AS:** D/M-Tropic Virus, Mixed Tropic Virus

A strain of HIV that can enter and infect a host cell by binding to either the CCR5 or CXCR4 receptor on the host cell. To enter a host cell, HIV must first attach to a CD4 receptor, then attach to either the CCR5 or CXCR4 receptor, and finally fuse its membrane with the host cell membrane. HIV is usually R5-tropic (uses CCR5) during the early stages of infection, but the virus may later switch to using either only CXCR4 or both CCR5 and CXCR4.

**SEE RELATED TERM(S):** CCR5, CXCR4, R5-Tropic Virus, X4-Tropic Virus

## Dyslipidemia

Abnormal levels of lipids (fats), including cholesterol and triglycerides, in the blood. Dyslipidemia can refer to either decreased or elevated levels of lipids. Dyslipidemia may be an adverse effect of some antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Hyperlipidemia

## Dysplasia

The development of precancerous changes in cells. Dysplasia can affect various parts of the body, including the cervix or prostate. The extent of dysplasia within body tissue can be mild (grade 1), moderate (grade 2), or severe (grade 3).

## Dyspnea

Difficult or labored breathing or shortness of breath.

## Ecchymosis

A blue or purplish bruise that results from bleeding under the skin.

## Edema

Abnormal swelling caused by excess accumulation of fluid in tissues or body cavities.

## Efficacy

Effectiveness of a drug or other medical intervention. Drugs are tested for efficacy to ensure they produce the desired effect on the disease or condition being treated.

## Eligibility Criteria

**ALSO KNOWN AS:** Exclusion/Inclusion Criteria, Inclusion/Exclusion Criteria

Factors used to determine whether a person is eligible (inclusion criteria) or not eligible (exclusion criteria) to participate in a clinical trial. Eligibility criteria may include disease type and stage, other medical conditions, previous treatment history, age, and gender.

**SEE RELATED TERM(S):** Clinical Trial, Protocol

## Elite Controllers

A very small subset of people infected with HIV who are able to maintain suppressed viral loads for years without antiretroviral (ARV) drugs. Although antiretroviral therapy (ART) may be theoretically beneficial for elite controllers, there is no clinical data supporting therapy for this group.

**SEE RELATED TERM(S):** Viral Load

## Embryo

In humans, an infant developing in the uterus (womb) from conception until about the third month of pregnancy.

## Encephalitis

Inflammation of the brain, usually caused by a viral infection.

Encephalitis can also be caused by a bacterial infection, toxin, or autoimmune process. Symptoms of encephalitis range from mild, such as flu-like symptoms, to severe, such as seizures. In people with HIV, encephalitis may be due to HIV infection or opportunistic infections, such as *Toxoplasma gondii* infection.

## Endemic

When a disease occurs frequently and at a predictable rate in a specific location or population. For example, HIV-2 is endemic to West Africa.

## Endpoint

**ALSO KNOWN AS:** Clinical Endpoint

## End-Stage Liver Disease (ESLD)

The most severe stage of liver disease, at which point the liver is barely functioning, if at all. The treatment for end-stage liver disease (ESLD) is a liver transplant.

**SEE RELATED TERM(S):** Liver

## End-Stage Renal Disease (ESRD)

The most severe stage of kidney (renal) disease, at which point the kidneys are barely functioning, if at all. The treatment for end-stage renal disease (ESRD) is dialysis or a kidney transplant.

**SEE RELATED TERM(S):** Kidneys

## Enteric

Pertaining to the intestines. Certain bacterial enteric infections are more common or more severe in people with HIV than in people with healthy immune systems.

## Enteric-Coated (EC)

When a tablet or capsule is coated with a substance that prevents the medication from being released until it reaches the small intestine, where it can then be absorbed.

## Enteritis

Inflammation of the small intestine.

## Envelope

**ALSO KNOWN AS:** HIV Viral Envelope

The outer coat of HIV, made up of two layers of lipids (fatty molecules). HIV uses specific proteins embedded in its envelope to enter host cells.

## Enzyme

A molecule, usually a protein, that catalyzes (increases the rate of) chemical reactions in the body. Enzymes are essential to all body functions. HIV requires specific enzymes, such as reverse transcriptase or integrase, to replicate.

## Enzyme Immunoassay

**ALSO KNOWN AS:** Enzyme-Linked Immunosorbent Assay

## Enzyme-Linked Immunosorbent Assay (ELISA)

**ALSO KNOWN AS:** Enzyme Immunoassay

A laboratory test to detect the presence of HIV antibodies in the blood, oral fluid, or urine. The immune system responds to HIV infection by producing HIV antibodies. A positive result on an enzyme-linked immunosorbent assay (ELISA) must be confirmed by a second, different antibody test (a positive Western blot) for a person to be definitively diagnosed with HIV infection.

**SEE RELATED TERM(S):** Antibody, Western Blot

## Eosinophilia

An abnormal increase of eosinophils (a type of white blood cell) in the blood, tissues, or organs. Eosinophilia is often a response to infection or allergens (substances that cause an allergic reaction).

## Eosinophilic Folliculitis (EF)

A rare, severe type of folliculitis (inflammation of hair follicles) characterized by itchy bumps or pus-filled sores on the face, chest, back, or arms. Eosinophilic folliculitis (EF) is mainly associated with advanced HIV infection.

## **Epidemic**

A widespread outbreak of a disease in a large number of individuals over a particular period of time either in a given area or among a specific group of people.

## **Epidemiology**

The study of the distribution, causes, and clinical characteristics of disease or health status in a population.

## **Epithelium**

A protective tissue consisting of one or more layers of cells that line the internal surface of organs and glands and cover the outer surface of the body. In addition to enclosing and protecting body surfaces, certain types of epithelial cells produce mucus or use tiny hairs called cilia to help remove foreign substances.

## **Epitope**

A specific area on the surface of an antigen that interacts with and binds to specific antibodies. Generally, an antigen has several different epitopes.

**SEE RELATED TERM(S):** Antibody, Antigen

## **Epstein-Barr Virus (EBV)**

A type of herpesvirus that infects B lymphocytes (B cells). Epstein-Barr virus (EBV) infection is usually asymptomatic but may cause mononucleosis ("mono"). In people with suppressed immune systems, EBV is strongly associated with certain cancers, including Burkitt lymphoma, oral hairy leukoplakia, and nasopharyngeal carcinoma.

**SEE RELATED TERM(S):** Herpesviruses

## **Eradication**

The total elimination of a pathogen, such as a bacterium, from the body. Eradication can also refer to the complete elimination of a disease from the world, such as the global eradication of smallpox.

## Erythema

Redness of the skin.

## Erythema Multiforme

A type of rash usually triggered by viral infections, most often herpes simplex infection and sometimes HIV infection.

## Erythrocyte

**ALSO KNOWN AS:** Red Blood Cell

## Etiology

The cause of a disease or abnormal condition. Etiology may also refer to the branch of medical science that studies the causes of diseases.

## Excipient Hyperbilirubinemia

**ALSO KNOWN AS:** Kernicterus

## Exclusion/Inclusion Criteria

**ALSO KNOWN AS:** Eligibility Criteria

## Expanded Access

**ALSO KNOWN AS:** Compassionate Use

Legal use of an investigational drug outside of a clinical trial to treat a person who has a serious or immediately life-threatening disease and who has no approved treatment options. The Food and Drug Administration (FDA) regulates expanded access to investigational drugs on a case-by-case basis for an individual patient or groups of patients who do not meet criteria to participate in a clinical trial. Drug companies must have permission from the FDA to make an investigational drug available for expanded access.

**SEE RELATED TERM(S):** Food and Drug Administration, Investigational Drug

## Experimental Arm

In a clinical trial, the group of participants that is given the experimental treatment being studied. The experimental treatment arm is compared to the control arm to determine whether the experimental treatment works.

**SEE RELATED TERM(S):** Clinical Trial, Control Arm

## Experimental Drug

**ALSO KNOWN AS:** Investigational Drug

### Extensively Drug Resistant Tuberculosis (XDR-TB)

A relatively rare type of multiple drug resistant tuberculosis (MDR-TB). Extensively drug resistant tuberculosis (XDR-TB) occurs when a *Mycobacterium tuberculosis* strain becomes resistant to drugs used to treat TB, including the two most effective first-line antibiotics (isoniazid and rifampin) and most of the second-line drugs. XDR-TB progresses more rapidly and is more severe in people coinfecting with HIV than in people infected with XDR-TB alone.

**SEE RELATED TERM(S):** Multiple Drug Resistant Tuberculosis, *Mycobacterium Tuberculosis*, Tuberculosis



## False Negative

A negative test result that incorrectly indicates that the condition being tested for is not present when, in fact, the condition is actually present. For example, a false negative HIV test indicates a person does not have HIV when, in fact, the person is infected with HIV.

**SEE RELATED TERM(S):** False Positive

## False Positive

A positive test result that incorrectly indicates that the condition being tested for is present when, in fact, the condition is actually not present. For example, a false positive HIV test indicates a person has HIV when, in fact, the person is not infected with HIV.

**SEE RELATED TERM(S):** False Negative

## Fanconi Syndrome

A hereditary or acquired kidney disorder that impairs the reabsorption of electrolytes, glucose, amino acids, and other nutrients into the bloodstream when blood passes through the kidneys. Acquired Fanconi syndrome may be caused by use of certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Kidneys

## Fat Maldistribution

**ALSO KNOWN AS:** Lipodystrophy

## Fatty Liver

**ALSO KNOWN AS:** Hepatic Steatosis

## Fetus

In humans, an infant developing in the uterus (womb) from about the third month of pregnancy until birth.

## First-Line Therapy

The preferred standard treatment for a particular condition. The recommended first-line HIV treatment regimens include antiretroviral (ARV) drugs that are safe and effective for most people with HIV.

## Fixed-Dose Combination

Two or more drugs contained in a single dosage form, such as a capsule or tablet. An example of a fixed-dose combination HIV drug is Atripla (a combination of efavirenz, emtricitabine, and tenofovir). By reducing the number of pills a person must take each day, fixed-dose combination drugs can help improve adherence to an HIV treatment regimen.

**SEE RELATED TERM(S):** Adherence, Drug Class, Regimen Simplification

## Food and Drug Administration (FDA)

The federal agency responsible for ensuring the safety and effectiveness of drugs, biologics, vaccines, and medical devices. The Food and Drug Administration (FDA) also regulates the manufacture, distribution, and marketing of tobacco products and works to safeguard the nation's blood supply.

## Formulation

**ALSO KNOWN AS:** Drug Formulation

The physical form in which a drug is manufactured or administered. Examples of formulations include tablets, capsules, powders, and oral and injectable solutions. A drug may be available in multiple formulations.

## Fungus

A plant-like organism that feeds off a living host organism or dead or decaying material. Examples of fungi include mushrooms, yeast, and mold. People with weakened immune systems, including people with HIV, are at a higher risk for fungal infections than people with healthy immune systems.

## Fusin

**ALSO KNOWN AS:** CXCR4

## Fusion

The first of seven steps in the HIV life cycle. HIV binds to the CD4 receptor and a coreceptor (either CCR5 or CXCR4) on the host cell, causing the viral envelope to fuse with the host cell membrane. This fusion allows HIV to release HIV RNA and HIV enzymes, such as reverse transcriptase and integrase, into the host cell.

**SEE RELATED TERM(S):** Fusion Inhibitor, Life Cycle

## Fusion Inhibitor

Antiretroviral (ARV) HIV drug class. Fusion inhibitors block the HIV envelope from merging with the host cell membrane (fusion). This prevents HIV from entering the host cell.

**SEE RELATED TERM(S):** Drug Class, Envelope, Fusion

## **Gamma Globulin**

A group of proteins found in blood plasma. Most antibodies are gamma globulins. Injections of gamma globulin, which contain high levels of antibodies, can be given to boost a person's immune system.

**SEE RELATED TERM(S):** Antibody

## **Gamma-Glutamyl Transpeptidase (GGT)**

An enzyme found in many organs in the body, including the liver. Gamma-glutamyl transpeptidase may be measured as part of a liver function test.

**SEE RELATED TERM(S):** Liver Function Test

## **Gastroenteritis**

Inflammation of any segment of the gastrointestinal tract, from the mouth to the anus.

## **Gastrointestinal (GI)**

Pertaining to the stomach and intestinal tract. Gastrointestinal (GI) symptoms, such as nausea, vomiting, and diarrhea, may be caused by HIV infection, opportunistic infections, or some antiretroviral (ARV) drugs.

## **Gene**

A short segment of DNA (or in the case of some viruses, RNA). Most genes contain the information needed to make a particular protein.

**SEE RELATED TERM(S):** Deoxyribonucleic Acid, Genome, Protein, Ribonucleic Acid

## **Gene Therapy**

Manipulating genes to treat or prevent disease. Gene therapy techniques being researched include replacing a defective gene with a healthy copy of the gene, repairing an abnormal gene, inactivating an improperly functioning gene, and introducing a new disease-fighting gene.

**SEE RELATED TERM(S):** Gene

## Generic Drug

A drug that has the same active ingredients, dosage, formulation, safety, strength, route of administration, quality, effectiveness, and intended use as a brand-name drug. For example, ibuprofen is a generic drug that has several manufacturers and brand names, including Advil and Motrin. Generic drugs are usually less expensive than brand-name drugs.

## Genetic Engineering

Using biotechnological techniques to modify an organism by changing its genetic material (DNA or RNA). For example, bacteria can be genetically engineered to produce insulin, which can then be used to treat diabetes.

**SEE RELATED TERM(S):** Deoxyribonucleic Acid, Ribonucleic Acid

## Genital Ulcer Disease

Any of several diseases that are characterized by genital sores. Genital ulcer diseases are usually sexually transmitted infections, including genital herpes (herpes simplex virus 2 infection), syphilis, and chancroid. Genital ulcer diseases increase the risk of sexual transmission of HIV.

**SEE RELATED TERM(S):** Sexually Transmitted Infection

## Genital Warts

**ALSO KNOWN AS:** Condyloma Acuminatum, Venereal Warts

A sexually transmitted infection caused by the human papillomavirus (HPV). Genital warts appear as raised pink or flesh-colored bumps on the surface of the vagina, cervix, tip of the penis, or anus.

**SEE RELATED TERM(S):** Human Papillomavirus, Sexually Transmitted Infection

## Genitourinary System

**ALSO KNOWN AS:** Genitourinary Tract

## Genitourinary Tract

**ALSO KNOWN AS:** Genitourinary System, Urogenital System, Urogenital Tract

All organs involved in the production and excretion of urine plus all organs involved with reproduction. Organs of the genitourinary tract include the kidneys, bladder, fallopian tubes, and penis.

## Genome

The complete genetic material of an organism, including all of its genes. The genome is contained in a set of chromosomes in humans, a single chromosome in bacteria, and a DNA or RNA molecule in viruses. The HIV genome consists of an RNA molecule and includes nine genes.

**SEE RELATED TERM(S):** Deoxyribonucleic Acid, Gene, Ribonucleic Acid

## Genotypic Antiretroviral Resistance Test (GART)

**ALSO KNOWN AS:** Genotypic Assay

A type of resistance test that detects drug-resistant mutations in HIV genes. Resistance testing is used to guide selection of an HIV regimen when initiating or changing antiretroviral therapy (ART).

**SEE RELATED TERM(S):** Phenotypic Antiretroviral Resistance Test, Resistance Testing

## Genotypic Assay

**ALSO KNOWN AS:** Genotypic Antiretroviral Resistance Test

## Glucose

**ALSO KNOWN AS:** Blood Sugar, Sugar

Blood sugar. Glucose, the main source of fuel for the body, is formed when foods are broken down in the digestive system. After digestion, glucose is absorbed into the bloodstream and then used for cell growth and energy.

**SEE RELATED TERM(S):** Diabetes, Hyperglycemia, Insulin Resistance

## Glycoprotein

A molecule that consists of a protein plus one or more carbohydrates.

## Glycoprotein 41

**ALSO KNOWN AS:** gp41

## Glycoprotein 120

**ALSO KNOWN AS:** gp120

## Glycoprotein 160

**ALSO KNOWN AS:** gp160

## Gonorrhea

A sexually transmitted infection caused by the bacterium *Neisseria gonorrhoeae*. Gonorrhea can also be transmitted from an infected mother to her child during delivery. Gonorrhea often has mild or no symptoms. However, if left untreated, gonorrhea can lead to infertility, and it can spread into the bloodstream and affect the joints, heart valves, and brain. Gonorrhea increases the risk of sexual transmission of HIV.

**SEE RELATED TERM(S):** Sexually Transmitted Infection

## gp41

**ALSO KNOWN AS:** Glycoprotein 41

A glycoprotein on the HIV envelope. HIV enters a host cell by using gp41 to fuse the HIV envelope with the host cell membrane.

**SEE RELATED TERM(S):** Fusion, Glycoprotein, Life Cycle

## gp120

**ALSO KNOWN AS:** Glycoprotein 120

A glycoprotein on the HIV envelope. gp120 binds to a CD4 receptor on a host cell, such as a CD4 T lymphocyte (CD4 cell). This starts the process by which HIV fuses its viral membrane with the host cell membrane and enters the host cell.

**SEE RELATED TERM(S):** Envelope, Fusion, Glycoprotein, Life Cycle

## gp160

**ALSO KNOWN AS:** Glycoprotein 160

An HIV glycoprotein. gp160 is a precursor of the HIV envelope glycoproteins gp41 and gp120.

**SEE RELATED TERM(S):** Glycoprotein, gp41, gp120, Life Cycle

## Granulocyte

A type of white blood cell that includes neutrophils, eosinophils, and basophils. Granulocytes help the body fight infection.

**SEE RELATED TERM(S):** White Blood Cell

## **Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF)**

A protein that stimulates white blood cells, especially granulocytes, macrophages, and cells that become platelets, to multiply and mature. A laboratory-produced version of this protein is often used to boost a low white blood cell count.

**SEE RELATED TERM(S):** Granulocyte, White Blood Cell

## **Granulocyte-Colony Stimulating Factor (G-CSF)**

A protein that stimulates neutrophils, which are a type of white blood cell, to multiply and mature. A laboratory-produced version of this protein is used to boost a low neutrophil count.

**SEE RELATED TERM(S):** Granulocyte, White Blood Cell

## **Granulocytopenia**

**ALSO KNOWN AS:** Agranulocytopenia

A deficiency or abnormal decrease in the number of granulocytes, a type of white blood cell. Granulocytopenia may be caused by certain bone marrow diseases, chemotherapy, or certain drugs used to treat HIV and opportunistic infections.

**SEE RELATED TERM(S):** Granulocyte

## **Guillain-Barré Syndrome (GBS)**

**ALSO KNOWN AS:** Acute Inflammatory Demyelinating Polyneuropathy

A rare acute neurological disorder in which the immune system mistakenly attacks part of the peripheral nervous system. Guillain-Barré syndrome (GBS) primarily destroys the myelin that covers the peripheral nerves, causing the nerve signals to slow down. This damage can result in weakness and sometimes paralysis of the legs, arms, face, and breathing muscles. GBS is often preceded by a bacterial or viral infection and can occur early in the course of HIV infection.

**SEE RELATED TERM(S):** Myelin, Peripheral Nervous System



## Gynecomastia

Development of larger-than-normal breasts in males. Gynecomastia is due to excess growth of breast tissue, not fat tissue. Gynecomastia is sometimes caused by natural hormonal changes, but it can also be due to use of certain medications, including antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Body Habitus Changes

## Half-Life

The time it takes a drug to lose half its original concentration or activity after being introduced into the body. Drug half-life is considered when determining drug dosing.

## Health Care Financing Administration

**ALSO KNOWN AS:** Centers for Medicare and Medicaid Services

## Health Resources and Services Administration (HRSA)

The primary federal agency for improving access to health care services for people who are uninsured, isolated, or medically vulnerable.

Through its HIV/AIDS bureau, the Health Resources and Services Administration (HRSA) administers the Ryan White HIV/AIDS Program, the largest federal program focused exclusively on HIV/AIDS care.

**SEE RELATED TERM(S):** Ryan White HIV/AIDS Program

## HELLP Syndrome

A rare but life-threatening complication of pregnancy that is characterized by **H**emolysis (breakdown of red blood cells), **E**levated Liver enzyme levels, and a **L**ow **P**latelet count. HELLP develops late in pregnancy, or sometimes after birth.

## Helper T Cell

**ALSO KNOWN AS:** CD4 T Lymphocyte

## Hematocrit

A laboratory test that measures the volume of red blood cells in whole blood. Hematocrit is normally ordered as part of a complete blood count.

**SEE RELATED TERM(S):** Complete Blood Count

## Hematotoxic

Poisonous to the blood and to the organs and tissues involved in the production of blood, such as the bone marrow.

## Hematuria

Blood in the urine. The use of certain antiretroviral (ARV) drugs may cause hematuria.

## Hemoglobin

A protein in red blood cells that carries oxygen from the lungs to the tissues of the body. Hemoglobin also refers to the hemoglobin test, which is normally ordered as part of a complete blood count.

**SEE RELATED TERM(S):** Complete Blood Count

## Hemolysis

Destruction of red blood cells. Hemolysis occurs as part of the natural life cycle of red blood cells, or it may be caused by certain conditions or drugs.

**SEE RELATED TERM(S):** Red Blood Cell

## Hemophilia

An inherited blood clotting disorder that most often affects males. The main symptom of hemophilia is prolonged bleeding either spontaneously or after an injury or accident.

## Hemorrhage

Excessive or uncontrollable bleeding from one or more blood vessels. A hemorrhage, which may be internal or external, is often caused by injury or surgical complications or from advanced disease. The use of certain antiretroviral (ARV) drugs may cause internal hemorrhage.

## Hepatic

Pertaining to the liver.

**SEE RELATED TERM(S):** Liver

## Hepatic Necrosis

Death of liver cells. Hepatic necrosis may be caused by certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Liver

## Hepatic Steatosis

**ALSO KNOWN AS:** Fatty Liver

Excessive accumulation of triglycerides and other fats in liver cells. Use of certain antiretroviral (ARV) drugs may cause hepatic steatosis.

**SEE RELATED TERM(S):** Liver

## Hepatitis

Inflammation of the liver, usually from a viral infection. The most common hepatitis infections are hepatitis A, hepatitis B, and hepatitis C. Hepatitis may also be due to autoimmune disease, alcohol, medications, or toxic agents. Symptoms of hepatitis, if any, can include loss of appetite, nausea and vomiting, and jaundice. Hepatitis can lead to liver damage, liver failure, or cancer. Hepatitis is also often used to refer to the group of viral infections that affect the liver (hepatitis A, B, C, D, and E).

**SEE RELATED TERM(S):** Hepatitis B Virus (HBV) Infection, Hepatitis C Virus (HCV) Infection, Jaundice, Liver

## Hepatitis B Virus (HBV) Infection

Infection with the hepatitis B virus (HBV). HBV can be transmitted through blood, semen, or other body fluids during sex or injection-drug use. Because HIV and HBV share the same modes of transmission, people infected with HIV are often also coinfecting with HBV. HBV infection progresses more rapidly in people coinfecting with HIV than in people infected with HBV alone.

**SEE RELATED TERM(S):** Hepatitis, Opportunistic Infection

## Hepatitis C Virus (HCV) Infection

Infection with the hepatitis C virus (HCV). HCV is usually transmitted through blood and rarely through other body fluids, such as semen. HCV infection progresses more rapidly in people coinfecting with HIV than in people infected with HCV alone.

**SEE RELATED TERM(S):** Hepatitis

## Hepatomegaly

Abnormal enlargement of the liver.

**SEE RELATED TERM(S):** Liver

## Hepatotoxicity

Toxic damage to the liver. Drugs, including antiretroviral (ARV) drugs, can cause hepatotoxicity.

**SEE RELATED TERM(S):** Liver

## Herpes Simplex Virus 1 (HSV-1) Infection

An infection caused by herpes simplex virus 1 (HSV-1) and usually associated with lesions on the lips, mouth, and face. HSV-1 is very contagious and is transmitted by direct contact with someone who is infected (even if lesions are not visible). Treatment cannot completely clear HSV-1 from the body, but antiviral therapy can shorten and prevent outbreaks and reduce the risk of transmission. People with weakened immune systems, such as people with HIV, are more likely to have lesions that spread to other parts of the body than people with healthy immune systems.

**SEE RELATED TERM(S):** Herpesviruses, Opportunistic Infection

## Herpes Simplex Virus 2 (HSV-2) Infection

An infection caused by herpes simplex virus 2 (HSV-2) and usually associated with lesions in the genital or anal area. HSV-2 is very contagious and is transmitted by sexual contact with someone who is infected (even if lesions are not visible). Treatment cannot eradicate HSV-2 from the body, but antiviral therapy can shorten and prevent outbreaks and reduce the risk of transmission. People with weakened immune systems, such as people with HIV, are more likely to have lesions that spread to other parts of the body than people with healthy immune systems.

**SEE RELATED TERM(S):** Herpesviruses, Opportunistic Infection

## Herpes Zoster

**ALSO KNOWN AS:** Varicella Zoster Virus

## Herpesviruses

**ALSO KNOWN AS:** Human Herpesviruses

A group of viruses that use DNA as their genetic material. Herpesviruses include herpes simplex viruses 1 and 2 (HSV-1 and -2), varicella zoster virus (VZV or HHV-3), Epstein-Barr virus (EBV or HHV-4), cytomegalovirus (CMV or HHV-5), herpes simplex viruses 6 and 7 (HSV-6 and -7), and Kaposi sarcoma herpesvirus (KSHV or HHV-8).

## High Blood Pressure

**ALSO KNOWN AS:** Hypertension

## Highly Active Antiretroviral Therapy

**ALSO KNOWN AS:** Antiretroviral Therapy

## Histoplasmosis

A lung infection caused by the fungus *Histoplasma capsulatum*. Symptoms include fever, chest pain, and dry cough. In people with weakened immune systems, such as people with HIV, histoplasmosis may spread to other parts of the body, including the brain or gastrointestinal tract. Histoplasmosis (disseminated or extrapulmonary) is an AIDS-defining condition in people with HIV.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Opportunistic Infection

## HIV Encephalopathy

**ALSO KNOWN AS:** AIDS Dementia Complex

## HIV Gingivitis

**ALSO KNOWN AS:** Linear Gingival Erythema

## HIV Prevention Trials Network (HPTN)

A federally funded, worldwide clinical trials network that develops and tests the safety and efficacy of primarily non-vaccine interventions designed to prevent the transmission of HIV.

**SEE RELATED TERM(S):** Clinical Trial

## HIV Progression

The course of HIV infection. HIV is a chronic infection that progresses in four stages: acute HIV infection, asymptomatic HIV infection, symptomatic HIV infection, and AIDS. Antiretroviral therapy (ART) is designed to delay or stop the progression of HIV infection.

**SEE RELATED TERM(S):** Acquired Immunodeficiency Syndrome, Acute HIV Infection, Asymptomatic HIV Infection, Antiretroviral Therapy, Symptomatic HIV Infection

## HIV Vaccine Trials Network (HVTN)

A federally funded international clinical trials network that works towards finding an effective and safe HIV vaccine. HIV Vaccine Trials Network (HVTN) conducts clinical trials on preventive HIV vaccines and educates community members on the general science of HIV/AIDS vaccines and associated research methods.

**SEE RELATED TERM(S):** Clinical Trial, Preventive HIV Vaccine

## HIV Viral Core

**ALSO KNOWN AS:** Core

## HIV Viral Envelope

**ALSO KNOWN AS:** Envelope

## HIV-1

One of the two types of HIV, the virus that causes AIDS. AIDS is the most advanced stage of HIV infection. HIV-1 is transmitted through direct contact with HIV-infected body fluids, such as blood, semen, and genital secretions, or from an HIV-infected mother to her child during pregnancy, delivery, or breastfeeding (through breast milk). HIV-1 is responsible for the majority of HIV infections worldwide. In the United States, unless otherwise noted, the term “HIV” primarily refers to HIV-1.

**SEE RELATED TERM(S):** Acquired Immunodeficiency Syndrome, HIV-2

## HIV-2

One of the two types of HIV, the virus that causes AIDS. AIDS is the most advanced stage of HIV infection. HIV-2 infection is endemic to West Africa. Like HIV-1, HIV-2 is transmitted through direct contact with HIV-infected body fluids, such as blood, semen, and genital secretions, or from an HIV-infected mother to her child during pregnancy, delivery, or breastfeeding (through breast milk). HIV-2 infection generally takes longer to progress to symptomatic HIV/AIDS and has a lower mortality rate than HIV-1 infection.

**SEE RELATED TERM(S):** Acquired Immunodeficiency Syndrome, HIV-1

## HIV-Associated Adult-Onset Nemaline Myopathy

**ALSO KNOWN AS:** Nemaline Rod Myopathy

## **HIV-Associated Dementia**

**ALSO KNOWN AS:** AIDS Dementia Complex

## **HIV-Associated Nephropathy (HIVAN)**

Kidney disease associated with HIV infection. HIV-associated nephropathy (HIVAN) usually begins with large amounts of protein in the urine (proteinuria) and progresses rapidly to total kidney failure. HIVAN is very uncommon in people whose HIV is effectively controlled by antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Kidneys

## **HIV-Associated Neurocognitive Disorders (HAND)**

A range of increasingly severe central nervous system complications associated with HIV infection. HIV-associated neurocognitive disorders (HAND) range from mild problems with memory, language, and reasoning to the more severe HIV-associated dementia (HAD).

**SEE RELATED TERM(S):** HIV-Associated Dementia

## **Hives**

**ALSO KNOWN AS:** Urticaria

## **HLA-B\*5701 Test**

A test that detects the presence of HLA-B\*5701. The HLA-B\*5701 molecule is linked to hypersensitivity to the antiretroviral (ARV) drug abacavir. A person who tests positive for HLA-B\*5701 should not use abacavir.

**SEE RELATED TERM(S):** Human Leukocyte Antigen

## **HMG-CoA Reductase Inhibitor**

**ALSO KNOWN AS:** Statin

## **Hodgkin Disease**

**ALSO KNOWN AS:** Hodgkin Lymphoma



## Hodgkin Lymphoma

**ALSO KNOWN AS:** Hodgkin Disease

A type of lymphoma (cancer of the lymphatic system). Hodgkin lymphoma is characterized by progressive enlargement of the lymph nodes, spleen, and general lymphoid tissue and by the presence of large, usually multinucleate cells of unknown origin called Reed-Sternberg cells. In people with HIV, Hodgkin lymphoma is an AIDS-related cancer.

**SEE RELATED TERM(S):** AIDS-Related Cancer, Lymphoma

## Horizontal Transmission

Transmission of HIV, or other infectious disease, from one person to another, except from parent to child (vertical transmission). Horizontal transmission of HIV can occur during sex or needle sharing as the result of contact with the semen, vaginal fluid, or blood of an HIV-infected partner.

**SEE RELATED TERM(S):** Sexual Transmission, Vertical Transmission

## Hormone

A chemical messenger produced by the body and carried by the blood to tissues and organs. Hormones regulate many different body processes, including growth and development, metabolism, sexual function, reproduction, and mood. HIV can affect the production of hormones, such as estrogen and testosterone.

## Host

The animal or plant (or specific part of an animal or plant) in which another organism or microorganism lives. For example, CD4 cells infected with HIV are called host cells.

## Human Growth Hormone (hGH)

A hormone that is produced by the pituitary gland and stimulates the growth of bones, muscles, and other organs. A synthetic version of human growth hormone (hGH) is approved by the Food and Drug Administration (FDA) for the treatment of AIDS-related wasting syndrome.

**SEE RELATED TERM(S):** Wasting Syndrome

## Human Herpesvirus 3

**ALSO KNOWN AS:** Varicella Zoster Virus

## Human Herpesvirus 7 (HHV-7)

A type of herpesvirus found in saliva of people infected with human herpesvirus 7 (HHV-7). HHV-7 has not been definitively documented to cause a specific disease.

**SEE RELATED TERM(S):** Herpesviruses

## Human Herpesvirus 6 (HHV-6) Infection

An infection caused by human herpesvirus 6 (HHV-6). HHV-6 is primarily transmitted through saliva and usually causes disease only in children or people with weakened immune systems. HHV-6 can cause neurological diseases, such as encephalitis and febrile seizures. HHV-6 can also cause fever and rash (roseola), which mostly affects children between 6 months and 2 years old.

**SEE RELATED TERM(S):** Herpesviruses, Opportunistic Infection

## Human Herpesvirus 8

**ALSO KNOWN AS:** Kaposi Sarcoma Herpesvirus

## Human Herpesviruses

**ALSO KNOWN AS:** Herpesviruses

## Human Immunodeficiency Virus (HIV)

The virus that causes AIDS, which is the most advanced stage of HIV infection. HIV is a retrovirus that occurs as two types: HIV-1 and HIV-2. Both types are transmitted through direct contact with HIV-infected body fluids, such as blood, semen, and genital secretions, or from an HIV-infected mother to her child during pregnancy, birth, or breastfeeding (through breast milk).

**SEE RELATED TERM(S):** Acquired Immunodeficiency Syndrome, HIV-1, HIV-2, Retrovirus

## Human Leukocyte Antigen (HLA)

A group of molecules found on the surface of almost every cell in the body. Human leukocyte antigens (HLAs) present protein fragments (peptides) to immune cells. If the cells recognize the peptides as foreign, the body mounts an immune response. Some diseases and drug reactions are linked to certain types of HLAs.

**SEE RELATED TERM(S):** Major Histocompatibility Complex

## Human Papillomavirus (HPV)

The virus that causes human papillomavirus (HPV) infection, the most common sexually transmitted infection. There are two groups of HPV—types that can cause genital warts and types that can cause cancer. HPV is the most frequent cause of cervical cancer. In women with HIV, invasive cervical cancer is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Cervical Cancer, Opportunistic Infection, Sexually Transmitted Infection

## Human T-Cell Lymphotropic Virus Type I (HTLV-I)

A retrovirus that infects only T lymphocytes (T cells). Human T cell lymphotropic virus type 1 (HTLV-1) is transmitted through exposure to contaminated blood, through sexual contact, and from an infected mother to her child at birth or through breastfeeding via breast milk. HTLV-1 is prevalent mostly in Japan, Africa, the Caribbean Islands, and South America. HTLV-1 can cause adult T-cell leukemia/lymphoma, a rare and aggressive cancer of the white blood cells.

**SEE RELATED TERM(S):** Retrovirus

## Humoral Immune Response

**ALSO KNOWN AS:** Humoral Immunity

## Humoral Immunity

**ALSO KNOWN AS:** Humoral Immune Response

Type of immune response that is mediated by antibodies.

**SEE RELATED TERM(S):** Antibody, Cell-Mediated Immunity

## Hyperadiposity

**ALSO KNOWN AS:** Lipohypertrophy

## **Hypergammaglobulinemia**

A higher-than-normal level of gamma globulin in the blood. Gamma globulins are a group of blood proteins that include most antibodies. Hypergammaglobulinemia may occur with chronic infections, including HIV infection.

## **Hyperglycemia**

Abnormally high blood sugar (glucose) level. Use of some antiretroviral (ARV) drugs may cause hyperglycemia.

## **Hyperlipidemia**

Excess lipids (cholesterol, triglycerides, or both) in the blood. Hyperlipidemia increases the risk of high blood pressure, heart disease, and stroke. Hyperlipidemia may be caused by HIV infection or use of some antiretroviral (ARV) drugs.

## **Hyperplasia**

An increase in the number of cells in a tissue or organ. Hyperplasia may be due to a normal, increased demand for cells or may be a sign of precancerous changes.

## **Hypersensitivity**

**ALSO KNOWN AS:** Hypersensitivity Reaction

An exaggerated immune response to a specific antigen or drug. Hypersensitivity reactions, including allergic reactions, can be life-threatening. Use of some antiretroviral (ARV) drugs may cause a hypersensitivity reaction.

## **Hypersensitivity Reaction**

**ALSO KNOWN AS:** Hypersensitivity

## **Hypersensitivity Syndrome**

**ALSO KNOWN AS:** Drug Hypersensitivity Syndrome, Drug Reaction with Eosinophilia and Systemic Symptoms

A life-threatening allergic reaction to a drug. Hypersensitivity syndrome is characterized by fever, rash, organ involvement (most frequently the liver), and high blood levels of eosinophils (a type of white blood cell). Use of certain antiretroviral (ARV) drugs may cause hypersensitivity syndrome.

## Hypertension

**ALSO KNOWN AS:** High Blood Pressure

Persistently elevated blood pressure. Blood pressure is the force of blood pushing against the walls of the arteries. Hypertension can harm the arteries and increase the risk of stroke, heart attack, and kidney failure. Use of some antiretroviral (ARV) drugs may cause hypertension.

## Hypertriglyceridemia

Excessive accumulation of triglycerides (a type of fat) in the blood. Hypertriglyceridemia increases the risk of high blood pressure, heart disease, and stroke. Use of some antiretroviral (ARV) drugs can cause hypertriglyceridemia.

## Hyperuricemia

Much higher-than-normal levels of uric acid in the blood. Hyperuricemia may be an adverse effect of some antiretroviral (ARV) drugs.

## Hypogammaglobulinemia

Abnormally low levels of gamma globulin in the blood. Gamma globulins are a group of blood proteins that include most antibodies. People with hypogammaglobulinemia are at high risk for infections. Hypogammaglobulinemia may be due to certain genetic diseases or to acquired diseases such as HIV.

## Hypogonadism

Condition in which the sex glands produce little or no hormones. Hypogonadism commonly occurs during HIV infection.

**SEE RELATED TERM(S):** Hormone

## Hypoxia

An insufficient supply of oxygen to the cells and tissues of the body.

## Idiopathic

Occurring spontaneously or from an unknown cause.

## Idiopathic Thrombocytopenia Purpura (ITP)

**ALSO KNOWN AS:** Immune Thrombocytopenic Purpura

An autoimmune disorder in which the immune system destroys platelets. The destruction of platelets leads to abnormal blood clotting and easy or excessive bruising and bleeding. The exact cause of idiopathic thrombocytopenia purpura is unknown; however, the disorder may develop with a viral infection, including HIV.

**SEE RELATED TERM(S):** Platelet

## Immune Complex

**ALSO KNOWN AS:** Antigen-Antibody Complex

An antibody bound to an antigen. Immune complexes are part of a normal immune response. However, when immune complexes accumulate in the blood, they can cause autoimmune disorders, infections, and malignancies.

**SEE RELATED TERM(S):** Antigen

## Immune Reconstitution Inflammatory Syndrome (IRIS)

In HIV infection, an exaggerated inflammatory reaction to a disease-causing microorganism that sometimes occurs when the immune system begins to recover following treatment with antiretroviral (ARV) drugs. Immune reconstitution inflammatory syndrome (IRIS) occurs in two forms: “unmasking” IRIS refers to the flare-up of an underlying, previously undiagnosed infection soon after antiretroviral therapy (ART) is started; “paradoxical” IRIS refers to the worsening of a previously treated infection after ART is started. IRIS can be mild or life-threatening.

**ALSO KNOWN AS:** Immune Reconstitution Syndrome, Immune Restoration Disease

## Immune Reconstitution Syndrome

**ALSO KNOWN AS:** Immune Reconstitution Inflammatory Syndrome

## Immune Response

Actions of the immune system to defend the body against bacteria, viruses, or other substances that the body recognizes as foreign and harmful.

**SEE RELATED TERM(S):** Immune System

## Immune Restoration Disease

**ALSO KNOWN AS:** Immune Reconstitution Inflammatory Syndrome

## Immune Serum Globulin

**ALSO KNOWN AS:** Intravenous Immunoglobulin

## Immune System

A complex network of specialized cells, tissues, and organs that recognize and defend the body from foreign substances, primarily disease-causing microorganisms such as bacteria, viruses, parasites, and fungi. Organs and tissues of the immune system, called lymphoid organs, include the bone marrow, spleen, thymus, and tonsils. Immune system cells include white blood cells, such as B lymphocytes (B cells), T lymphocytes (T cells), dendritic cells, and macrophages. HIV infection gradually destroys the immune system.

## Immune Thrombocytopenic Purpura

**ALSO KNOWN AS:** Idiopathic Thrombocytopenia Purpura

## Immunity

Protection against disease caused by infectious microorganisms or by other foreign substances. There are two main types of immunity: innate and acquired.

**SEE RELATED TERM(S):** Acquired Immunity, Innate Immunity

## Immunization

**ALSO KNOWN AS:** Vaccination

## Immunocompetent

When the body is able to produce a normal immune response.

**SEE RELATED TERM(S):** Immune Response

## **Immunocompromised**

When the body is unable to produce an adequate immune response. A person may be immunocompromised because of a disease or an infection, such as HIV, or as the result of treatment with drugs or radiation.

**SEE RELATED TERM(S):** Immune Response

## **Immunodeficiency**

Inability to produce an adequate immune response because of an insufficiency or absence of antibodies, immune cells, or both. Immunodeficiency disorders can be inherited, such as severe combined immunodeficiency; they can be acquired through infection, such as with HIV; or they can result from chemotherapy.

**SEE RELATED TERM(S):** Acquired Immunodeficiency Syndrome, Immune Response

## **Immunogenicity**

The ability or the extent to which a substance is able to stimulate an immune response.

**SEE RELATED TERM(S):** Immune Response

## **Immunoglobulin**

**ALSO KNOWN AS:** Antibody

## **Immunologic**

Pertaining to the immune system.

**SEE RELATED TERM(S):** Immune System

## **Immunologic Failure**

A type of HIV treatment failure. There is no consensus on the definition of immunologic failure. However, some experts define immunologic failure as the failure to achieve and maintain adequate CD4 counts despite viral suppression.

**SEE RELATED TERM(S):** Treatment Failure, Viral Suppression

## **Immunomodulator**

A natural or synthetic substance that modifies (activates, enhances, or suppresses) the immune response or the functioning of the immune system.

**SEE RELATED TERM(S):** Immune Response, Immune System



## Immunomodulatory Therapy

**ALSO KNOWN AS:** Immunotherapy

### Immunosuppression

When the body's ability to mount an immune response to fight infections or disease is reduced. Immunosuppression may result from certain diseases, such as HIV/AIDS, or as a result of radiotherapy or chemotherapy. Immunosuppression may also be deliberately induced by drugs used to prevent rejection of transplanted organs.

**SEE RELATED TERM(S):** Immune Response

### Immunotherapy

**ALSO KNOWN AS:** Immunomodulatory Therapy

Use of immunologic agents such as antibodies, growth factors, and vaccines to modify (activate, enhance, or suppress) the immune system in order to treat disease. Immunotherapy is also used to diminish adverse effects caused by some cancer treatments or to prevent rejection of a transplanted organ or tissue.

**SEE RELATED TERM(S):** Immune System

### In Utero

In the uterus (womb). *In utero* also refers to the length of time that a fetus is in the uterus of the pregnant female.

### In Vitro

In an artificial environment outside the body, such as in a test tube in a laboratory.

### In Vitro Fertilization (IVF)

A medical procedure used to help a woman become pregnant. *In vitro* fertilization (IVF) involves removing mature eggs from a woman's ovary, fertilizing the eggs with sperm in a laboratory, and then introducing the resulting embryo into a woman's uterus.

### In Vivo

In the living body of a plant, animal, or human.

## **Incidence**

The number of new cases of a disease in a specific area during a specific time period.

**SEE RELATED TERM(S):** Prevalence

## **Inclusion/Exclusion Criteria**

**ALSO KNOWN AS:** Eligibility Criteria

## **Incubation Period**

The time between infection with a pathogen and the onset of disease symptoms.

**SEE RELATED TERM(S):** Pathogen

## **Indian Health Service (IHS)**

A federal agency responsible for providing federal health services to American Indians and Alaska Natives. The Indian Health Service (IHS) delivers preventive, curative, and community health care to American Indians and Alaska Natives in hospitals, clinics, and other settings throughout the United States.

## **Infection**

Invasion and growth of an infectious microorganism, such as a bacterium or virus, in the body. Infection can also refer to the disease caused by the infectious microorganism. For example, HIV infection is caused by the human immunodeficiency virus (HIV).

## **Infectious**

Capable of causing infection.

## **Infectious Disease**

A disease that is caused by a microorganism, such as a bacterium, virus, or parasite, that is not normally found in the body and is capable of causing infection. Some, but not all, infectious diseases are contagious, meaning they can spread from person to person. Other infectious diseases can spread from animals or insects to humans, but not from person to person. HIV is both infectious and contagious.

**SEE RELATED TERM(S):** Contagious Disease

## Informed Consent

A communication process between a person and a health care provider or researcher to ensure that the person understands all relevant facts associated with a medical procedure or clinical trial. Before undergoing the procedure or participating in the trial, the person must sign an informed consent form that indicates understanding of the risks and benefits involved and of the risks and benefits of other options.

## infoSIDA

The Spanish-language companion Web site to *AIDSinfo*. Information is available via the Web, phone, e-mail, and postal mail.

**SEE RELATED TERM(S):** *AIDSinfo*

## Infusion

Administration of a substance, such as a drug or glucose in solution, typically into a vein (intravenous). Infusions can also be administered into bone (intraosseous), muscle (intramuscular), and the space that surrounds the spinal cord (epidural).

## Injection Drug Use

A method of illicit drug use. The drugs are injected directly into the body—into a vein, into a muscle, or under the skin—with a needle and syringe. Blood-borne viruses, including HIV and hepatitis, can be transmitted via shared needles or other drug injection equipment.

## Injection Site Reaction

An adverse reaction, such as rash or redness, at the site of an injection.

## Innate Immunity

Immunity that a person is born with. Innate immunity includes certain physical barriers, such as skin and mucous membranes, and fast-acting immune cells, such as natural killer cells.

**SEE RELATED TERM(S):** Immunity

## Inoculation

**ALSO KNOWN AS:** Vaccine

## **Institutional Review Board (IRB)**

An independent committee of medical, scientific, and non-scientific members established to review, approve, and monitor research involving human participants. An institutional review board (IRB) protects the rights and welfare of human participants by assuring that a clinical trial is well designed, does not involve undue risks, and includes safeguards for participants. Any institution conducting or supporting research that involves human participants must appoint an IRB to monitor the research.

**SEE RELATED TERM(S):** Clinical Trial

## **Insulin**

A hormone that is secreted by the pancreas and controls the amount of glucose in the blood. Glucose is the body's main source of energy. Insulin stimulates cells to absorb and use glucose for energy. Without insulin, cells starve for energy and glucose builds up in the blood (hyperglycemia). Insulin also refers to the laboratory-made drug.

**SEE RELATED TERM(S):** Diabetes, Glucose, Pancreas

## **Insulin Resistance**

The body's decreasing ability to respond to and use the insulin it produces. As a result, excess glucose builds up in the blood (hyperglycemia). Insulin resistance increases the risk of developing type 2 diabetes and heart disease. Use of certain antiretroviral (ARV) drugs may cause insulin resistance.

**SEE RELATED TERM(S):** Diabetes, Insulin

## **Insulin Sensitivity**

The degree to which the body's cells respond to insulin and take up glucose from the blood.

**SEE RELATED TERM(S):** Insulin

## **Integrase**

An enzyme found in HIV (and other retroviruses). HIV uses integrase to insert (integrate) its viral DNA into the DNA of the host cell. Integration is a crucial step in the HIV life cycle and is targeted by a class of antiretroviral (ARV) HIV drugs called integrase strand transfer inhibitors (INSTIs).

**SEE RELATED TERM(S):** Integrase Strand Transfer Inhibitor, Integration, Life Cycle, Provirus

## Integrase Inhibitor

**ALSO KNOWN AS:** Integrase Strand Transfer Inhibitor

## Integrase Strand Transfer Inhibitor (INSTI)

**ALSO KNOWN AS:** Integrase Inhibitor

Antiretroviral (ARV) HIV drug class. Integrase strand transfer inhibitors (INSTIs) block integrase (an HIV enzyme). HIV uses integrase to insert (integrate) its viral DNA into the DNA of the host cell. Blocking integrase prevents HIV from replicating.

**SEE RELATED TERM(S):** Drug Class, Integrase

## Integration

The third of seven steps in the HIV life cycle. During integration, HIV uses integrase (an HIV enzyme) to insert its viral DNA into the DNA of the host cell.

**SEE RELATED TERM(S):** Integrase, Integrase Strand Transfer Inhibitor, Life Cycle, Provirus

## Intensification

Adding additional antiretroviral (ARV) drugs to an HIV regimen to further reduce replication of HIV.

## Interferon (IFN)

Cytokines secreted by certain cells in response to an antigen, usually a virus. Interferon signals neighboring cells into action and inhibits the growth of malignant cells. There are three types of interferons: alpha, beta, and gamma. Laboratory-made interferons are used to treat certain cancers and opportunistic infections.

**SEE RELATED TERM(S):** Antigen, Cytokine

## Interleukin-2 (IL-2)

A cytokine that stimulates the growth and replication of immune cells, specifically B lymphocytes (B cells) and T lymphocytes (T cells). Laboratory-made interleukin-2 (IL-2) is used to treat certain cancers.

**SEE RELATED TERM(S):** Cytokine

## **Interleukin-7 (IL-7)**

A cytokine that prompts the immune system to make more B lymphocytes (B cells) and T lymphocytes (T cells). Laboratory-made interleukin-7 (IL-7) coupled with antiretroviral therapy (ART) is being studied as a potential treatment for HIV.

**SEE RELATED TERM(S):** Cytokine

## **International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Group**

A cooperative group of institutions, investigators, and other collaborators organized to evaluate treatment for HIV-infected children, adolescents, and pregnant women, including treatment and prevention of coinfections; to develop and evaluate safe and effective approaches to prevent mother-to-child transmission of HIV; and to evaluate vaccines for the prevention of HIV transmission among adolescents. International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Group was formed through a merger of investigators, including investigators from the Pediatric AIDS Clinical Trials Group (PACTG).

**SEE RELATED TERM(S):** Clinical Trial, Pediatric AIDS Clinical Trials Group

## **International Network for Strategic Initiatives in Global HIV Trials (INSIGHT)**

A clinical trials network that conducts studies worldwide in order to define optimal strategies for the management of HIV and other infectious diseases.

**SEE RELATED TERM(S):** Clinical Trial

## **Interstitial Nephritis**

A kidney disorder in which the spaces between the kidney tubules (tiny urine-collecting tubes) become swollen. Interstitial nephritis can impair kidney function, including a kidney's ability to filter waste and extra fluid from the body.

**SEE RELATED TERM(S):** Kidneys

## **Intervention**

A measure taken to prevent or treat disease or to improve health in other ways. Examples of interventions include preventive vaccines, drugs, and palliative care.

## **Interventional Trial**

A type of clinical trial. In interventional trials, researchers assign participants to a treatment or other intervention and then measure outcomes.

**SEE RELATED TERM(S):** Clinical Trial

## **Intracytoplasmic Sperm Injection (ICSI)**

A type of in vitro (outside the body) fertilization that is used principally to overcome male infertility. Intracytoplasmic sperm injection (ICSI) involves injecting a single sperm into an egg that has been removed from a woman's ovary. The fertilized egg can then be returned to the woman's uterus. Sperm washing combined with ICSI can be considered as a reproductive option for an HIV discordant couple. ICSI is considered when the man is the HIV-infected partner and insemination with donor sperm from an HIV-uninfected male is not an option.

**SEE RELATED TERM(S):** Discordant Couple, Sperm Washing

## **Intra-Abdominal Fat**

**ALSO KNOWN AS:** Visceral Adipose Tissue

## **Intradermal**

Within or between the layers of the skin. Some drugs are given as intradermal injections.

## **Intramuscular (IM)**

Situated or occurring inside a muscle. An intramuscular (IM) injection is an injection given directly into a muscle.

## **Intrapartum**

The time period spanning childbirth, from the onset of labor through delivery of the placenta. Intrapartum can refer to both the woman and the fetus.

## **Intrauterine Insemination (IUI)**

**ALSO KNOWN AS:** Artificial Insemination

A medical procedure used to help a woman become pregnant. Intrauterine insemination (IUI) involves placing sperm directly in a woman's uterus the day after ovulation. For a discordant couple in which the HIV-infected partner is female, IUI is the most effective way to reduce the risk of HIV transmission when trying to conceive.

**SEE RELATED TERM(S):** Discordant Couple

## **Intravaginal**

Within or introduced into the vagina.

## **Intravenous (IV)**

Situated or occurring inside a vein. An intravenous (IV) injection is an injection given directly into a vein.

## **Intravenous Immunoglobulin (IVIG)**

**ALSO KNOWN AS:** Immune Serum Globulin

A solution of antibodies prepared for injection into a person's vein. Intravenous immunoglobulin (IVIG) is composed of antibodies removed from the blood of healthy donors and then pooled together and purified. IVIG is approved for use in children infected with HIV to reduce the risk of serious bacterial infections.

**SEE RELATED TERM(S):** Antibody

## **Invasive**

Pertaining to an infection or disease that spreads to surrounding tissues or to other parts of the body. Invasive can also refer to a medical procedure that involves entering a part of the body, such as through an incision.

## **Investigational Drug**

**ALSO KNOWN AS:** Experimental Drug

A drug that is approved by the Food and Drug Administration (FDA) for testing in humans for a specified condition but not approved for commercial marketing and sale.

**SEE RELATED TERM(S):** Food and Drug Administration



## Investigational New Drug (IND) Application

A drug sponsor's request to the Food and Drug Administration (FDA) for approval to test an investigational drug in humans. FDA review of an investigational new drug (IND) application ensures that the drug is safe for testing in humans and that testing will not put study participants at unreasonable risk.

**SEE RELATED TERM(S):** Food and Drug Administration, Investigational Drug

## Ischemia

A decrease in blood flow to an organ or tissue of the body, usually due to a blocked artery.

## Isosporiasis

**ALSO KNOWN AS:** Cystoisosporiasis

An intestinal infection caused by the protozoan parasite *Cystoisospora belli* (formerly called *Iso spor a belli*). Isosporiasis can be spread by ingesting food or water contaminated with the parasite. Symptoms of isosporiasis include watery diarrhea, abdominal pain, anorexia, and low-grade fever. In people with HIV, chronic isosporiasis (lasting over 1 month) is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Opportunistic Infection

## Jaundice

Yellowing of the skin, whites of the eyes, or mucous membranes.

Jaundice is a sign that the blood contains too much bilirubin, a substance produced when the liver breaks down red blood cells. It usually indicates liver dysfunction. Jaundice may be caused by liver diseases, such as hepatitis and cirrhosis; blood diseases; infections; or blocked bile ducts (gallbladder disease). Jaundice may also be caused by certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Bilirubin, Liver

## Kaposi Sarcoma (KS)

A rare type of cancer characterized by the abnormal growth of cells that line lymph and blood vessels. Kaposi sarcoma (KS) causes red or purple patches of tissue (lesions) to grow under the skin and in the lining of the mouth, nose, and throat. Lesions may also develop in the digestive tract, liver, or lungs. KS generally occurs in people with weakened immune systems. In people with HIV, KS is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Kaposi Sarcoma Herpesvirus

## Kaposi Sarcoma Herpesvirus (KSHV)

**ALSO KNOWN AS:** Human Herpesvirus 8 (HHV-8)

A type of herpesvirus that causes Kaposi sarcoma. Kaposi sarcoma herpesvirus (KSHV) is primarily transmitted through genital fluids and saliva. Most people infected with KSHV do not develop Kaposi sarcoma. In people with weakened immune systems, including people with HIV, the viral infection is much more likely to advance to Kaposi sarcoma than in people with healthy immune systems.

**SEE RELATED TERM(S):** Herpesviruses, Kaposi Sarcoma

## Karnofsky Performance Status

**ALSO KNOWN AS:** Karnofsky Score

A way to rate a person's ability to perform activities of daily living. The Karnofsky performance status is used to evaluate whether a person should receive a therapy, whether a therapy should be adjusted or discontinued, and whether a person may participate in a clinical trial. The scores range from 0 to 100, with a higher score indicating that a person is better able to perform daily activities.

## Karnofsky Score

**ALSO KNOWN AS:** Karnofsky Performance Status

## Kernicterus

**ALSO KNOWN AS:** Exipient Hyperbilirubinemia

A rare type of brain damage associated with high levels of bilirubin. Kernicterus is usually seen only in infants with untreated jaundice, and it very rarely occurs in adults. Symptoms include uncontrollable movement in the face, body, arms, and legs (called athetoid cerebral palsy) and hearing loss. Kernicterus may also cause problems with vision and teeth and may lead to mental retardation.

**SEE RELATED TERM(S):** Bilirubin, Jaundice

## Kidneys

A pair of bean-shaped organs located in the abdomen, near the middle of the back. The kidneys filter the blood to remove waste products and extra water. The wastes and water become urine, which is eliminated from the body. The kidneys also release hormones, which help with regulating blood pressure, stimulating the body to produce red blood cells, and maintaining a normal chemical balance in the body.

## Killer T Cell

**ALSO KNOWN AS:** CD8 T Lymphocyte

## Lactic Acid

Acid formed by the breakdown of glucose when oxygen levels in the body are low. The body uses lactic acid for energy.

**SEE RELATED TERM(S):** Lactic Acidosis

## Lactic Acidosis

A condition in which lactic acid builds up in the blood. If left untreated, lactic acidosis can be fatal. Symptoms, if any, can include nausea, abdominal pain, muscle ache and weakness, and unintentional weight loss. Lactic acidosis may be caused by advanced HIV infection or antiretroviral (ARV) drugs.

## Latent HIV Reservoir

**ALSO KNOWN AS:** Reservoir

Resting CD4 cells (or other cells) that are infected with HIV but not actively producing HIV. Latent HIV reservoirs are established during the earliest stage of HIV infection. Although antiretroviral therapy (ART) can reduce the level of HIV in the blood to an undetectable level, latent reservoirs of HIV continue to survive. When a latently infected cell is reactivated, the cell begins to produce HIV again. For this reason, ART cannot cure HIV infection.

**SEE RELATED TERM(S):** Viral Latency

## Latent Tuberculosis Infection

When a person is infected with *Mycobacterium tuberculosis*, but the immune system prevents the bacteria from growing. Because the bacteria are inactive, the person does not feel sick and does not have any symptoms of tuberculosis (TB). A person with latent TB infection cannot spread TB to others. Without treatment, latent TB infection can advance to TB disease, especially in people with weakened immune systems.

**SEE RELATED TERM(S):** Tuberculosis, Tuberculosis Disease

## **Leishmaniasis**

A disease caused by the protozoan *Leishmania*, which is usually transmitted by the bites of infected sand flies. There are four major types of leishmaniasis: cutaneous, diffuse, mucocutaneous, and visceral. Visceral leishmaniasis affects internal organs and is characterized by fever, weight loss, enlargement of the spleen and liver, and a drop in blood cell production with possible anemia. In people with AIDS, visceral leishmaniasis is the most common type, and, if left untreated, it is nearly always fatal.

**SEE RELATED TERM(S):** Opportunistic Infection

## **Lentivirus**

A subgroup of retroviruses, which includes HIV.

**SEE RELATED TERM(S):** Retrovirus

## **Lesion**

Damage or an abnormal structural change to a tissue, organ, or body part because of injury or disease. Examples of a lesion include a wound or an infected or diseased patch of skin.

## **Leukocyte**

**ALSO KNOWN AS:** White Blood Cell

## **Leukocytosis**

An increase in the number of white blood cells. Leukocytosis often occurs during acute infection or inflammation.

**SEE RELATED TERM(S):** White Blood Cell

## **Leukopenia**

A low or reduced number of white blood cells.

**SEE RELATED TERM(S):** White Blood Cell

## **LGBTQ**

Acronym for lesbian, gay, bisexual, transgender, and questioning.

## Life Cycle

**ALSO KNOWN AS:** Replication Cycle

The sequence of events required for HIV to replicate. There are seven steps in the HIV life cycle: 1) fusion; 2) reverse transcription; 3) integration; 4) transcription; 5) translation; 6) budding; 7) maturation.

## Linear Gingival Erythema

**ALSO KNOWN AS:** HIV Gingivitis, Red-Band Gingivitis

A condition in which the edge of the gums near the teeth become red and inflamed. Linear gingival erythema is common with HIV infection.

## Lipid

Fat or fat-like substances found in the blood and body tissues. Lipids serve as building blocks for cells and as a source of energy for the body. Cholesterol and triglycerides are types of lipids.

## Lipid-Lowering Agent

**ALSO KNOWN AS:** Statin

## Lipid Profile

**ALSO KNOWN AS:** Coronary Risk Profile

A group of blood tests that measure cholesterol and triglyceride levels. Test results are used to determine a person's risk for heart disease or stroke. High lipid levels may be associated with use of some antiretroviral (ARV) drugs.

## Lipoatrophy

Loss of fat from specific areas of the body, especially from the face, arms, legs, and buttocks. Use of some antiretroviral (ARV) drugs may cause lipoatrophy.

**SEE RELATED TERM(S):** Lipodystrophy

## Lipodystrophy

**ALSO KNOWN AS:** Fat Maldistribution

Changes in lipid metabolism and body composition, including accumulation of fat (lipohypertrophy), loss of fat (lipoatrophy), and redistribution of fat. Use of some antiretroviral (ARV) drugs may cause lipodystrophy.

**SEE RELATED TERM(S):** Dorsocervical Fat Pad, Lipoma, Wasting Syndrome

## Lipohypertrophy

**ALSO KNOWN AS:** Hyperadiposity

Abnormal accumulation of fat, particularly within the abdominal cavity, the upper back (buffalo hump), and subcutaneous tissue (peripheral lipomatosis). Use of some antiretroviral (ARV) drugs may cause lipohypertrophy.

**SEE RELATED TERM(S):** Lipodystrophy

## Lipoma

Benign (not cancerous) lumps of fat that develop under the skin. Lipomas can develop as a result of lipodystrophy, which may be caused by certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Lipodystrophy

## Live Attenuated

**ALSO KNOWN AS:** Attenuated

A disease-causing virus or bacterium that is weakened in a laboratory so it cannot cause disease (or only mild disease). Live attenuated viruses are often used as vaccines because, although weakened, they can stimulate a strong immune response. However, because of remote possibility that a live attenuated virus could cause disease, people infected with HIV should not receive most live attenuated vaccines.

**SEE RELATED TERM(S):** Vaccine



## Liver

The largest organ in the body, located in the upper abdomen on the right side. The liver has many important functions, which include converting food into energy, producing bile (a liquid that helps with digestion), processing drugs and alcohol, removing toxins from the body, filtering blood, and producing blood cells and blood-clotting components.

**SEE RELATED TERM(S):** Hepatitis

## Liver Function Test

A group of blood tests used to detect, evaluate, and monitor liver disease or damage. A liver function test measures enzymes, proteins, and other substances that are produced or excreted by the liver, such as alanine aminotransferase (ALT), alkaline phosphatase (ALP), aspartate aminotransferase (AST), gamma-glutamyl transpeptidase (GGT), bilirubin, and albumin.

**SEE RELATED TERM(S):** Alanine Aminotransferase, Albumin, Aspartate Aminotransferase, Bilirubin, Gamma-Glutamyl Transpeptidase, Hepatotoxicity, Liver

## Localized

Affecting only a specific or limited part of the body rather than the entire body.

**SEE RELATED TERM(S):** Systemic

## Log

**ALSO KNOWN AS:** Log10

## Log10

**ALSO KNOWN AS:** Common Logarithm, Log, Logarithm

A mathematical term used to describe changes in viral load (HIV RNA). For example, if the viral load is 20,000 copies/mL, then a 1-log increase equals a 10-fold (10 times) increase, or 200,000 copies/mL. A 2-log increase equals a 100-fold increase, or 2,000,000 copies/mL.

**SEE RELATED TERM(S):** Viral Load, Viral Load Test

## Logarithm

**ALSO KNOWN AS:** Log10

## Long-Term Nonprogressors

A small group of people infected with HIV who are able to maintain healthy CD4 counts for many years without antiretroviral therapy (ART).

## Lumbar Puncture

**ALSO KNOWN AS:** Spinal Tap

## Lymph

A clear-to-yellowish fluid that circulates throughout the body. In addition to its fluid component, lymph consists of white blood cells (especially lymphocytes) and a small concentration of red blood cells and proteins. As lymph circulates, it picks up unwanted materials, such as bacteria and dead cells, which are then filtered through the lymph nodes. Lymph also supplies mature lymphocytes to the blood.

**SEE RELATED TERM(S):** Lymph Nodes

## Lymph Nodes

Very small organs of the lymphatic system. Lymph nodes are located in many areas of the body, mainly in the neck, under the arms, and in the groin. Lymph nodes play a crucial role in the immune system. When lymph is filtered through the lymph nodes, foreign substances are trapped and destroyed by the lymphocytes that line the walls of the lymph nodes.

**SEE RELATED TERM(S):** Lymph, Lymphatic System, Lymphocyte

## Lymphadenopathy

Abnormal enlargement of lymph nodes, usually associated with an infection or disease. Lymphadenopathy may also occur as part of a hypersensitivity reaction to certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Lymph Nodes

## Lymphatic System

A network of organs, nodes, ducts, and vessels that produce and transport lymph from the body's tissues to the bloodstream. The lymphatic system helps to maintain fluid balance in the tissues and blood; to supply nutrients, oxygen, and hormones to cells; to transport fats, proteins, and white blood cells to the blood; and to fight infection and filter out foreign organisms and waste products.

## Lymphocyte

A type of white blood cell. Most lymphocytes can be classified as T lymphocytes (T cells), B lymphocytes (B cells), or natural killer cells. Lymphocytes are found in the blood, lymph, and lymphoid tissue and help the body fight infection.

**SEE RELATED TERM(S):** White Blood Cell

## Lymphocyte Proliferation Assay

A laboratory test that measures the ability of lymphocytes to replicate (proliferate) when exposed to an antigen.

**SEE RELATED TERM(S):** Antigen

## Lymphogranuloma Venereum (LGV)

A chronic infection of the lymphatic system caused by three strains of the bacterium *Chlamydia trachomatis*. Lymphogranuloma venereum (LGV) is a sexually transmitted infection. Symptoms include genital or rectal ulcers. LGV may increase the risk for sexual transmission of HIV.

**SEE RELATED TERM(S):** Sexually Transmitted Infection

## Lymphoid Interstitial Pneumonitis (LIP)

Inflammation and possible scarring of the tissue that surrounds the air sacs of the lungs (lung interstitium). Symptoms of lymphoid interstitial pneumonitis (LIP) include fever, cough, and difficult breathing (dyspnea). LIP is associated with autoimmune diseases, lymphoproliferative disorders, and certain viral infections, such as HIV or Epstein-Barr virus. LIP is an AIDS-defining condition in children infected with HIV who are 13 years or younger.

**SEE RELATED TERM(S):** AIDS-Defining Condition

## Lymphoma

A type of cancer that starts in the tissues of the lymphatic system, including the lymph nodes, spleen, and bone marrow. In people infected with HIV, certain lymphomas, such as Burkitt lymphoma, are AIDS-defining conditions.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Lymphatic System

## **Lymphopenia**

Lower-than-normal number of lymphocytes (a type of white blood cell) in the blood.

## **Lymphoproliferative Response**

An immune system response that stimulates lymphocytes (a type of white blood cell) to multiply rapidly.

**SEE RELATED TERM(S):** Lymphocyte

## **Lysis**

The breakdown or destruction of cells. Lysis may be caused by chemical or physical damage, such as by drugs or injury, or infection.

## Macrophage

A type of white blood cell that fights infection by ingesting foreign substances, such as microorganisms and dead cells. Macrophages also act as antigen-presenting cells to stimulate other immune cells to fight infection.

**SEE RELATED TERM(S):** Antigen-Presenting Cell, White Blood Cell

## Magnetic Resonance Imaging (MRI)

A noninvasive procedure that uses magnetic fields and radio waves to produce three-dimensional computerized images of areas inside the body.

## Maintenance Therapy

**ALSO KNOWN AS:** Secondary Prophylaxis

Additional drugs or other treatment given to prevent a reoccurrence of a disease or infection after initial treatment has already controlled the disease or infection. Sometimes maintenance therapy may be lifelong.

**SEE RELATED TERM(S):** Primary Prophylaxis

## Major Histocompatibility Complex (MHC)

A group of molecules found on the surface of almost every cell in the body. Major histocompatibility complex (MHC) molecules present protein fragments (peptides) to immune cells. If the cells recognize the peptides as foreign, the body mounts an immune response. In humans, MHC molecules are called human leukocyte antigens (HLAs).

## Malabsorption Syndrome

A group of symptoms that occur when the small intestine cannot absorb nutrients properly. Symptoms include abdominal pain, bloating, gas, and diarrhea. Malabsorption syndrome may be caused by certain diseases, infections, or drugs.

## Malaise

A general feeling of discomfort, illness, or lack of well-being. Malaise can occur as part of a hypersensitivity reaction to certain antiretroviral (ARV) drugs.

## Malaria

A potentially life-threatening disease caused by four strains of protozoa called *Plasmodium*. Malaria is spread by the bite of a mosquito infected with the protozoa. Malaria is endemic in parts of Asia, Africa, Central and South America, Oceania, and certain Caribbean islands. Symptoms of malaria can include extreme exhaustion, chills, profuse sweating, fever, vomiting, diarrhea, other flu-like symptoms, and jaundice. Both malaria and HIV cause substantial morbidity and mortality worldwide, particularly in sub-Saharan Africa. Recent evidence shows important interactions between the two diseases.

**SEE RELATED TERM(S):** Opportunistic Infection

## Malignant

Threatening to health or life, such as a malignant disease. Malignant may also refer to the uncontrolled, invasive growth of cells, such as in a malignant tumor.

## Mast Cell

**ALSO KNOWN AS:** Mastocyte

A type of white blood cell found in almost all tissues, particularly in the skin. Mast cells help the body fight infection by triggering an inflammatory response to an antigen.

**SEE RELATED TERM(S):** Antigen, White Blood Cell

## Mastocyte

**ALSO KNOWN AS:** Mast Cell

## Maternal-Child Transmission

**ALSO KNOWN AS:** Mother-to-Child Transmission

## Maturation

The final and seventh step in the HIV life cycle. Maturation takes place after the virus has pushed itself out of the host cell. During maturation, protease (an HIV enzyme) releases certain viral proteins that allow HIV to mature (become infectious).

**SEE RELATED TERM(S):** Life Cycle, Protease, Protease Inhibitor

## Medication Event Monitoring System (MEMS)

A device used to monitor medication adherence. A medication event monitoring system (MEMS) monitor consists of a conventional medicine container fitted with a special closure that records the time and date of each time the container is opened and closed.

**SEE RELATED TERM(S):** Adherence

## Medline

A federal database that contains references and summaries for biomedical and life science publications from around the world. Most of the publications are from scholarly journal articles. Some of the listings include a link to the free full text of the article. Medline is a service of the U.S. National Library of Medicine.

**SEE RELATED TERM(S):** National Library of Medicine

## MedlinePlus

A federal Web site that contains reliable and up-to-date information about diseases, conditions, and wellness issues for patients and their families and friends. The Web site is written in easy-to-understand language and includes videos and illustrations. MedlinePlus is a service of the U.S. National Library of Medicine.

**SEE RELATED TERM(S):** National Library of Medicine

## Memory Cell

**ALSO KNOWN AS:** Memory Lymphocyte

## Memory Lymphocyte

**ALSO KNOWN AS:** Memory Cell

A type of lymphocyte. Memory lymphocytes can recognize an antigen introduced into the body during a prior infection or vaccination. Memory lymphocytes mount a rapid and strong immune response when exposed to an antigen for a second time. Both T lymphocytes (T cells) and B lymphocytes (B cells) can become memory cells.

**SEE RELATED TERM(S):** Antigen, B Lymphocyte, Lymphocyte, T Lymphocyte

## **Meningitis**

Inflammation of the meninges, which are three layers of tissue that cover and protect the brain and spinal cord. Meningitis may be caused by a bacterial, fungal, or viral infection; drug allergies; cancer; or other diseases. Symptoms may include fever, headache, vomiting, malaise, and stiff neck. If left untreated, meningitis can lead to convulsions, coma, and death.

## **Messenger RNA (mRNA)**

A type of RNA that carries the genetic information needed to make a protein.

**SEE RELATED TERM(S):** Protein, Ribonucleic Acid

## **Metabolic**

Pertaining to metabolism.

**SEE RELATED TERM(S):** Metabolism

## **Metabolic Syndrome**

**ALSO KNOWN AS:** Syndrome X

A combination of risk factors that increase the risk for heart disease, diabetes, and stroke. To be diagnosed with metabolic syndrome, a person must have at least three of the following metabolic risk factors: high blood pressure, abdominal obesity, high triglyceride levels, low levels of high-density lipoprotein (HDL) cholesterol, or high fasting blood sugar levels. Use of some antiretroviral (ARV) drugs may cause or worsen risk factors associated with metabolic syndrome.

## **Metabolism**

All of the physical and chemical processes that produce or use energy within the body. Drug metabolism refers to the breakdown of drugs in the body.

## **Microbe**

**ALSO KNOWN AS:** Microorganism



## Microbicide

A drug, chemical, or other substance used to kill microorganisms. Increasingly, the term is used specifically for substances that prevent or reduce the transmission of sexually transmitted infections, such as HIV.

**SEE RELATED TERM(S):** Microbicide, Microbicide Trials Network

## Microbicide Trials Network (MTN)

A federally funded clinical trials network. Many Microbicide Trials Network (MTN) trials focus on evaluating microbicides and other promising HIV prevention approaches.

**SEE RELATED TERM(S):** Clinical Trial, Microbicide

## Microorganism

**ALSO KNOWN AS:** Microbe

An organism that can be seen only through a microscope. Microorganisms include bacteria, protozoans, and fungi. Although viruses are not considered living organisms, they are sometimes classified as microorganisms.

## Microsporidiosis

An infection caused by several species of the protozoan parasite microsporidia. Microsporidia usually infect the gastrointestinal tract but may also infect other parts of the body, such as the eyes, respiratory tract, or brain. The most common symptoms are chronic diarrhea and wasting, but symptoms vary greatly depending on the site of infection. Microsporidiosis occurs primarily in people with weakened immune systems, especially people with HIV or people who have undergone organ transplants.

**SEE RELATED TERM(S):** Opportunistic Infection

## Mitochondria

A structural unit within cells that produces energy through a process called cellular respiration.

**SEE RELATED TERM(S):** Mitochondrial Toxicity

## Mitochondrial Toxicity

Damage to mitochondria. Mitochondrial toxicity may affect different parts of the body, including the heart, nerves, muscles, pancreas, kidneys, and liver. Conditions resulting from mitochondrial toxicity can include muscle weakness, inflammation of the pancreas (pancreatitis), high levels of lactic acid in the blood (lactic acidosis), changes in distribution and amount of body fat (lipodystrophy), and fatty liver (hepatic steatosis). Use of certain antiretroviral (ARV) drugs may cause mitochondrial toxicity.

**SEE RELATED TERM(S):** Mitochondria

## Mixed Tropic Virus

**ALSO KNOWN AS:** Dual-Tropic Virus

## Modified Directly Observed Therapy (m-DOT)

A variation of directly observed therapy (DOT). Modified-DOT (m-DOT) is when a health care professional watches a person take some, but not all, medication doses.

## Molluscum Contagiosum

A common, usually mild skin disease caused by the virus *Molluscum contagiosum* and characterized by small white, pink, or flesh-colored bumps with a dimple in the center. Molluscum contagiosum is spread by touching the affected skin of an infected person or by touching a surface with the virus on it. The bumps can easily spread to other parts of the body if someone touches or scratches a bump and then touches another part of the body. Compared to people with healthy immune systems, people with weakened immune systems, including people with HIV, are at higher risk for molluscum contagiosum and are more likely to have bumps that are larger and more difficult to treat.

## Monoinfection

When a person has only one infection.

**SEE RELATED TERM(S):** Coinfection

## Mononeuropathy

Neuropathy that damages only one nerve, resulting in symptoms that are linked specifically to the affected nerve.

**SEE RELATED TERM(S):** Neuropathy

## Monotherapy

Using only one drug to treat an infection or disease. Currently, monotherapy for the treatment of HIV is **not recommended** outside of a clinical trial. The recommended treatment for HIV infection is combination antiretroviral therapy (ART), using a regimen that includes three or more antiretroviral (ARV) drugs from at least two different HIV drug classes.

**SEE RELATED TERM(S):** Antiretroviral Therapy

## Morbidity

Disease state or symptom. Morbidity rate is a measure of the frequency of occurrence of disease among a defined population during a specified time period.

## Mortality

The state of being mortal (subject to death). Mortality rate is a measure of the frequency of occurrence of death among a defined population during a specified time period.

## Mother-to-Child Transmission (MTCT)

**ALSO KNOWN AS:** Maternal-Child Transmission, Perinatal Transmission

When an HIV-infected mother passes HIV to her infant during pregnancy, labor and delivery, or breastfeeding (through breast milk). Antiretroviral (ARV) drugs are given to HIV-infected women during pregnancy and to their infants after birth to reduce the risk of mother-to-child transmission (MTCT) of HIV.

**SEE RELATED TERM(S):** Prevention of Mother-to-Child Transmission

## MSM

Acronym for men who have sex with men.

## **MSMW**

Acronym for men who have sex with men and women.

## **M-Tropic Virus**

**ALSO KNOWN AS:** R5-Tropic Virus

## **Mucocutaneous**

Pertaining to the mucous membranes and skin. Mucocutaneous areas of the body include the mouth, eyes, vagina, and anus.

## **Multicenter AIDS Cohort Study (MACS)**

Started in 1984, the study involves collection of biological specimens and medical and behavioral data on MSM (men who have sex with men) in order to study the natural and treated history of HIV. The Multicenter AIDS Cohort Study (MACS) has significantly contributed to the understanding of HIV, AIDS, and the effects of antiretroviral therapy (ART).

## **Multiple Drug Resistant Tuberculosis (MDR-TB)**

A form of tuberculosis (TB) that is resistant to the two most effective antibiotics commonly used to cure TB infection (isoniazid and rifampin). People infected with multiple drug resistant-TB (MDR-TB) are at high risk for treatment failure. They are also at risk for further drug resistance, which can lead to life-threatening disease—extensively drug resistant tuberculosis (XDR-TB).

**SEE RELATED TERM(S):** Drug Resistance, Extensively Drug Resistant Tuberculosis, Tuberculosis

## **Multivalent Vaccine**

**ALSO KNOWN AS:** Polyvalent Vaccine

## Mutagenic

Causing a mutation, which is a permanent change in the genetic material of a cell or microorganism. A mutation may alter a trait or characteristic of a person or may cause disease. Mutations can be inherited or can occur spontaneously. Before being approved, drugs—including antiretroviral (ARV) drugs—are tested to assess their potential for mutagenic effects.

**SEE RELATED TERM(S):** Mutation

## Mutation

A permanent change in the genetic material of a cell or microorganism. Some mutations can be transmitted when the cell or microorganism replicates. Some HIV mutations cause the virus to become resistant to certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Drug Resistance

## Myalgia

**ALSO KNOWN AS:** Myodynia, Myoneuroalgia

Muscle pain.

## Mycobacterium Avium Complex (MAC) Infection

An infection caused by a group of bacteria called *Mycobacterium avium* complex (MAC). MAC include *Mycobacterium avium*, *Mycobacterium intracellulare*, and other similar *Mycobacteria*. MAC bacteria can be found in drinking water, dirt, and household dust. MAC infection usually starts in the lungs and intestines, but can spread throughout the body (disseminated). Symptoms of disseminated MAC infection include fever, night sweats, weight loss, abdominal pain, fatigue, and diarrhea. Most people with healthy immune systems are not affected by the bacteria. In people infected with HIV, MAC infection that is outside of the lungs (extrapulmonary) or that has disseminated is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Mycobacterium Avium-Intracellulare (MAI) Infection, Opportunistic Infection

## **Mycobacterium Avium-Intracellulare (MAI) Infection**

An infection caused by two closely related and hard-to-distinguish bacteria, *Mycobacterium avium* and *Mycobacterium intracellulare*. These two bacteria can be found in drinking water, dirt, and household dust. Most people are not affected by the bacteria, but for people with severely weakened immune systems, the bacteria can cause infection. *M. intracellulare* tends to cause lung disease, and *M. avium* tends to spread throughout the body (disseminated). Symptoms of disseminated *Mycobacterium avium-intracellulare* (MAI) infection include fever, night sweats, weight loss, abdominal pain, fatigue, and diarrhea. In people infected with HIV, MAI infection that is outside of the lungs (extrapulmonary) or that has disseminated is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Mycobacterium Avium Complex (MAC) Infection, Opportunistic Infection

## **Mycobacterium Kansasii Infection**

An infection caused by the bacteria *Mycobacterium kansasii*. The bacteria can be found in water, dirt, and food. *M. kansasii* usually infects the lungs, but can also infect other organs and/or can spread throughout the body (disseminated). Most people with healthy immune systems are not affected by the bacteria. In people infected with HIV, *M. kansasii* infection that is outside of the lungs (extrapulmonary) or that has disseminated is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition

## **Mycobacterium tuberculosis**

The bacterium that causes tuberculosis (TB). *Mycobacterium tuberculosis* usually infects the lungs, but it can also infect other parts of the body, such as the kidneys, spine, and brain. *M. tuberculosis* is spread when a person with an active infection coughs, sneezes, speaks, or sings, and then a person nearby breathes in the bacteria.

**SEE RELATED TERM(S):** Tuberculosis

## **Mycosis**

An infection with or disease caused by a fungus.

**SEE RELATED TERM(S):** Fungus

## Myelin

A whitish, fatty substance that forms an insulating layer around nerves. Myelin helps nerve signals transmit quickly and efficiently along nerve cells.

## Myeloablation

Severe bone marrow suppression. Use of some antiretroviral (ARV) drugs may cause myeloablation.

**SEE RELATED TERM(S):** Bone Marrow, Myelosuppression

## Myelosuppression

**ALSO KNOWN AS:** Bone Marrow Suppression

Impaired bone marrow function. Myelosuppression reduces bone marrow production of red blood cells, white blood cells, and platelets. Use of certain antiretroviral (ARV) drugs may cause myelosuppression.

**SEE RELATED TERM(S):** Bone Marrow

## Myocardial Infarction

A heart attack. Heart attacks occur when blood flow to the heart is reduced or interrupted, causing severe damage or death to the heart muscle (myocardium). Use of some antiretroviral (ARV) drugs may increase the risk for a myocardial infarction.

## Myodynia

**ALSO KNOWN AS:** Myalgia

## Myoneuroalgia

**ALSO KNOWN AS:** Myalgia

## Myopathy

A disease of muscle tissue. Use of certain antiretroviral (ARV) drugs may cause myopathy.

## **Nadir**

The lowest point. For example, a person's nadir CD4 count is the person's lowest CD4 count.

**SEE RELATED TERM(S):** CD4 Count

## **National Cancer Institute (NCI)**

The lead federal agency for cancer-related research, training, and health information for the public. Programs at the National Cancer Institute (NCI) focus on the cause, diagnosis, prevention, and treatment of cancer; rehabilitation from cancer; and continuing care of people with cancer and their families.

## **National Center for Complementary and Alternative Medicine (NCCAM)**

The primary federal agency for scientific research on the diverse medical and health care systems, practices, and products that are not generally considered part of conventional (Western) medicine.

**SEE RELATED TERM(S):** Complementary and Alternative Medicine

## **National Institute of Allergy and Infectious Diseases (NIAID)**

A federal agency that supports basic and applied research to prevent, diagnose, and treat infectious and immune-mediated illnesses, including HIV/AIDS and other sexually transmitted infections. The Institute also supports medical research studies on tuberculosis (TB), malaria, autoimmune disorders, asthma, allergies, and illnesses from potential bioterrorism agents.

## **National Institutes of Health (NIH)**

A federal agency that is the largest source of funding for medical research in the world. The National Institutes of Health (NIH) is made up of several institutions, each with a specific research focus, such as a particular disease or body system.



## National Library of Medicine (NLM)

A federal institute that serves as the world's largest medical library and is the creator of PubMed, MEDLINE, and MedlinePlus. The National Library of Medicine (NLM) collects materials in all areas of biomedicine and health care. NLM makes its resources available around the world, primarily through its electronic information services.

## National Prevention Information Network

**ALSO KNOWN AS:** Centers for Disease Control and Prevention-National Prevention Information Network

## Natural History Study

A type of medical research study. In natural history studies, researchers examine how a disease or medical condition develops over time. Researchers follow participants who are at risk for or have a specific disease or condition to determine how specific factors, such as family history, age, and occupational exposure, affect the development or progression of the disease or condition. Data collected during a natural history study also provide information on how best to treat a condition or disease.

## Natural Killer (NK) Cell

A type of lymphocyte. Natural killer (NK) cells contain enzymes that can kill other cells, especially tumor cells and cells infected by viruses.

**SEE RELATED TERM(S):** Lymphocyte, White Blood Cell

## Nemaline Rod Myopathy (NM)

**ALSO KNOWN AS:** HIV-Associated Adult-Onset Nemaline Myopathy, Rod Body Disease

A rare neuromuscular disorder characterized by the presence of rod-like structures (nemaline bodies) in the muscle fibers and by muscle weakness. Muscle weakness can occur throughout the body, but is typically most severe in the neck, face, and limbs. Nemaline rod myopathy (NM) in its most severe form can be life-threatening. NM can occur as a complication of HIV infection.

## Neonatal

Pertaining to an infant during the first 28 days after birth.

## **Neoplasm**

New abnormal growth of tissue. Neoplasms may be benign (not cancerous) or malignant (cancerous). Neoplasms are commonly called tumors.

## **Nephritis**

Inflammation of the kidney.

**SEE RELATED TERM(S):** Kidneys

## **Nephrolithiasis**

Calculi (stones) in the kidney. Use of some antiretroviral (ARV) drugs may cause nephrolithiasis.

**SEE RELATED TERM(S):** Kidneys

## **Nephrotoxic**

Toxic or destructive to the kidneys. Certain antiretroviral (ARV) drugs can have nephrotoxic effects.

**SEE RELATED TERM(S):** Kidneys

## **Neuralgia**

Sharp, shooting pain along a nerve or group of nerves.

## **NeuroAIDS**

A group of neurological disorders caused primarily by HIV damage to the central and peripheral nervous systems. Examples of neuroAIDS disorders include myelopathy, sensory neuropathy, and AIDS dementia.

**SEE RELATED TERM(S):** Central Nervous System, Peripheral Nervous System

## **Neuropathy**

Damage or degeneration of the nerves, especially the peripheral nerves. Symptoms of neuropathy depend on which nerves are affected and can include pain, tingling, numbness, or weakness. HIV-related neuropathy may be due to HIV infection or use of certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Peripheral Nervous System

## Neutropenia

Lower-than-normal number of neutrophils (a type of white blood cell) in the blood. Moderate to severe neutropenia can increase the risk of bacterial and fungal infections. Neutropenia may occur as a result of HIV infection or use of some antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Neutrophil

## Neutrophil

A type of white blood cell that fights infection by engulfing and killing foreign substances, such as bacteria.

**SEE RELATED TERM(S):** White Blood Cell

## New Drug Application (NDA)

A drug sponsor's request to the Food and Drug Administration (FDA) for approval to sell and market a new drug in the United States. A new drug application (NDA) includes enough information for the FDA to determine whether the new drug is safe and effective; whether the drug's benefits outweigh its risks; whether the proposed drug label (package insert) is appropriate; and whether the drug manufacturing standards are adequate.

**SEE RELATED TERM(S):** Food and Drug Administration

## NNRTI-Sparing Regimen

Combination antiretroviral therapy (ART) that does not include antiretroviral (ARV) drugs from the non-nucleoside reverse transcriptase inhibitor (NNRTI) drug class. Excluding NNRTIs from an HIV treatment regimen saves drugs in the NNRTI class for future use.

**SEE RELATED TERM(S):** Non-Nucleoside Reverse Transcriptase Inhibitor

## Non-Hodgkin Lymphoma (NHL)

A large group of lymphomas (cancers of the lymphatic system). The many types of non-Hodgkin lymphoma (NHL) are classified according to how fast the cancer spreads. Although the symptoms of NHLs vary, they often include swollen lymph nodes, fever, and weight loss. Certain types of NHLs, such as Burkitt lymphoma and immunoblastic lymphoma, are AIDS-defining cancers in people with HIV.

**SEE RELATED TERM(S):** AIDS-Defining Cancer, AIDS-Defining Condition, Lymphoma

## **Non-Inferiority Trial**

A clinical trial designed to show that a new drug (or other treatment) is at least as effective as the drug to which it is compared.

**SEE RELATED TERM(S):** Superiority Trial

## **Non-Nucleoside Analogue Reverse Transcriptase Inhibitor**

**ALSO KNOWN AS:** Non-Nucleoside Reverse Transcriptase Inhibitor

## **Non-Nucleoside Reverse Transcriptase Inhibitor (NNRTI)**

**ALSO KNOWN AS:** Non-Nucleoside Analogue Reverse Transcriptase Inhibitor

Antiretroviral (ARV) HIV drug class. Non-nucleoside reverse transcriptase inhibitors (NNRTIs) bind to and block HIV reverse transcriptase (an HIV enzyme). HIV uses reverse transcriptase to convert its RNA into DNA (reverse transcription). Blocking reverse transcriptase and reverse transcription prevents HIV from replicating.

**SEE RELATED TERM(S):** Drug Class, Reverse Transcriptase, Reverse Transcription

## **Non-Occupational Post-Exposure Prophylaxis (nPEP)**

Short-term treatment started as soon as possible after high-risk non-occupational exposure to an infectious agent, such as HIV, hepatitis B virus (HBV), or hepatitis C virus (HCV). Non-occupational exposure refers to exposure to an infectious agent that occurs outside of one's work. The purpose of non-occupational post-exposure prophylaxis (nPEP) is to reduce the risk of infection.

## **Non-Steroidal Anti-Inflammatory Drug (NSAID)**

A drug used to control pain and inflammation. Common non-steroidal anti-inflammatory drugs (NSAIDs) include aspirin and ibuprofen.

## **NRTI-Sparing Regimen**

Combination antiretroviral therapy (ART) that does not include antiretroviral (ARV) drugs from the nucleoside reverse transcriptase inhibitor (NRTI) drug class. Excluding NRTIs from an HIV treatment regimen saves drugs in the NRTI class for future use.

**SEE RELATED TERM(S):** Nucleoside Reverse Transcriptase Inhibitor

## Nucleic Acid

A family of molecules found in all living cells and viruses. Nucleic acids, which include DNA and RNA, control cellular function and heredity.

**SEE RELATED TERM(S):** Deoxyribonucleic Acid, Ribonucleic Acid

## Nucleic Acid Amplification Test

**ALSO KNOWN AS:** Nucleic Acid Amplification Test

## Nucleic Acid Test (NAT)

**ALSO KNOWN AS:** Nucleic Acid Amplification Test

Any of various laboratory tests used to detect the genetic material of a microorganism, such as HIV, in blood, plasma, or other tissue. The viral load (HIV RNA) test is a type of nucleic acid test (NAT).

**SEE RELATED TERM(S):** Viral Load Test

## Nucleoside

Precursor to a nucleotide. The body converts nucleosides into nucleotides, which are then used to make nucleic acids.

**SEE RELATED TERM(S):** Nucleic Acid, Nucleotide

## Nucleoside Analogue Reverse Transcriptase Inhibitor

**ALSO KNOWN AS:** Nucleoside Reverse Transcriptase Inhibitor

## Nucleoside Reverse Transcriptase Inhibitor (NRTI)

**ALSO KNOWN AS:** Nucleoside Analogue Reverse Transcriptase Inhibitor, Nukes

Antiretroviral (ARV) HIV drug class. Nucleoside reverse transcriptase inhibitors (NRTIs) block reverse transcriptase (an HIV enzyme). HIV uses reverse transcriptase to convert its RNA into DNA (reverse transcription). Blocking reverse transcriptase and reverse transcription prevents HIV from replicating.

**SEE RELATED TERM(S):** Drug Class, Nucleotide Reverse Transcriptase Inhibitor, Reverse Transcriptase, Reverse Transcription

## Nucleotide

A building block of nucleic acids. DNA and RNA are nucleic acids.

**SEE RELATED TERM(S):** Deoxyribonucleic Acid, Ribonucleic Acid

## Nucleotide Reverse Transcriptase Inhibitor (NtRTI)

**ALSO KNOWN AS:** Nucleotide Analogue Reverse Transcriptase Inhibitor, Nukes

A type of antiretroviral (ARV) HIV drug. Nucleotide reverse transcriptase inhibitors (NtRTIs) interfere with the HIV life cycle in the same way as NRTIs. Both block reverse transcription. NtRTIs are included in the NRTI drug class.

**SEE RELATED TERM(S):** Drug Class, Nucleoside Reverse Transcriptase Inhibitor, Reverse Transcriptase, Reverse Transcription

## Nucleus

A membrane-bound structure containing a cell's chromosomes. All eukaryotes (all organisms except bacteria and viruses) have a nucleus.

**SEE RELATED TERM(S):** Chromosome

## Nukes

**ALSO KNOWN AS:** Nucleoside Reverse Transcriptase Inhibitor

## Nukes

**ALSO KNOWN AS:** Nucleotide Reverse Transcriptase Inhibitor

## Observational Trial

A type of clinical trial. In observational trials, researchers do not assign participants to a treatment or intervention. Instead, the researchers observe participants over time to determine health outcomes.

**SEE RELATED TERM(S):** Clinical Trial

## Occupational Exposure

Contact with a potentially harmful physical, chemical, or biological agent as a result of one's work. For example, a health care professional may be exposed to HIV or another infectious agent through a needlestick injury.

## Occupational Post-Exposure Prophylaxis (oPEP)

Short-term treatment started as soon as possible after high-risk occupational exposure to an infectious agent, such as HIV, hepatitis B virus (HBV), or hepatitis C virus (HCV). The purpose of occupational post-exposure prophylaxis (oPEP) is to reduce the risk of infection. An example of a high-risk occupational exposure is exposure to an infectious agent as the result of a needlestick injury.

**SEE RELATED TERM(S):** Occupational Exposure

## Office of AIDS Research (OAR)

A federal agency that coordinates the scientific, budgetary, legislative, and policy elements of the NIH AIDS research program.

**SEE RELATED TERM(S):** National Institutes of Health

## Office of Minority Health (OMH)

A federal office whose primary responsibility is to improve the health of racial and ethnic minority populations, including African Americans, Hispanic Americans, American Indians, Alaskan Natives, and Pacific Islanders. The Office of Minority Health (OMH) develops or advances policies, programs, and practices that address health, social, economic, environmental, and other factors that impact the health of minority populations, including those specifically affected by HIV/AIDS.

## Off-Label Use

The legal, prescribed use of a drug in a manner different from that described on the Food and Drug Administration (FDA)-approved drug label. Off-label use can include using a drug for a different disease or medical condition or giving a drug at a different dose or via a different route of administration than approved by FDA.

**SEE RELATED TERM(S):** Food and Drug Administration

## Open-Label Trial

A type of clinical trial. In open-label trials, both the researchers and participants know which drug (or other intervention) is being given to participants.

**SEE RELATED TERM(S):** Clinical Trial, Double-Blind Study

## Opportunistic Infection (OI)

An infection that occurs more frequently or is more severe in people with weakened immune systems, such as people with HIV or people receiving chemotherapy, than in people with healthy immune systems.

## Optimized Background Therapy (OBT)

The combination of antiretroviral (ART) drugs most likely to control a person's HIV. Optimized background therapy (OBT) is chosen on the basis of a person's resistance test results and treatment history.

## Oral Hairy Leukoplakia (OHL)

A disease of the mucous membranes that occurs mostly in people with HIV. Oral hairy leukoplakia (OHL) is characterized by white or gray lesions that usually develop on the tongue or the inside of the cheek. The lesions have a ribbed, fuzzy appearance. OHL is caused by the Epstein-Barr virus (EBV), a type of herpesvirus.

**SEE RELATED TERM(S):** Epstein-Barr Virus

## Osteonecrosis

Death of bone tissue.



## Osteopenia

Lower-than-normal bone mass and bone mineral density. Osteopenia often precedes more severe bone loss (osteoporosis). Osteopenia frequently develops in people taking antiretroviral (ARV) drugs; however, the association between ARV drugs and osteopenia is unclear.

**SEE RELATED TERM(S):** Osteoporosis

## Osteoporosis

Progressive loss of bone mass and bone mineral density, resulting in an increased risk of fractures. Osteoporosis frequently develops in people taking antiretroviral (ARV) drugs; however, the association between ARV drugs and osteoporosis is unclear.

**SEE RELATED TERM(S):** Osteopenia

## Outcome Measure

**ALSO KNOWN AS:** Clinical Endpoint

## **p24**

An HIV protein. p24 forms HIV's viral core.

**SEE RELATED TERM(S):** Core

## **Package Insert**

**ALSO KNOWN AS:** Prescribing Information, Prescription Drug Labeling, Product Label

Drug prescribing information prepared by the drug manufacturer and approved by the Food and Drug Administration (FDA). The package insert includes details and directions that health care providers need to prescribe a drug properly, including approved uses for the drug, contraindications, potential adverse reactions, available formulations and dosage, and how to administer the drug. The package insert is included with drug packaging and is used to develop any promotional or labeling materials.

**SEE RELATED TERM(S):** Food and Drug Administration

## **Palliative Care**

Care to alleviate the physical and psychological symptoms of disease or the undesirable effects of treatment. The goal of palliative care is not to cure disease but to make the person more comfortable and improve the person's quality of life. Palliative care may be given at any stage of a disease.

## **Pancreas**

A gland located behind the stomach. The pancreas secretes enzymes that aid in digestion and produces several hormones, including insulin and glucagon, which regulate blood sugar levels.

**SEE RELATED TERM(S):** Insulin

## **Pancreatitis**

Inflammation of the pancreas. Symptoms of acute and chronic pancreatitis are similar and can include pain, nausea and vomiting, and a swollen abdomen. Gallstones are the most common cause of acute pancreatitis. Chronic, heavy alcohol use is a common cause of both acute and chronic pancreatitis. Pancreatitis may also be caused by use of certain antiretroviral (ARV) drugs or an opportunistic infection.

**SEE RELATED TERM(S):** Pancreas

## Pancytopenia

Lower-than-normal levels of blood cells (red blood cells and white blood cells) and platelets.

## Pandemic

An epidemic of disease, or other health condition, that occurs over a widespread area (multiple countries or continents) and usually affects a sizeable part of the population.

**SEE RELATED TERM(S):** Epidemic

## Pap Smear

**ALSO KNOWN AS:** Pap Test

A procedure in which cells and secretions are collected from inside and around the cervix for examination under a microscope. Pap smear also refers to the laboratory test used to detect any infected, potentially pre-cancerous, or cancerous cells in the cervical cells obtained from a Pap smear.

**SEE RELATED TERM(S):** Cervix

## Pap Test

**ALSO KNOWN AS:** Pap Smear

## Papilloma

A benign (not cancerous) growth, such as a wart, on the skin or mucous membrane.

## Parasite

Any organism that lives on or in another living organism (the host) and gets its food from or at the expense of the host. The host does not benefit from the parasite. Many parasites cause disease in humans. People with weakened immune systems, including people with HIV, are at a higher risk for parasitic infections than people with healthy immune systems.

## **Parenteral**

When a substance, such as a drug or solution, is introduced into the body through a route other than the gastrointestinal (GI) tract. (The GI tract extends from the mouth to the anus.) For example, a parenteral drug may be given through the veins (intravenous), into the muscles (intramuscular), or through the skin (subcutaneous). Parenteral nutrition refers to feeding a person intravenously.

## **Paresthesia**

Abnormal touch sensations, such as burning, prickling, or tingling, that occur spontaneously. Paresthesia usually occurs in the hands, arms, legs, or feet, but it can occur in other parts of the body, too. Chronic paresthesia may be due to underlying neurological disease, traumatic nerve damage, or peripheral neuropathy. Paresthesia may also be caused by use of certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Peripheral Neuropathy

## **Passive Immunity**

Immunity that develops after a person receives immune system components, most commonly antibodies, donated from another person. Passive immunity can occur naturally, such as when an infant receives a mother's antibodies through the placenta or breast milk, or artificially, such as when a person receives antibodies in the form of an injection (gamma globulin injection). Passive immunity provides immediate protection against an antigen, but does not provide long-lasting protection.

**SEE RELATED TERM(S):** Acquired Immunity, Active Immunity, Antibody

## **Passive Immunotherapy**

A type of immunotherapy in which donated or laboratory-made immune system components or cellular proteins are given to a person to help the person fight an infection or disease. Passive immunotherapy using antibodies is often used in cancer treatment.

**SEE RELATED TERM(S):** Immunotherapy

## Pathogen

Any disease-causing microorganism, such as a bacterium or virus.

## Pathogenesis

The origin and development of a disease. Pathogenesis includes the specific processes that occur during the development of a disease.

## Peak Concentration

**ALSO KNOWN AS:** C<sub>max</sub>

## Pediatric AIDS Clinical Trials Group (PACTG)

A large clinical trials network that evaluates treatments for HIV-infected children and adolescents and that develops new therapeutic approaches for preventing mother-to-child transmission of HIV. Originally an independent network, Pediatric AIDS Clinical Trials Group (PACTG) investigators are now merged with the International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Group.

**SEE RELATED TERM(S):** International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Group

## Pediatric AIDS Clinical Trials Group 076 (PACTG 076)

A federally funded study that determined that the risk of mother-to-child transmission (MTCT) of HIV could be reduced by nearly 70% if the antiretroviral (ARV) drug zidovudine was given to a woman during pregnancy and labor and delivery and to the newborn. The Pediatric AIDS Clinical Trials Group 076 (PACTG 076) study contributed greatly to preventing MTCT of HIV.

## Pelvic Inflammatory Disease (PID)

Infection and inflammation of the female upper genital tract, including the uterus and fallopian tubes. Pelvic inflammatory disease (PID) is usually due to bacterial infection, including some sexually transmitted infections, such as chlamydia and gonorrhea. Symptoms, if any, include pain in the lower abdomen, fever, smelly vaginal discharge, irregular bleeding, or pain during intercourse. PID can lead to serious complications, including infertility, ectopic pregnancy (a pregnancy in the fallopian tube or elsewhere outside of the womb), and chronic pelvic pain.

## Penicilliosis

**ALSO KNOWN AS:** Penicillium Marneffeii Infection

## Penicillium Marneffeii Infection

**ALSO KNOWN AS:** Penicilliosis

A disease caused by the fungus *Penicillium marneffeii*, which is endemic in Southeast Asia (especially Northern Thailand). Symptoms include fever, anemia, weight loss, and skin lesions. *Penicillium marneffeii* infection occurs mostly in people with weakened immune systems, such as people with HIV. Without timely antifungal treatment, the disease can be fatal.

**SEE RELATED TERM(S):** Opportunistic Infection

## People Living with AIDS

**ALSO KNOWN AS:** People Living with HIV/AIDS

## People Living with HIV

**ALSO KNOWN AS:** People Living with HIV/AIDS

## People Living with HIV/AIDS (PLWHA)

**ALSO KNOWN AS:** People Living with AIDS (PLWA), People Living with HIV (PLWH)

Infants, children, adolescents, and adults infected with HIV/AIDS.

## Peptide

Amino acids that are chemically linked to one another. Proteins are made of peptides.

**SEE RELATED TERM(S):** Amino Acids, Protein

## Perianal

Pertaining to the area around the anus.

## Perinatal

The time period that extends from about mid-way before birth to after birth. This time period begins the 20th week of gestation and ends 4 weeks after birth. Perinatal transmission of HIV refers to the passage of HIV from an infected mother to her child during pregnancy, labor and delivery, or breastfeeding (through breast milk).

**SEE RELATED TERM(S):** Mother-to-Child Transmission

## Perinatal Transmission

**ALSO KNOWN AS:** Mother-to-Child Transmission

## Peripheral Blood Mononuclear Cell (PBMC)

A type of white blood cell that contains one nucleus, such as a lymphocyte or macrophage.

**SEE RELATED TERM(S):** White Blood Cell

## Peripheral Nervous System (PNS)

The part of the nervous system that is made up of the nerves outside of the brain and spinal cord. The peripheral nervous system (PNS) transmits information from the brain and spinal cord to the rest of the body; it also transmits sensory information back to the brain and spinal cord. HIV infection or use of certain antiretroviral (ARV) drugs can cause damage to the PNS.

**SEE RELATED TERM(S):** Peripheral Neuropathy

## Peripheral Neuropathy

Damage to the peripheral nervous system, which includes the nerves outside of the brain and spinal cord. Symptoms include pain, numbness, tingling, swelling, and muscle weakness. Peripheral neuropathy may be due to injury, infection, disease (such as diabetes), autoimmune diseases (such as chronic inflammatory demyelinating polyneuropathy), or certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Neuropathy, Peripheral Nervous System

## Persistent Generalized Lymphadenopathy (PGL)

Enlarged lymph nodes (lymphadenopathy) in at least two areas of the body for at least 3 months. In people with HIV, persistent generalized lymphadenopathy (PGL) is associated with early stages of HIV infection and with certain opportunistic infections.

**SEE RELATED TERM(S):** Lymph Nodes

## Pharmacokinetics

The processes by which a drug is absorbed, distributed, metabolized, and eliminated by the body.

**SEE RELATED TERM(S):** Pharmacology

## Pharmacology

The study of drugs. Pharmacology includes the study of a drug's composition, pharmacokinetics, therapeutic use, and toxicity.

**SEE RELATED TERM(S):** Pharmacokinetics

## Phase I Trial

The first step in testing an experimental drug in humans. Phase I trials evaluate the drug's safety and toxicity at different dose levels and determine drug pharmacokinetics. Because little is known about the possible risks and benefits of the drug being tested, Phase I trials usually include only a small number of participants (20 to 80). Testing of other biomedical interventions, such as diagnostic tests or medical devices, also begins with Phase I trials.

**SEE RELATED TERM(S):** Clinical Trial, Pharmacokinetics, Phase II Trial, Phase III Trial, Phase IV Trial

## Phase II Trial

The second step in testing an experimental drug (or other treatment) in humans. Typically, Phase II trials are done only if Phase I trials have shown that the drug is safe, but sometimes Phase I and Phase II trials are combined. Phase II trials are designed to evaluate the drug's effectiveness in people with the disease or condition being studied and to determine the common short-term adverse effects and risks associated with the drug. Phase II trials involve more participants (often several hundred) and typically last longer than Phase I trials.

**SEE RELATED TERM(S):** Clinical Trial, Phase I Trial, Phase III Trial, Phase IV Trial

## Phase III Trial

The third step in testing an experimental drug (or other treatment) in humans. Phase III trials are conducted to confirm and expand on safety and effectiveness results from Phase I and II trials, to compare the drug to standard therapies for the disease or condition being studied, and to evaluate the overall risks and benefits of the drug. This trial phase recruits a large group of people with the disease or condition, usually ranging from 1,000 to 3,000 participants. Results from Phase III trials



provide information that the Food and Drug Administration (FDA) needs to consider the drug for approval.

**SEE RELATED TERM(S):** Clinical Trial, Food and Drug Administration, Phase I Trial, Phase II Trial, Phase IV Trial

## Phase IV Trial

Testing in humans that occurs after a drug (or other treatment) has already been approved by the Food and Drug Administration (FDA) and is being marketed for sale. Phase IV trials are conducted to determine long-term safety and effectiveness and to identify adverse effects that may not have been apparent in prior trials. Thousands of participants are usually recruited to volunteer for this phase of clinical testing.

**SEE RELATED TERM(S):** Clinical Trial, Food and Drug Administration, Phase I Trial, Phase II Trial, Phase III Trial

## Phenotypic Antiretroviral Resistance Test

**ALSO KNOWN AS:** Phenotypic Assay

A type of resistance test that measures the extent to which a person's strain of HIV will multiply in different concentrations of antiretroviral (ARV) drugs. Resistance testing is used to guide selection of an HIV regimen when initiating or changing antiretroviral therapy (ART).

**SEE RELATED TERM(S):** Genotypic Antiretroviral Resistance Test, Resistance Testing

## Phenotypic Assay

**ALSO KNOWN AS:** Phenotypic Antiretroviral Resistance Test

## Photosensitivity

Abnormal sensitivity to light. Symptoms may include reddening and blistering of the skin. Use of some antiretroviral (ARV) drugs may cause photosensitivity reactions.

## Pill Burden

The number of tablets, capsules, or other dosage forms that a person takes on a regular basis. A high pill burden can make it difficult to adhere to an HIV treatment regimen.

**SEE RELATED TERM(S):** Adherence

## Pink Eye

**ALSO KNOWN AS:** Conjunctivitis

## PI-Sparing Regimen

Combination antiretroviral therapy (ART) that does not include antiretroviral (ARV) drugs from the protease inhibitor (PI) drug class. Excluding PIs from an HIV treatment regimen saves drugs in the PI class for future use.

**SEE RELATED TERM(S):** Protease Inhibitor

## Placebo

**ALSO KNOWN AS:** Sham, Sugar Pill

An inactive drug (or other intervention) that is identical in appearance to a therapeutically active drug. In some clinical trials, researchers compare the effects of a placebo with those of an active drug under investigation to determine if the active investigational drug is effective.

**SEE RELATED TERM(S):** Placebo-Controlled Trial, Placebo Effect

## Placebo Effect

An effect (usually, but not necessarily, beneficial) that arises from an expectation that the given drug (or other intervention) will have an effect. In a clinical trial, placebo effect can refer to an effect experienced by either a participant or a researcher.

**SEE RELATED TERM(S):** Placebo

## Placebo-Controlled Trial

A type of clinical trial. In placebo-controlled trials, one group of participants (the control arm) receives an inactive drug (or other intervention), called a placebo, while another group of participants (the experimental arm) receives the active drug being tested. The two groups are compared to see if the drug is more effective than the placebo.

**SEE RELATED TERM(S):** Placebo

## Placenta

The sac-shaped organ that develops in the uterus of a pregnant woman. The placenta provides the fetus with oxygen and nutrients and takes away wastes, such as carbon dioxide, via the umbilical cord.

## Plasma

The clear, yellowish liquid part of blood. Plasma carries red blood cells, white blood cells, and platelets throughout the body.

## Platelet

An irregularly shaped cell-like particle found in the blood. Platelets cause blood clots to form, which helps prevent bleeding.

## Pneumocystis Carinii Pneumonia

**ALSO KNOWN AS:** Pneumocystis Jiroveci Pneumonia

## Pneumocystis Jiroveci Pneumonia

**ALSO KNOWN AS:** Pneumocystosis, Pneumocystis Carinii Pneumonia, Pneumocystis Pneumonia

Formerly known as *Pneumocystis carinii* pneumonia (PCP). A lung infection caused by the fungus *Pneumocystis jiroveci*. Symptoms include a cough (often mild and dry), fever, and shortness of breath. The fungus is common in the environment and does not cause illness in healthy people. *Pneumocystis jiroveci* pneumonia occurs only in people with weakened immune systems. In people with HIV, *Pneumocystis jiroveci* pneumonia is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Opportunistic Infection

## Pneumocystis Pneumonia

**ALSO KNOWN AS:** Pneumocystis Jiroveci Pneumonia

## Pneumocystosis

**ALSO KNOWN AS:** Pneumocystis Jiroveci Pneumonia

## Pneumonia

**ALSO KNOWN AS:** Bronchopneumonia

Inflammation of the lungs, which is usually caused by a bacterial, viral, or fungal infection. People older than 65 years of age or younger than 2 years of age and people with weakened immune systems are more at risk for pneumonia. Symptoms include cough, shortness of breath, fevers, chills, chest pain, and weakness. In people with HIV, recurrent pneumonia (pneumonia that returns again and again) is considered an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition

## **Polymerase Chain Reaction (PCR)**

A laboratory technique used to produce large amounts of specific DNA fragments. PCR is used for genetic testing and to diagnose disease.

## **Polyneuritis**

Inflammation of several peripheral nerves at the same time.

**SEE RELATED TERM(S):** Peripheral Nervous System

## **Polyneuropathy**

Neuropathy that damages multiple nerves.

**SEE RELATED TERM(S):** Neuropathy

## **Polyvalent Vaccine**

**ALSO KNOWN AS:** Multivalent Vaccine

A vaccine that immunizes against more than one antigen. An example of a polyvalent vaccine is the MMR vaccine, which immunizes against three viruses—the viruses that cause measles, mumps, and rubella.

**SEE RELATED TERM(S):** Antigen, Vaccine

## **Post-Exposure Prophylaxis (PEP)**

Short-term treatment started as soon as possible after high-risk exposure to an infectious agent, such as HIV, hepatitis B virus (HBV), or hepatitis C virus (HCV). The purpose of post-exposure prophylaxis (PEP) is to reduce the risk of infection. An example of a high-risk exposure is exposure to an infectious agent as the result of unprotected sex.

**SEE RELATED TERM(S):** Non-Occupational Post-Exposure Prophylaxis, Occupational Post-Exposure Prophylaxis, Pre-Exposure Prophylaxis

## **Postnatal**

The time period after birth. Postnatal refers to the newborn.

## **Postpartum**

The time period after childbirth. Postpartum refers to the mother.

## Preclinical

Preliminary testing of an investigational drug (or other intervention) in laboratory animals. Preclinical studies are used to determine a drug's effects and safety in laboratory animals before Phase I clinical trials in humans can begin.

**SEE RELATED TERM(S):** Clinical Trial, Phase I Trial

## Preconception Counseling and Care

Ongoing education and care to improve the health of a woman before pregnancy. Preconception counseling and care involves identifying and managing conditions and behaviors that could put the woman or her baby at risk. For women with HIV, this includes counseling on the risks and benefits of antiretroviral (ARV) drugs to prevent mother-to-child transmission (MTCT) of HIV.

**SEE RELATED TERM(S):** Mother-to-Child Transmission

## Pre-Exposure Prophylaxis (PrEP)

Administration of antiretroviral (ARV) drugs before potential HIV exposure in order to reduce the risk of HIV infection. Clinical trials are underway to determine if pre-exposure prophylaxis (PrEP) is a safe and effective way to reduce HIV transmission in people at high risk for HIV infection.

## Prenatal

**ALSO KNOWN AS:** Antenatal

The time period before birth. Prenatal can refer to both the woman and the fetus.

## Prescribing Information

**ALSO KNOWN AS:** Package Insert

## Prescription Drug Labeling

**ALSO KNOWN AS:** Package Insert

## **President's Emergency Plan for AIDS Relief (PEPFAR)**

The U.S. government global initiative to combat the HIV/AIDS epidemic. The President's Emergency Plan for AIDS Relief (PEPFAR) works with governmental and non-governmental partners worldwide to support integrated HIV prevention, treatment, and care programs. PEPFAR places emphasis on improving health outcomes, increasing program sustainability and integration, and strengthening health systems.

## **Presumptive**

Based on a reasonable assumption. In non-breastfed infants born to HIV-infected mothers, presumptive exclusion of HIV infection is based on two or more negative HIV tests, one at age 14 days or older and the other at age 1 month or older. Additional testing is necessary to definitively exclude HIV infection.

**SEE RELATED TERM(S):** Definitive

## **Prevalence**

The number or proportion of people with a particular disease or condition in a given population and at a specific time.

**SEE RELATED TERM(S):** Incidence

## **Prevention of Mother-to-Child Transmission (PMTCT)**

Strategies used to prevent the spread (transmission) of HIV from an HIV-infected mother to her child during pregnancy, during labor and delivery, or by breastfeeding (through breast milk). Strategies include antiretroviral (ARV) prophylaxis for the mother during pregnancy and labor and delivery, scheduled cesarean delivery, ARV prophylaxis for the newborn infant, and avoidance of breastfeeding.

## **Primary HIV Infection**

**ALSO KNOWN AS:** Acute HIV Infection

## **Preventive HIV Vaccine**

A vaccine to prevent HIV infection in people who do not have HIV. To date, no preventive HIV vaccine exists, but research is underway.

**SEE RELATED TERM(S):** Therapeutic HIV Vaccine, Vaccine

## Primary Immune Complex Reaction

A type of hypersensitivity reaction that results from interactions between a drug and the immune system. During a primary immune complex reaction, antigens and antibodies clump together to form immune complexes. These immune complexes then damage body tissue. This rare but serious drug reaction can occur with use of certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Hypersensitivity

## Primary Prevention

**ALSO KNOWN AS:** Primary Prophylaxis

## Primary Prophylaxis

**ALSO KNOWN AS:** Primary Prevention

Drugs or other forms of treatment used to prevent the development of a disease in a person who is at risk for but with no prior history of the disease. For example, primary prophylaxis is used to prevent people with advanced HIV infection from developing opportunistic infections, such as toxoplasmosis.

**SEE RELATED TERM(S):** Maintenance Therapy

## Primary Resistance

**ALSO KNOWN AS:** Transmitted Resistance

## Proctitis

Inflammation of the anus and rectum.

## Prodrome

An early symptom that indicates the onset of a disease.

## Product Label

**ALSO KNOWN AS:** Package Insert

## Programmed Cell Death

**ALSO KNOWN AS:** Apoptosis

## **Progressive Multifocal Leukoencephalopathy (PML)**

A rare disorder of the central nervous system caused by the John Cunningham virus (JCV). Most people are infected with JCV by 10 years of age; however, only people with weakened immune systems develop progressive multifocal leukoencephalopathy (PML). PML is primarily characterized by damage to myelin in the brain. Symptoms of PML vary and can include headache, loss of coordination, loss of speech, vision problems, and progressive weakness in the arms and legs. In people with HIV, PML is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Central Nervous System, Myelin, Opportunistic Infection

## **Prophylactic**

**ALSO KNOWN AS:** Condom

## **Prophylaxis**

Prevention or protection against disease.

**SEE RELATED TERM(S):** Maintenance Therapy, Primary Prophylaxis

## **Protease**

A type of enzyme that breaks down proteins into smaller proteins or smaller protein units, such as peptides or amino acids. HIV protease cuts up large precursor proteins into smaller proteins. These smaller proteins combine with HIV's genetic material to form a new HIV virus. Protease inhibitors (PIs) prevent HIV from replicating by blocking protease.

**SEE RELATED TERM(S):** Life Cycle, Maturation, Protease Inhibitor

## **Protease Inhibitor (PI)**

Antiretroviral (ARV) HIV drug class. Protease inhibitors (PIs) block protease (an HIV enzyme). This prevents new HIV from forming.

**SEE RELATED TERM(S):** Drug Class, Protease

## **Protein**

A large molecule made up of a series of peptides—one or more long chains of amino acids. The specific sequence of the amino acids determines the protein's structure and function. Proteins are essential to all living organisms.

**SEE RELATED TERM(S):** Amino Acids



## Proteinuria

Excess protein in the urine. Proteinuria is a sign of chronic kidney disease, which can result from diabetes, high blood pressure, and diseases that cause inflammation in the kidneys. Proteinuria can also occur if antiretroviral (ARV) drugs damage the kidneys.

## Protocol

The detailed plan for conducting a clinical trial. The protocol is carefully designed to safeguard the health of participants and to answer specific research questions. The protocol describes what the trial will do, how it will be carried out, and why each part of the trial is necessary. Each person participating in a clinical trial must agree to the rules set out by the protocol.

**SEE RELATED TERM(S):** Clinical Trial, Eligibility Criteria

## Protozoan

A single-celled microorganism. Some protozoans can cause disease in humans, including *Toxoplasma gondii* (causes toxoplasmosis), the group *Plasmodium* (causes malaria), and the group *Cryptosporidium* (causes cryptosporidiosis). People with weakened immune systems, including people with HIV, are at a higher risk for protozoan infections than people with healthy immune systems.

## Proviral DNA

**ALSO KNOWN AS:** Provirus

## Provirus

**ALSO KNOWN AS:** Proviral DNA

HIV DNA that has integrated into the DNA of the host cell. When HIV enters a host cell, HIV RNA is first changed to HIV DNA (provirus). The provirus then gets inserted into the DNA of the host cell. When the host cell replicates, the HIV provirus is passed from one cell generation to the next, ensuring ongoing replication of HIV.

**SEE RELATED TERM(S):** Integration

## **Pruritus**

An intense itching sensation that produces the urge to rub or scratch the skin to obtain relief. Common causes of pruritus include allergic reactions, insect bites, and reactions to medications.

## **PubMed**

A service of the U.S. National Library of Medicine that provides free access to an extensive database of citations and abstracts for biomedical literature, life science journals, and online books. Citations may include links to full-text content and to related resources.

**SEE RELATED TERM(S):** National Library of Medicine

## **Pulmonary**

Pertaining to the lungs.

## **Purified Protein Derivative Test**

**ALSO KNOWN AS:** Tuberculosis Skin Test

## **q.d.**

ALSO KNOWN AS: QD

## **qd**

ALSO KNOWN AS: QD

## **QD**

ALSO KNOWN AS: qd, q.d.

An abbreviation meaning “once a day.” The abbreviation is commonly used in drug dosing instructions.

## **q.i.d.**

ALSO KNOWN AS: QID

## **qid**

ALSO KNOWN AS: QID

## **QID**

ALSO KNOWN AS: q.i.d., qid

An abbreviation meaning “four times a day.” The abbreviation is commonly used in drug dosing instructions.

## **Qualitative Transcription-Mediated Amplification**

A type of viral load test. Viral load tests are used to diagnose acute HIV infection, guide treatment choices, and monitor response to antiretroviral therapy (ART).

**SEE RELATED TERM(S):** Viral Load Test

## **Quantitative Branched DNA (bDNA)**

A type of viral load test. Viral load tests are used to diagnose acute HIV infection, guide treatment choices, and monitor response to antiretroviral therapy (ART).

**SEE RELATED TERM(S):** Viral Load Test

## Quasispecies

A group of viruses found in the same host. The viruses in the group develop similar genetic mutations over time. During HIV infection, HIV can mutate into multiple quasispecies, which may reduce the immune system's ability to control HIV infection. Antiretroviral therapy (ART) started in the early stages of HIV infection can control HIV replication and development of quasispecies.

## R5-Tropic Virus

**ALSO KNOWN AS:** M-Tropic Virus

A strain of HIV that enters and infects a host cell by binding to the CCR5 receptor on the host cell. To enter a host cell, HIV must first attach to a CD4 receptor, then attach to either the CCR5 or CXCR4 receptor, and finally fuse its membrane with the host cell membrane. HIV is usually R5-tropic (uses CCR5) during the early stages of infection, but the virus may later switch to using either only CXCR4 or both CCR5 and CXCR4. Antiretroviral (ARV) drugs in the CCR5 inhibitor drug class block HIV from attaching to the CCR5 receptor, preventing HIV entry into the host cell.

**SEE RELATED TERM(S):** CCR5, CCR5 Inhibitor, CD4 Receptor, X4-Tropic Virus

## Randomized Trial

A type of clinical trial in which participants are assigned by chance (randomized) to treatment and control groups, or among various treatment groups. Randomization produces groups that are similar overall in terms of general characteristics, such as age or gender, and other factors that might affect the disease or condition being studied. Having groups that are as similar as possible at the start of a clinical trial allows researchers to conclude with a certain level of confidence whether one treatment is better than another at the end of the trial.

**SEE RELATED TERM(S):** Clinical Trial, Control Arm

## Rapid Test

A type of HIV antibody test used to screen for HIV infection. A rapid HIV antibody test can detect HIV antibodies in blood or oral fluid in less than 30 minutes. A positive rapid HIV antibody test must be confirmed by a second, different antibody test (a positive Western blot) for a person to be definitively diagnosed with HIV infection.

**SEE RELATED TERM(S):** Antibody, Enzyme-Linked Immunosorbent Assay, Western Blot

## Rebound

**ALSO KNOWN AS:** Viral Rebound

## Receptor

A protein that is located inside or on the surface of a cell and that binds to a specific substance, such as a hormone, antigen, virus, or neurotransmitter. The binding of the substance to the cell receptor causes a change in the activity of the cell. In order to enter a host cell, HIV must first bind to receptors on the host cell.

**SEE RELATED TERM(S):** CD4 Receptor

## Rechallenge

Restarting a drug that was stopped because it was considered the likely cause of an adverse effect. When the drug is restarted, the person is closely monitored for any signs of the adverse effect.

## Recombinant

DNA produced in a laboratory by joining segments of DNA from different sources. Recombinant can also describe proteins, cells, or organisms made by genetic engineering.

**SEE RELATED TERM(S):** Genetic Engineering

## Red Blood Cell

**ALSO KNOWN AS:** Erythrocyte, Red Blood Corpuscle

Blood cells that carry oxygen to all parts of the body. Red blood cells have a high concentration of hemoglobin, a protein that binds to oxygen from the lungs and that gives blood its red color.

## Red Blood Corpuscle

**ALSO KNOWN AS:** Red Blood Cell

## Red Eye

**ALSO KNOWN AS:** Conjunctivitis

## Red-Band Gingivitis

**ALSO KNOWN AS:** Linear Gingival Erythema

## Refractory

Resistant to treatment. For example, a refractory disease or condition is one that is not responding to treatment.

## Regimen

**ALSO KNOWN AS:** Treatment Regimen

## Regimen Simplification

**ALSO KNOWN AS:** Treatment Simplification

Making changes to an HIV treatment regimen to make medication adherence easier. Simplifying a regimen can include reducing the number of antiretroviral (ARV) drugs in a regimen or changing to a drug that offers once-daily dosing. Other changes can include switching to ARV drugs that cause fewer adverse effects or to ARV drugs that can be taken without food. Regimen simplification can improve a person's quality of life, help maintain long-term adherence, help prevent toxicities that may develop with long-term drug use, and reduce the risk of treatment failure.

**SEE RELATED TERM(S):** Adherence

## Regulatory T Cell

**ALSO KNOWN AS:** Regulatory T Lymphocyte

## Regulatory T Lymphocyte

**ALSO KNOWN AS:** Regulatory T Cell, Suppressor T Cell, Suppressor T Lymphocyte

A type of lymphocyte. Regulatory T lymphocytes (regulatory T cells) prevent the immune system from becoming over-active during an immune response and from attacking normal cells.

**SEE RELATED TERM(S):** T Lymphocyte

## Relapse

The recurrence of a disease after a period of remission or apparent recovery.

**SEE RELATED TERM(S):** Remission

## Relative Contraindication

When a particular treatment or procedure is somewhat inadvisable because there is a higher risk for complications.

**SEE RELATED TERM(S):** Contraindication

## Remission

The period during which symptoms of a disease diminish or disappear.

**SEE RELATED TERM(S):** Relapse

## Renal

Pertaining to the kidneys.

## Replicate

To produce a copy or duplicate. The HIV life cycle describes the 7-step process by which HIV replicates.

**SEE RELATED TERM(S):** Life Cycle

## Replication

**ALSO KNOWN AS:** Viral Replication

## Replication Cycle

**ALSO KNOWN AS:** Life Cycle

## Rescue Therapy

**ALSO KNOWN AS:** Salvage Therapy

## Reservoir

**ALSO KNOWN AS:** Latent HIV Reservoir

## Resistance

**ALSO KNOWN AS:** Drug Resistance

## Resistance Assay

**ALSO KNOWN AS:** Resistance Testing



## Resistance Testing

**ALSO KNOWN AS:** Resistance Assay

Laboratory testing to identify which, if any, antiretroviral (ARV) drugs will not be effective against a person's specific strain of HIV. Resistance testing is done using a sample of blood. There are two types of resistance testing: genotypic and phenotypic. Resistance testing is used to guide selection of an HIV regimen when initiating or changing antiretroviral therapy (ART).

**SEE RELATED TERM(S):** Drug Resistance, Genotypic Antiretroviral Resistance Test, Phenotypic Antiretroviral Resistance Test

## Retina

The light-sensitive membrane that lines the inside of the eye and sends visual messages through the optic nerve to the brain.

## Retinal Detachment

Separation of the retina from its supporting tissue. Retinal detachment must be treated promptly to avoid permanent vision loss. Retinal detachment can be a complication of cytomegalovirus (CMV) retinitis, which is a viral infection that can occur in people with weakened immune systems, including people with HIV.

**SEE RELATED TERM(S):** Retina

## Retinitis

Inflammation of the retina.

**SEE RELATED TERM(S):** Retina

## Retrospective Study

A type of medical research study. Retrospective studies look back in time to compare a group of people with a particular disease or condition to a group of people who do not have the disease or condition. Researchers study the medical and lifestyle histories of the people in each group to learn what factors may be associated with the disease or condition.

## **Retrovirus**

A type of virus that uses RNA as its genetic material. After infecting a cell, a retrovirus uses an enzyme called reverse transcriptase to convert its RNA into DNA. The retrovirus then integrates its viral DNA into the DNA of the host cell, which allows the retrovirus to replicate. HIV, the virus that causes AIDS, is a retrovirus.

**SEE RELATED TERM(S):** Life Cycle

## **Reverse Transcriptase (RT)**

An enzyme found in HIV (and other retroviruses). HIV uses reverse transcriptase (RT) to convert its RNA into viral DNA, a process called reverse transcription. Non-nucleoside reverse transcriptase inhibitors (NNRTIs) prevent HIV from replicating by blocking RT.

**SEE RELATED TERM(S):** Life Cycle, Non-Nucleoside Reverse Transcriptase Inhibitor, Reverse Transcription

## **Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR)**

A type of viral load test. Viral load tests are used to diagnose acute HIV infection, guide treatment choices, and monitor response to antiretroviral therapy (ART).

**SEE RELATED TERM(S):** Viral Load Test

## **Reverse Transcription**

The second of seven steps in the HIV life cycle. During reverse transcription, HIV uses reverse transcriptase (an HIV enzyme) to convert genetic information carried in HIV RNA to make HIV DNA.

**SEE RELATED TERM(S):** Life Cycle, Non-Nucleoside Reverse Transcriptase Inhibitor, Nucleoside Reverse Transcriptase Inhibitor, Reverse Transcriptase

## **Rhabdomyolysis**

Breakdown or death of muscle tissue, often with release of muscle fiber contents into the bloodstream and sometimes leading to acute renal failure. Rhabdomyolysis may be caused by HIV infection, opportunistic infections, or some antiretroviral (ARV) drugs.

## Ribonucleic Acid (RNA)

One of two types of genetic material found in all living cells and many viruses. (The other type of genetic material is DNA.) There are several types of ribonucleic acid (RNA). RNA plays important roles in protein synthesis and other cell activities.

**SEE RELATED TERM(S):** Deoxyribonucleic Acid, Messenger RNA

## Rigors

Shivering that is caused by a chill.

## Rod Body Disease

**ALSO KNOWN AS:** Nemaline Rod Myopathy

## Ryan White HIV/AIDS Program

**ALSO KNOWN AS:** CARE Act

The largest federally funded program providing HIV-related services to low-income, uninsured, and underinsured people with HIV/AIDS. The program's services are available in all 50 states and U.S. territories.

**SEE RELATED TERM(S):** Health Resources and Services Administration

## Salmonella

A group of bacteria. *Salmonella* is the most common cause of foodborne illnesses in the United States. Infection with *Salmonella* can cause diarrhea, nausea, fever, and headache. In people with weakened immune systems, including people with HIV, the symptoms of *Salmonella* infection are more severe.

## Salmonella Septicemia

A life-threatening *Salmonella* infection that has spread to the bloodstream. *Salmonella* septicemia can be caused by any of the *Salmonella* bacteria, which are found in contaminated food and water. The infection is systemic and affects virtually every organ system. The most common symptom is a fever that comes and goes. In people with HIV, recurrent *Salmonella* septicemia is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, *Salmonella*

## Salvage Therapy

**ALSO KNOWN AS:** Rescue Therapy

Therapy given when the standard treatment for a disease or condition is no longer effective and when treatment options are limited. HIV salvage therapy is designed for people with treatment failure on more than one HIV treatment regimen and with extensive HIV drug resistance.

**SEE RELATED TERM(S):** Drug Resistance, Treatment Failure

## San Joaquin Valley Fever

**ALSO KNOWN AS:** Coccidioidomycosis

## Seborrheic Dermatitis

A non-contagious inflammatory skin condition characterized by flaky, white to yellowish scales on various areas of the body, including the scalp, eyebrows, eyelids, ears, and trunk. Seborrheic dermatitis can occur with or without redness. The exact cause of seborrheic dermatitis is unknown, but it may be due to an overproduction of skin oil combined with irritation from a yeast. Factors that might increase the risk of seborrheic dermatitis include family history, stress, fatigue, use of alcohol-containing lotions, skin disorders, obesity, HIV infection, and certain neurologic conditions.

## Secondary Prophylaxis

**ALSO KNOWN AS:** Maintenance Therapy

## Secondary Resistance

**ALSO KNOWN AS:** Acquired Resistance

## Self-Administered Therapy (SAT)

A method of drug administration in which a person takes medication without being observed by a health care professional.

**SEE RELATED TERM(S):** Directly Observed Therapy

## Semen

**ALSO KNOWN AS:** Seminal Fluid

A thick, whitish fluid that is discharged from the male penis during ejaculation. Semen contains sperms and various secretions. HIV can be transmitted through the semen of a man with HIV.

## Semen-Derived Enhancer of Virus Infection (SEVI)

Protein fibers found in semen that can trap HIV and help HIV attach to cells. Semen-derived enhancer of virus infection (SEVI) increases the risk of sexual transmission of HIV.

## Seminal Fluid

**ALSO KNOWN AS:** Semen

## Sensitivity

The probability that a medical test will detect the condition being tested for in people who actually have the condition. In other words, a sensitive test is one that produces true positive results. For example, the enzyme-linked immunosorbent assay (ELISA) HIV antibody test is highly sensitive, which means the test can detect HIV in most people infected with HIV. However, because the ELISA can sometimes mistakenly recognize antibodies to other diseases as antibodies to HIV (a false positive result), a Western Blot or other HIV test is used to confirm a positive ELISA HIV antibody test.

**SEE RELATED TERM(S):** Specificity, True Positive

## Sepsis

An overwhelming, life-threatening immune response to infection. Sepsis causes a systemic reaction that includes fever, chills, rapid heart rate, increased breathing rate, and possibly shock. Sepsis can also cause body organs, such as the kidneys or lungs, to fail. Sepsis is more likely to occur in people with weakened immune systems, including people with HIV, than in people with healthy immune systems.

## Seroconversion

When an HIV-infected person converts from HIV negative to HIV positive by blood testing. Shortly after infection with HIV, the body begins to produce HIV antibodies. It takes the body a while to produce enough antibodies to be detected by an HIV antibody test—usually 10 to 14 days but sometimes up to 6 months. When HIV antibodies in the blood reach a detectable level, the HIV-infected person seroconverts. In other words, the person's antibody test goes from HIV negative to HIV positive.

**SEE RELATED TERM(S):** Window Period

## Serologic Test

A blood test to detect the presence of antibodies against a microorganism. A serologic test can determine whether a person has been exposed to a particular microorganism.

## Seroprevalence

The overall occurrence of a disease or condition within a defined population at one time, as measured by blood tests (serologic tests).

## Serostatus

The state of either having or not having detectable antibodies against a specific antigen, as measured by a blood test (serologic test). For example, HIV seropositive means that a person has detectable antibodies to HIV; seronegative means that a person does not have detectable HIV antibodies.

## Serum

The clear, yellowish liquid part of blood that remains after clotting. Serum is used for various laboratory tests.

## Serum Glutamate Pyruvate Transaminase

**ALSO KNOWN AS:** Alanine Aminotransferase

## Serum Glutamic-Oxaloacetic Transaminase

**ALSO KNOWN AS:** Aspartate Aminotransferase

## Set Point

**ALSO KNOWN AS:** Viral Set Point

The viral load (HIV RNA) that the body settles at within a few weeks to months after infection with HIV. Immediately after infection, HIV multiplies rapidly and a person's viral load is typically very high. After a few weeks to months, this rapid replication of HIV declines and the person's viral load drops to its set point.

**SEE RELATED TERM(S):** Viral Load

## Sexual Transmission

Transmission of HIV, or other sexually transmitted infection, from one individual to another as the result of sexual contact.

**SEE RELATED TERM(S):** Vertical Transmission

## Sexually Transmitted Disease

**ALSO KNOWN AS:** Sexually Transmitted Infection

## Sexually Transmitted Infection (STI)

**ALSO KNOWN AS:** Sexually Transmitted Disease

An infectious disease that spreads from person to person during sexual contact. Sexually transmitted infections, such as syphilis, HIV infection, and gonorrhea, are caused by bacteria, parasites, and viruses.

## Sham

**ALSO KNOWN AS:** Placebo

## Shigellosis

An enteric (intestinal) infection caused by the bacterium *Shigella*, which is typically transmitted through contact with contaminated human feces. Symptoms usually include watery or bloody diarrhea, abdominal pain, nausea, and fever. Certain bacterial enteric infections, including shigellosis, occur at a much higher rate in people with HIV than in people with healthy immune systems.

**SEE RELATED TERM(S):** Opportunistic Infection

## Shingles

A non-contagious disease caused by the varicella zoster virus (VZV or HHV-3). VZV is the same virus that causes chickenpox. The virus remains in the nervous system of people who have had chickenpox, and it can become active years later to cause shingles. Symptoms of shingles can include numbness, itching, and severe pain that is followed by a rash of blister-like lesions along one side of the body. The pain can persist for weeks, months, or years after the rash heals. People with HIV are more at risk for shingles than people with healthy immune systems.

**SEE RELATED TERM(S):** Herpesviruses, Varicella Zoster Virus

## Simian Immunodeficiency Virus (SIV)

An HIV-like virus that can infect monkeys and apes and can cause a disease similar to AIDS. Because HIV and simian immunodeficiency virus (SIV) are closely related viruses, researchers study SIV as a way to learn more about HIV. However, SIV cannot infect humans, and HIV cannot infect monkeys.

**SEE RELATED TERM(S):** Human Immunodeficiency Virus

## Single-Blind Study

**ALSO KNOWN AS:** Single-Masked Study

A type of clinical trial in which either the investigators or the participants are unaware of the treatment that the participants are receiving.

**SEE RELATED TERM(S):** Clinical Trial, Double-Blind Study



## Single-Masked Study

**ALSO KNOWN AS:** Single-Blind Study

## South American Trypanosomiasis

**ALSO KNOWN AS:** Chagas Disease

### Specificity

The probability that a medical test will correctly produce a negative test result for a person who does not have the condition being tested. In other words, a specific test is one that produces true negative results. For example, the specificity of the Western Blot is very high; the test seldom mistakes antibodies to other diseases as antibodies to HIV. For that reason, the Western Blot is used to confirm a positive enzyme-linked immunosorbent assay (ELISA) or other HIV antibody test.

**SEE RELATED TERM(S):** Sensitivity, True Negative

### Sperm Washing

A laboratory procedure that involves “washing” semen from an HIV-infected man to separate the sperm from the fluid part of the semen. Because the seminal fluid contains the highest concentration of HIV, the “washed” sperm should not contain any HIV. Sperm washing can be considered as a reproductive option for an HIV discordant couple in which the man is the HIV-infected partner. Because sperm washing has not been proven completely effective, couples using the procedure should be counseled regarding the potential risks for transmission of HIV.

**SEE RELATED TERM(S):** Discordant Couple

### Spermicide

A topical preparation or substance used during sexual intercourse to kill sperm. Although spermicides may prevent pregnancy, they do not protect against HIV infection or other sexually transmitted infections. Irritation of the vagina and rectum that sometimes occurs with use of spermicides may increase the risk of sexual transmission of HIV.

## Spinal Tap

**ALSO KNOWN AS:** Lumbar Puncture

A procedure in which a needle is inserted into the lower region of the spinal cord to collect cerebrospinal fluid (CSF). The CSF is examined in a laboratory to diagnose and monitor certain infections. A spinal tap may also be performed to inject drugs or to reduce spinal fluid pressure.

**SEE RELATED TERM(S):** Cerebrospinal Fluid

## Spleen

An organ of the lymphatic system. The spleen is located on the left side of the body, above the stomach. The spleen helps fight infection, keeps body fluids in balance, stores blood, and destroys old and damaged cells.

**SEE RELATED TERM(S):** Lymphatic System

## Splenomegaly

Abnormal enlargement of the spleen.

**SEE RELATED TERM(S):** Spleen

## Sputum Analysis

Laboratory evaluation of sputum to detect certain infections, such as bacterial pneumonia and tuberculosis (TB). Sputum is the mucus-containing material produced by the cells lining the lungs and airways (bronchial tubes). The sputum used for analysis is collected when a person coughs or spits.

## Standard of Care

Treatment that experts agree is appropriate, accepted, and widely used for a given disease or condition.

## Statin

**ALSO KNOWN AS:** HMG-CoA Reductase Inhibitor, Lipid-Lowering Agent

A drug used to lower the amount of cholesterol and certain fats in the blood. Statins block a key liver enzyme involved in making cholesterol.

**SEE RELATED TERM(S):** Cholesterol

## Stem Cells

Unspecialized cells from which other types of cells develop. When a stem cell divides, each new cell has the potential either to remain a stem cell or to become a specialized cell with a distinct function, such as a muscle cell or blood cell. Stem cells serve as a repair system for the body, replacing old and damaged cells. Research on using stem cells to treat various diseases is currently under way.

## Stevens-Johnson Syndrome (SJS)

A severe and sometimes fatal form of skin rash characterized by red, blistered spots on the skin; blisters in the mouth, eyes, genitals, or other moist areas of the body; peeling skin that results in painful sores; and fever, headache, and other flu-like symptoms. Internal organs may also be affected. Stevens-Johnson syndrome (SJS) may occur as a severe reaction to certain drugs, including some antiretroviral (ARV) HIV drugs.

## Stomatitis

Inflammation of the mucous membranes of the mouth, such as the gums or lips. The causes of stomatitis vary and can include injury to the mouth, allergy, and infection.

## Strain

A group of organisms, such as bacteria or viruses, that belong to the same species and share certain characteristics not found in other members of the species. For example, HIV can mutate into different strains, with each strain having a different type of resistance to antiretroviral (ARV) drugs.

## Streptococcus Pneumonia Infection

Infection caused by the bacterium *Streptococcus pneumonia*, which is spread through contact with respiratory droplets from a person who is infected with or carrying the bacteria. The bacteria are a major cause of common illnesses, such as inflammation of the sinuses (sinusitis), but can also result in life-threatening infections, including meningitis and pneumonia. People with weakened immune systems, including people with HIV, are at higher risk for bacterial pneumonia, including *Streptococcus pneumonia* infection, than people with healthy immune systems.

**SEE RELATED TERM(S):** Opportunistic Infection, Pneumonia

## Stroke

**ALSO KNOWN AS:** Brain Attack

An interruption of blood flow to the brain, caused by a broken or blocked blood vessel. A stroke results in sudden loss of brain function, such as loss of consciousness, paralysis, or changes in speech. Stroke is a medical emergency and can be life-threatening.

## Structured Treatment Interruption (STI)

**ALSO KNOWN AS:** Drug Holiday

A planned break from treatment, during which a person stops taking medications. Structured treatment interruptions (STIs) may be used to reduce toxic effects of medications, to enhance a medication's effectiveness when restarted, or as a step towards stopping treatment all together. Structured interruption of HIV treatment is **not** recommended outside of controlled clinical trials.

## Subclinical Infection

An infection that has no symptoms or noticeable signs. A subclinical infection may be an early stage of an infection or a very mild infection.

## Subcutaneous (SC)

Pertaining to the area beneath the layers of the skin. Some drugs are given by subcutaneous injection.

## Subcutaneous Adipose Tissue (SAT)

Fat tissue located right under the skin. HIV-associated lipodystrophy can include changes in subcutaneous adipose tissue (SAT) and may be related to use of certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Lipodystrophy, Visceral Adipose Tissue

## Substance Abuse and Mental Health Services Administration (SAMHSA)

The lead federal agency for reducing the impact of substance abuse and mental illness in the United States. The Substance Abuse and Mental Health Services Administration (SAMHSA) has a Web site that focuses specifically on behavioral health and HIV/AIDS.

## Subtype

**ALSO KNOWN AS:** Clade

A subgroup of genetically related HIV-1 viruses. HIV-1 can be classified into four groups: M Group, N Group, O Group, and P Group. Viruses within each group can then be further classified by subtype. For example, the HIV-1 M group includes at least nine subtypes: A1, A2, B, C, D, F1, F2, G, H, J, and K.

## Sugar

**ALSO KNOWN AS:** Glucose

## Sugar Pill

**ALSO KNOWN AS:** Placebo

## Superinfection

When a person who is already infected with HIV becomes infected with a second, different strain of HIV. Superinfection may cause HIV to advance more rapidly. Superinfection can also complicate treatment if the newly acquired strain of HIV is resistant to antiretroviral (ARV) drugs in the person's current HIV treatment regimen.

**SEE RELATED TERM(S):** Drug Resistance

## **Superiority Trial**

A clinical trial designed to show that a new drug (or other treatment) is more effective than the drug to which it is compared.

**SEE RELATED TERM(S):** Non-Inferiority Trial

## **Suppressor T Cell**

**ALSO KNOWN AS:** Regulatory T Lymphocyte

## **Suppressor T Lymphocyte**

**ALSO KNOWN AS:** Regulatory T Lymphocyte

## **Surrogate Endpoint**

**ALSO KNOWN AS:** Surrogate Marker

Substitute measure for a clinical endpoint. Because it can be difficult to measure clinical endpoints in studies running for several years, researchers often use surrogate endpoints as substitute measures for clinical endpoints. For example, in HIV-related clinical trials, rising CD4 count is used as a surrogate endpoint for progression of HIV infection.

**SEE RELATED TERM(S):** Clinical Endpoint, Clinical Trial

## **Surrogate Marker**

**ALSO KNOWN AS:** Surrogate Endpoint

## **Sustained Viral Suppression**

**ALSO KNOWN AS:** Sustained Virologic Response

## **Sustained Virologic Response**

**ALSO KNOWN AS:** Sustained Viral Suppression

The continuous, long-term suppression of a person's viral load (HIV RNA)—generally to undetectable levels—as the result of treatment with antiretroviral (ARV) drugs.

## **Symptomatic HIV Infection**

Stage of HIV infection during which signs or symptoms of the infection begin to appear. The onset of symptoms signals the transition from asymptomatic HIV infection to full blown AIDS.

**SEE RELATED TERM(S):** Acquired Immunodeficiency Syndrome, HIV Progression

## Syncytium

A large cell-like structure that forms when many cells fuse together. Syncytia can form during viral infection. In some people with HIV, syncytia formation has been linked to more rapid progression of HIV infection.

## Syndrome

A group of symptoms or conditions that occur together and are collectively associated with a specific disease or with the risk of developing a specific disease.

## Syndrome X

**ALSO KNOWN AS:** Metabolic Syndrome

## Synergism

**ALSO KNOWN AS:** Drug Synergism

## Synergy

**ALSO KNOWN AS:** Drug Synergism

## Syphilis

An infectious disease caused by the bacterium *Treponema pallidum*, which is typically transmitted through direct contact with a syphilis sore, usually during vaginal or oral sex. Syphilis can also be transmitted from an infected mother to her child during pregnancy. Syphilis sores occur mainly on the genitals, anus, and rectum, but also on the lips and mouth. Genital sores (chancres) caused by syphilis increase the risk of sexual transmission of HIV.

**SEE RELATED TERM(S):** Opportunistic Infection, Sexually Transmitted Infection

## Systemic

Pertaining to the entire body. A systemic infection affects the whole body. Systemic drug therapy involves giving a drug that travels through the bloodstream and affects cells throughout the body.

## **T Cell**

**ALSO KNOWN AS:** T Lymphocyte

## **t.i.d.**

**ALSO KNOWN AS:** TID

## **T Lymphocyte**

**ALSO KNOWN AS:** T Cell

A type of lymphocyte. There are two major types of T lymphocytes: CD8 cells (cytotoxic T lymphocytes) and CD4 cells (helper T lymphocytes); both T cell types are essential for a healthy immune system. HIV infects and destroys CD4 cells, gradually destroying the immune system.

**SEE RELATED TERM(S):** CD4 T Lymphocyte, CD8 T Lymphocyte, Lymphocyte

## **Tachycardia**

Abnormal rapid heartbeat. In adults, a rate over 100 beats per minute is usually considered tachycardia. Tachycardia can occur as part of lactic acidosis, which may be caused by advanced HIV infection or some antiretroviral (ARV) drugs.

## **Tachypnea**

Abnormal increased rate of breathing. Tachypnea can occur as part of lactic acidosis, which may be caused by advanced HIV infection or antiretroviral (ARV) drugs.

## **Tanner Staging**

A scale used to classify the onset and progression of puberty in children and adolescents. The scale describes five stages of physical development on the basis of sex characteristics, such as pubic hair growth, development of genitalia in boys, and development of breasts in girls. Because children mature at different rates, health care providers use Tanner staging (in addition to age) to determine appropriate dosing of drugs to treat HIV infection and opportunistic infections.

## **T-Cell Depletion**

**ALSO KNOWN AS:** T-Cell Exhaustion



## T-Cell Exhaustion

**ALSO KNOWN AS:** T-Cell Depletion

The gradual decrease in T-cell function that can occur with chronic infections and cancers. T-cell exhaustion weakens the immune system, making it difficult for the body to fight off infections or kill cancer-causing cells.

## Teratogenic

Pertaining to birth defects and developmental malformations. Some antiretroviral (ARV) drugs should be avoided during pregnancy because they can potentially have teratogenic effects on the developing fetus.

## Testosterone

A type of sex hormone. Testosterone is necessary for developing and maintaining certain male sex characteristics, and it helps maintain muscle mass and bone density. Testosterone deficiency is common with HIV and may result in a decrease in muscle mass, an increase in body fat, or erectile dysfunction.

## Therapeutic Drug Monitoring (TDM)

Measuring the concentration of a drug in the blood at scheduled intervals. Therapeutic drug monitoring (TDM) is used to determine the dose at which a drug will be most safe and effective. Although TDM is not generally recommended for routine use in HIV treatment, it may be considered in some situations.

**SEE RELATED TERM(S):** Therapeutic Index

## Therapeutic HIV Vaccine

A vaccine to slow the progression of HIV infection or delay the onset of AIDS. To date, no therapeutic HIV vaccine exists, but research is underway.

**SEE RELATED TERM(S):** Preventive HIV Vaccine, Vaccine

## Therapeutic Index (TI)

A ratio that compares the blood concentration at which a drug becomes toxic and the concentration at which the drug is effective. The larger the therapeutic index (TI), the safer the drug is. If the TI is small (the difference between the two concentrations is very small), the drug must be dosed carefully and the person receiving the drug should be monitored closely for any signs of drug toxicity.

**SEE RELATED TERM(S):** Therapeutic Drug Monitoring

## Thrombocytopenia

A lower-than-normal number of blood platelets.

**SEE RELATED TERM(S):** Platelet

## Thymus

An organ of the lymph system where T lymphocytes (T cells) develop and mature. The thymus is important for normal immune system development early in life and is at its largest size at puberty. The thymus declines in size and function during adult life, eventually being replaced by fat.

**SEE RELATED TERM(S):** Lymphatic System, T Lymphocyte

## tid

**ALSO KNOWN AS:** TID

## TID

**ALSO KNOWN AS:** tid, t.i.d.

An abbreviation for “three times a day.” The abbreviation is commonly used in drug dosing instructions.

## Titer

A laboratory measurement of the concentration of a substance in a solution. For example, an antibody titer measures the presence and amount of antibodies in the blood.

## Tolerance

The ability to tolerate a drug when given as prescribed. In other words, tolerance means benefiting from the drug without having any adverse effects that would make it impossible to continue taking the drug.

## Topical

Pertaining to a drug or treatment applied to the outer surface of the body, such as the skin or mucous membranes.

## Toxic Epidermal Necrolysis (TEN)

A severe form of Stevens-Johnson syndrome involving at least 30% of the total body skin area.

**SEE RELATED TERM(S):** Stevens-Johnson Syndrome

## Torulosis

**ALSO KNOWN AS:** Cryptococcosis

## Toxicity

**ALSO KNOWN AS:** Drug Toxicity

The extent to which a drug causes adverse effects. Drug toxicity is one of the factors considered when selecting antiretroviral (ARV) drugs to include in an HIV treatment regimen.

**SEE RELATED TERM(S):** Adverse Event

## Toxoplasmosis

An infection caused by the parasite *Toxoplasma gondii*.

Toxoplasmosis is most commonly transmitted by contact with infected cat feces, eating contaminated meat, or drinking contaminated water. Toxoplasmosis can also be transmitted from an infected mother to her child during pregnancy. Symptoms, if any, include swollen lymph nodes and muscle aches that last for a month or more. In fetuses and people with weakened immune systems, toxoplasmosis can cause severe damage to the brain (*Toxoplasma gondii* encephalitis), eyes, and other organs. In people with HIV, toxoplasmosis of the brain is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Opportunistic Infection

## Transcription

The fourth of seven steps in the HIV life cycle. Transcription occurs after HIV has integrated its viral DNA into the DNA of the host cell. During transcription, the host cell uses the genetic instructions carried in HIV DNA to make new HIV RNA, including HIV messenger RNA (mRNA).

**SEE RELATED TERM(S):** Life Cycle, Messenger RNA

## Translation

The fifth of seven steps in the HIV life cycle. Translation occurs after the host cell makes new HIV RNA. During translation, the host cell uses the genetic instructions carried in the new HIV RNA, specifically messenger RNA (mRNA), to make HIV proteins.

**SEE RELATED TERM(S):** Life Cycle, Messenger RNA

## Transmitted Resistance

**ALSO KNOWN AS:** Primary Resistance

When a person becomes infected with a strain of HIV that is already resistant to certain antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Acquired Resistance, Drug Resistance

## Transplacental

Passage through or across the placenta. Transplacental usually refers to the exchange of nutrients, waste products, drugs, infectious organisms, or other substances between the mother and the fetus.

## Treatment Failure

When an antiretroviral (ARV) regimen is unable to control HIV infection. Treatment failure can be clinical failure, immunologic failure, virologic failure, or any combination of the three. Factors that can contribute to treatment failure include drug resistance, drug toxicity, or poor treatment adherence.

**SEE RELATED TERM(S):** Clinical Failure, Immunologic Failure, Virologic Failure

## Treatment Regimen

**ALSO KNOWN AS:** Regimen

A structured treatment plan designed to improve and maintain health. Recommended HIV treatment regimens include a combination of three or more antiretroviral (ARV) drugs from at least two different drug classes.

**SEE RELATED TERM(S):** Drug Class

## Treatment Simplification

**ALSO KNOWN AS:** Regimen Simplification

## Treatment-Experienced

When a person with HIV is currently taking or has previously taken antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Treatment-Naive

## Treatment-Naive

When a person with HIV has never taken antiretroviral (ARV) drugs.

**SEE RELATED TERM(S):** Treatment-Experienced

## Triglycerides

A type of fat in blood and adipose (fat) tissue.

## Triple-Class Experienced

When an HIV-infected person has received antiretroviral (ARV) drugs from three drug classes—the nucleoside reverse transcriptase inhibitor (NRTI), non-nucleoside reverse transcriptase inhibitor (NNRTI), and protease inhibitor (PI) drug classes.

## Tropism

**ALSO KNOWN AS:** Viral Tropism

## Trough Concentration

**ALSO KNOWN AS:** C<sub>min</sub>

## Trough Level

**ALSO KNOWN AS:** C<sub>min</sub>

## True Negative

A negative test result that correctly indicates that the condition being tested for is not present. For example, a true negative HIV test correctly indicates that a person is not infected with HIV.

## True Positive

A positive test result that correctly indicates that the condition being tested for is present. For example, a true positive HIV test correctly indicates that a person is infected with HIV.

## T-Tropic Virus

**ALSO KNOWN AS:** X4-Tropic Virus

## Tuberculin Skin Test

**ALSO KNOWN AS:** Tuberculosis Skin Test

## Tuberculosis (TB)

An infection caused by the bacteria *Mycobacterium tuberculosis* and *Mycobacterium bovis*. Tuberculosis (TB), also referred to as *Mycobacterium* infection, is spread when a person with an active infection (TB disease) coughs, sneezes, speaks, or sings, and then a person nearby breathes in the bacteria. TB usually affects the lungs, but it can also affect other parts of the body, such as the kidneys, spine, and brain. There are two forms of TB: latent TB infection and TB disease. In people with HIV, TB is considered an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Tuberculosis Disease, Tuberculosis Skin Test

## Tuberculosis Disease

The active form of tuberculosis (TB) infection. During TB disease, the bacteria multiply, become active, and make the person sick. A person with TB disease of the lungs can spread TB to others. TB disease primarily affects the lungs, but it can also affect other parts of the body, such as the kidneys, spine, and brain, and it can be fatal. Symptoms include a bad cough that lasts 3 weeks or longer, chest pain, coughing up blood or sputum, weakness, fatigue, loss of appetite, weight loss, fever, chills, and sweating at night. In people with HIV, TB disease is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition, Opportunistic Infection

## Tuberculosis Skin Test

**ALSO KNOWN AS:** Purified Protein Derivative Test, Tuberculin Skin Test

A screening test for tuberculosis (TB). Purified protein derivative (PPD) extracted from the bacterium that causes tuberculosis is injected just below the skin (intradermally). After 48 to 72 hours, a health care professional checks the site of injection for a reaction that indicates that the person has been exposed to TB. Following a positive TB skin test, additional tests are necessary to determine whether a person actually has active TB (TB disease). Certain populations, such as children, the elderly, or people with weakened immune systems, may have smaller, delayed, or negative reactions to the TB test even if they are infected with TB.

**SEE RELATED TERM(S):** Tuberculosis

## Undetectable Viral Load

When the amount of HIV in the blood is too low to be detected with a viral load (HIV RNA) test. Antiretroviral (ARV) drugs may reduce a person's viral load to an undetectable level; however, that does not mean the person is cured. Some HIV, in the form of latent HIV reservoirs, remain inside cells and in body tissues.

**SEE RELATED TERM(S):** Latent HIV Reservoir, Viral Load Test

## Urinalysis

Physical, chemical, and microscopic examination of urine. Urinalysis can detect a specific substance, such as glucose or blood, in the urine—this can be helpful in diagnosing a disease or monitoring the body's response to treatment.

## Urogenital System

**ALSO KNOWN AS:** Genitourinary Tract

## Urogenital Tract

**ALSO KNOWN AS:** Genitourinary Tract

## Urolithiasis

Calculi (stones) in the urinary tract. Use of some antiretroviral (ARV) drugs may cause urolithiasis.

## Urticaria

**ALSO KNOWN AS:** Hives

Raised, swollen, itchy areas on the skin or mucous membranes, usually caused by an allergic reaction to a drug or food.



## Vaccination

**ALSO KNOWN AS:** Immunization

Giving a vaccine to stimulate a person's immune response. Vaccination can be intended either to prevent a disease (a preventive vaccine) or to treat a disease (a therapeutic vaccine).

**SEE RELATED TERM(S):** Vaccine

## Vaccine

**ALSO KNOWN AS:** Inoculation

A substance administered to trigger an immune response against a particular disease. Most vaccines are designed to prevent a person from ever having a particular disease or to only have a mild case of the disease. However, therapeutic vaccines are intended to treat specific diseases. Although researchers are testing vaccines both to prevent and treat HIV/AIDS, no HIV vaccine is currently approved for use outside of clinical trials.

**SEE RELATED TERM(S):** Preventive HIV Vaccine, Therapeutic HIV Vaccine

## Vaccinia

The pox-type virus used in the vaccine that eradicated smallpox. Researchers are studying the possibility of using a modified, milder version of the vaccinia virus to develop a vaccine against HIV infection.

**SEE RELATED TERM(S):** Vaccine

## Vacuolar Myelopathy

A neurological disorder associated with advanced HIV infection. Vacuolar myelopathy causes the protective myelin sheath to pull away from nerve cells of the spinal cord, forming small holes (vacuoles) in nerve fibers. Symptoms of vacuolar myelopathy include weak and stiff legs and unsteadiness when walking.

**SEE RELATED TERM(S):** Myelin

## Valley Fever

**ALSO KNOWN AS:** Coccidioidomycosis

## Varicella Zoster Virus (VZV)

**ALSO KNOWN AS:** Herpes Zoster, Human Herpesvirus 3

A type of herpesvirus that causes chicken pox. After initial infection with varicella zoster virus (VZV), the inactive (latent) form of the virus can remain in the body. If the latent virus becomes active again, it can cause shingles.

**SEE RELATED TERM(S):** Herpesviruses, Opportunistic Infection, Shingles

## Vector

In genetically engineered vaccines, a vector is a bacterium or virus that transports antigen-coding genes into the body to provoke an immune response. (The vector itself does not provoke an immune response or cause disease.) A vector may also refer to an organism, especially an insect, that transmits disease-causing agents.

**SEE RELATED TERM(S):** Genetic Engineering

## Venereal Warts

**ALSO KNOWN AS:** Genital Warts

## Vertical Transmission

Vertical transmission of HIV refers to HIV transmission from an HIV-infected mother to her child during pregnancy, labor and delivery, or breastfeeding (through breastmilk).

**SEE RELATED TERM(S):** Sexual Transmission

## Viral Evolution

The change in the genetic makeup of a virus population as the viruses mutate and multiply over time. HIV evolves rapidly because of its high mutation and replication rates. Antiretroviral therapy (ART) and the body's immune response can also influence HIV evolution.

## Viral Latency

When a virus is present in the body but exists in a resting (latent) state without producing more virus. A latent viral infection usually does not cause any noticeable symptoms and can last a long period of time before becoming active and causing symptoms. HIV is capable of viral latency, as seen in the reservoirs of latent HIV-infected cells that persist in a person's body despite antiretroviral therapy (ART).

**SEE RELATED TERM(S):** Latent HIV Reservoir

## Viral Load (VL)

The amount of HIV in a sample of blood. Viral load (VL) is reported as the number of HIV RNA copies per milliliter of blood. An important goal of antiretroviral therapy (ART) is to suppress a person's VL to an undetectable level—a level too low for the virus to be detected by a VL test.

**SEE RELATED TERM(S):** Viral Load Test

## Viral Load Test

A laboratory test that measures the amount of HIV in a blood sample. Results are reported as the number of copies of HIV RNA per milliliter of blood. Examples of viral load tests include quantitative branched DNA (bDNA), reverse transcriptase-polymerase chain reaction (RT-PCR), and qualitative transcription-mediated amplification. Viral load tests are used to diagnose acute HIV infection, guide treatment choices, and monitor response to antiretroviral therapy (ART).

**SEE RELATED TERM(S):** Qualitative Transcription-Mediated Amplification, Quantitative Branched DNA, Reverse Transcriptase-Polymerase Chain Reaction

## Viral Rebound

**ALSO KNOWN AS:** Rebound

When a person on antiretroviral therapy (ART) has persistent, detectable levels of HIV in the blood after a period of undetectable levels. Causes of viral rebound can include drug resistance or poor adherence to an HIV treatment regimen.

**SEE RELATED TERM(S):** Undetectable Viral Load

## **Viral Replication**

**ALSO KNOWN AS:** Replication

The process by which a virus multiplies.

**SEE RELATED TERM(S):** Life Cycle

## **Viral Set Point**

**ALSO KNOWN AS:** Set Point

## **Viral Suppression**

**ALSO KNOWN AS:** Virologic Control

When antiretroviral therapy (ART) reduces a person's viral load (HIV RNA) to an undetectable level. Viral suppression does not mean a person is cured; HIV still remains in the body. If ART is discontinued, the person's viral load will likely return to a detectable level.

**SEE RELATED TERM(S):** Undetectable Viral Load

## **Viral Tropism**

**ALSO KNOWN AS:** Tropism

When HIV selectively attaches to a particular coreceptor on the surface of the host cell. HIV can attach to either the CCR5 coreceptor (R5-tropic) or the CXCR4 coreceptor (X4-tropic) or both (dual-tropic).

**SEE RELATED TERM(S):** Dual-Tropic Virus, R5-Tropic Virus, X4-Tropic Virus

## **Viremia**

The presence of viruses in the blood.

## **Viricide**

**ALSO KNOWN AS:** Virucide

A substance that can destroy or inactivate a virus.

## **Virologic Control**

**ALSO KNOWN AS:** Viral Suppression

## **Virologic Failure**

A type of HIV treatment failure. Virologic failure occurs when antiretroviral therapy (ART) fails to suppress and sustain a person's viral load to less than 200 copies/mL. Factors that can contribute to virologic failure include drug resistance, drug toxicity, and poor treatment adherence.

**SEE RELATED TERM(S):** Treatment Failure

## **Virology**

The study of viruses and viral diseases.

## **Virucide**

**ALSO KNOWN AS:** Viricide

## **Virus**

A microscopic infectious agent that requires a living host cell in order to replicate. Viruses often cause disease in humans, including measles, mumps, rubella, polio, influenza, and the common cold. HIV is the virus that causes AIDS.

## **Visceral Adipose Tissue (VAT)**

**ALSO KNOWN AS:** Intra-Abdominal Fat, Visceral Fat

Fat tissue located deep in the abdomen and around internal organs. Use of certain antiretroviral (ARV) drugs can cause excessive accumulation of visceral adipose tissue (VAT), which increases the risk of heart attack, stroke, and diabetes.

**SEE RELATED TERM(S):** Lipodystrophy

## **Visceral Fat**

**ALSO KNOWN AS:** Visceral Adipose Tissue

## Wasting Syndrome

An involuntary loss of more than 10% of body weight (especially muscle mass), plus at least 30 days of either diarrhea or weakness and fever. HIV-associated wasting syndrome is an AIDS-defining condition.

**SEE RELATED TERM(S):** AIDS-Defining Condition

## Western Blot

A type of antibody test used to confirm a positive result on an HIV screening test. (The initial screening test is usually an enzyme-linked immunosorbent assay [ELISA] or, less often, a viral load test). The immune system responds to HIV infection by producing HIV antibodies. A Western blot can detect HIV antibodies in the blood, oral fluid, or urine.

**SEE RELATED TERM(S):** Antibody, Enzyme-Linked Immunosorbent Assay, Viral Load Test

## White Blood Cell

**ALSO KNOWN AS:** Leukocyte

A type of cell found in blood and lymph. White blood cells are key components of the immune system and help fight infection and disease. Examples of white blood cells include lymphocytes, neutrophils, eosinophils, macrophages, and mast cells.

## Wild-Type Virus

The naturally occurring, non-mutated strain of a virus. When exposed to antiretroviral (ARV) drugs, wild-type HIV can develop mutations that make the virus resistant to specific ARV drugs.

**SEE RELATED TERM(S):** Drug Resistance

## Window Period

The time period from infection with HIV until the body produces enough HIV antibodies to be detected by an HIV antibody test. This generally takes 2 to 8 weeks, but in some people it can take up to 6 months. During the window period, a person can have a negative result on an HIV antibody test despite being infected with HIV.

**SEE RELATED TERM(S):** Seroconversion

## **Women's Interagency HIV Study (WIHS)**

Started in 1993, the Women's Interagency HIV Study (WIHS) is an ongoing federally funded study on women who have HIV or who are at risk for HIV. Analysis of biological specimens and medical and behavioral data collected on WIHS participants has contributed to the understanding of HIV, AIDS, and the effects of antiretroviral therapy (ART) in women.

## **World Health Organization (WHO)**

The agency of the United Nations that provides global leadership on health-related matters. Responsibilities of the World Health Organization (WHO) include shaping the global health research agenda, setting health standards, promoting evidence-based policy options, providing technical support to countries, and monitoring and assessing health trends.

## X4-Tropic Virus

**ALSO KNOWN AS:** T-Tropic Virus

A strain of HIV that enters and infects a host cell by binding to the CXCR4 receptor on the host cell. To enter a host cell, HIV must first attach to a CD4 receptor, then attach to either the CCR5 or CXCR4 receptor, and finally fuse its membrane with the host cell membrane. HIV is usually R5-tropic (uses CCR5) during the early stages of infection, but the virus may later switch to using either CXCR4 or both CCR5 and CXCR4.

**SEE RELATED TERM(S):** CD4 Receptor, CXCR4, Dual-Tropic Virus, R5-Tropic Virus



# Yeast Infection

ALSO KNOWN AS: Candidiasis

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# Abbreviations and Acronyms

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<b>ADAPs</b>	AIDS Drug Assistance Programs
<b>ADC</b>	AIDS Dementia Complex
<b>ADR</b>	Adverse Drug Reaction
<b>AE</b>	Adverse Event
<b>AETCs</b>	AIDS Education and Training Centers
<b>AHRQ</b>	Agency for Healthcare Research and Quality
<b>AIDS</b>	Acquired Immunodeficiency Syndrome
<b>AIEDRP</b>	Acute Infection and Early Diseases Research Program
<b>ALP</b>	Alkaline Phosphatase
<b>ALT</b>	Alanine Aminotransferase
<b>APC</b>	Antigen-Presenting Cell
<b>ARC</b>	AIDS-Related Complex
<b>ART</b>	Antiretroviral Therapy
<b>ARV</b>	Antiretroviral
<b>ASO</b>	AIDS Service Organization
<b>AST</b>	Aspartate Aminotransferase
<b>AUC</b>	Area Under the Curve
<b>AVN</b>	Avascular Necrosis
<b>B2M</b>	Beta-2 Microglobulin
<b>bDNA</b>	Quantitative Branched DNA
<b>BID</b>	Twice a Day
<b>CAM</b>	Complementary and Alternative Medicine
<b>CBC</b>	Complete Blood Count
<b>CBO</b>	Community-Based Organization
<b>CCR5</b>	Chemokine Receptor 5

<b>CDC</b>	Centers for Disease Control and Prevention
<b>CDC-NPIN</b>	Centers for Disease Control and Prevention-National Prevention Information Network
<b>CIDP</b>	Chronic Inflammatory Demyelinating Polyneuropathy
<b>CIPRA</b>	Comprehensive International Program of Research on AIDS
<b>C<sub>max</sub></b>	Maximum Concentration
<b>C<sub>min</sub></b>	Minimum Concentration
<b>CMP</b>	Comprehensive Metabolic Panel
<b>CMS</b>	Centers for Medicare and Medicaid Services
<b>CMV</b>	Cytomegalovirus
<b>CNS</b>	Central Nervous System
<b>CPCRA</b>	Community Programs for Clinical Research on AIDS
<b>CSF</b>	Cerebrospinal Fluid
<b>CXCR4</b>	Chemokine Receptor 4
<b>CYP3A4</b>	Cytochrome P450 3A4
<b>CYP450</b>	Cytochrome P450
<b>DAIDS</b>	Division of Acquired Immunodeficiency Syndrome
<b>DNA</b>	Deoxyribonucleic Acid
<b>DOT</b>	Directly Observed Therapy
<b>DSMB</b>	Data and Safety Monitoring Board
<b>DXA</b>	Dual Energy X-Ray Absorptiometry
<b>EBV</b>	Epstein-Barr Virus
<b>EC</b>	Enteric-Coated
<b>EF</b>	Eosinophilic Folliculitis
<b>ELISA</b>	Enzyme-Linked Immunosorbent Assay
<b>ESLD</b>	End-Stage Liver Disease
<b>ESRD</b>	End-Stage Renal Disease

<b>FDA</b>	Food and Drug Administration
<b>GART</b>	Genotypic Antiretroviral Resistance Test
<b>GBS</b>	Guillain-Barré Syndrome
<b>G-CSF</b>	Granulocyte-Colony Stimulating Factor
<b>GGT</b>	Gamma-Glutamyl Transpeptidase
<b>GI</b>	Gastrointestinal
<b>GM-CSF</b>	Granulocyte Macrophage-Colony Stimulating Factor
<b>gp41</b>	Glycoprotein 41
<b>gp120</b>	Glycoprotein 120
<b>gp160</b>	Glycoprotein 160
<b>HAND</b>	HIV-Associated Neurocognitive Disorders
<b>HBV</b>	Hepatitis B Virus
<b>HCV</b>	Hepatitis C Virus
<b>HELLP</b>	Hemolysis, Elevated Liver Enzymes, Low Platelet Count
<b>hGH</b>	Human Growth Hormone
<b>HHS</b>	Department of Health and Human Services
<b>HHV-6</b>	Human Herpesvirus 6
<b>HHV-7</b>	Human Herpesvirus 7
<b>HIV</b>	Human Immunodeficiency Virus
<b>HIVAN</b>	HIV-Associated Nephropathy
<b>HLA</b>	Human Leukocyte Antigen
<b>HPTN</b>	HIV Prevention Trials Network
<b>HPV</b>	Human Papillomavirus
<b>HRSA</b>	Health Resources and Services Administration
<b>HSV-1</b>	Herpes Simplex Virus 1
<b>HSV-2</b>	Herpes Simplex Virus 2
<b>HTLV-I</b>	Human T-Cell Lymphotropic Virus Type I

<b>HVTN</b>	HIV Vaccine Trials Network
<b>ICSI</b>	Intracytoplasmic Sperm Injection
<b>IFN</b>	Interferon
<b>IHS</b>	Indian Health Service
<b>IL-2</b>	Interleukin-2
<b>IL-7</b>	Interleukin-7
<b>IM</b>	Intramuscular
<b>IMPAACT</b>	International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Group
<b>IND</b>	Investigational New Drug
<b>INSIGHT</b>	International Network for Strategic Initiatives in Global HIV Trials
<b>INSTI</b>	Integrase Strand Transfer Inhibitor
<b>IRB</b>	Institutional Review Board
<b>IRIS</b>	Immune Reconstitution Inflammatory Syndrome
<b>ITP</b>	Idiopathic Thrombocytopenia Purpura
<b>IUI</b>	Intrauterine Insemination
<b>IV</b>	Intravenous
<b>IVF</b>	In Vitro Fertilization
<b>IVIG</b>	Intravenous Immunoglobulin
<b>KS</b>	Kaposi Sarcoma
<b>KSHV</b>	Kaposi Sarcoma Herpesvirus
<b>LGBTQ</b>	Lesbian Gay Bisexual Transgender Questioning
<b>LGV</b>	Lymphogranuloma Venereum
<b>LIP</b>	Lymphoid Interstitial Pneumonitis
<b>Log10</b>	Logarithm 10
<b>MAC</b>	Mycobacterium Avium Complex
<b>MACS</b>	Multicenter AIDS Cohort Study

<b>MAI</b>	Mycobacterium Avium-Intracellular
<b>m-DOT</b>	Modified Directly Observed Therapy
<b>MDR-TB</b>	Multiple Drug Resistant Tuberculosis
<b>MEMS</b>	Medication Event Monitoring System
<b>MHC</b>	Major Histocompatibility Complex
<b>MRI</b>	Magnetic Resonance Imaging
<b>mRNA</b>	Messenger RNA
<b>MSM</b>	Men Who Have Sex With Men
<b>MSMW</b>	Men Who Have Sex With Men and Women
<b>MTCT</b>	Mother-to-Child Transmission
<b>MTN</b>	Microbicide Trials Network
<b>NAT</b>	Nucleic Acid Test
<b>NCCAM</b>	National Center for Complementary and Alternative Medicine
<b>NCI</b>	National Cancer Institute
<b>NDA</b>	New Drug Application
<b>NHL</b>	Non-Hodgkin Lymphoma
<b>NIAID</b>	National Institute of Allergy and Infectious Diseases
<b>NIH</b>	National Institutes of Health
<b>NK Cell</b>	Natural Killer Cell
<b>NLM</b>	National Library of Medicine
<b>NM</b>	Nemaline Rod Myopathy
<b>NNRTI</b>	Non-Nucleoside Reverse Transcriptase Inhibitor
<b>nPEP</b>	Non-Occupational Post-Exposure Prophylaxis
<b>NRTI</b>	Nucleoside Reverse Transcriptase Inhibitor
<b>NSAID</b>	Non-Steroidal Anti-Inflammatory Drug
<b>NtRTI</b>	Nucleotide Reverse Transcriptase Inhibitor
<b>OAR</b>	Office of AIDS Research

<b>OBT</b>	Optimized Background Therapy
<b>OHL</b>	Oral Hairy Leukoplakia
<b>OI</b>	Opportunistic Infection
<b>OMH</b>	Office of Minority Health
<b>oPEP</b>	Occupational Post-Exposure Prophylaxis
<b>PACTG</b>	Pediatric AIDS Clinical Trials Group
<b>PACTG 076</b>	Pediatric AIDS Clinical Trials Group 076
<b>PBMC</b>	Peripheral Blood Mononuclear Cell
<b>PCR</b>	Polymerase Chain Reaction
<b>PEP</b>	Post-Exposure Prophylaxis
<b>PEPFAR</b>	President's Emergency Plan for AIDS Relief
<b>PGL</b>	Persistent Generalized Lymphadenopathy
<b>PI</b>	Protease Inhibitor
<b>PID</b>	Pelvic Inflammatory Disease
<b>PLWHA</b>	People Living with HIV/AIDS
<b>PML</b>	Progressive Multifocal Leukoencephalopathy
<b>PMTCT</b>	Prevention of Mother-to-Child Transmission
<b>PNS</b>	Peripheral Nervous System
<b>PrEP</b>	Pre-Exposure Prophylaxis
<b>QD</b>	Once a Day
<b>QID</b>	Four Times a Day
<b>RNA</b>	Ribonucleic Acid
<b>RT</b>	Reverse Transcriptase
<b>RT-PCR</b>	Reverse Transcriptase-Polymerase Chain Reaction
<b>SAMHSA</b>	Substance Abuse and Mental Health Services Administration
<b>SAT</b>	Self-Administered Therapy
<b>SAT</b>	Subcutaneous Adipose Tissue

<b>SC</b>	Subcutaneous
<b>SEVI</b>	Semen-Derived Enhancer of Virus Infection
<b>SIV</b>	Simian Immunodeficiency Virus
<b>SJS</b>	Stevens-Johnson Syndrome
<b>STI</b>	Sexually Transmitted Infection
<b>STI</b>	Structured Treatment Interruption
<b>TB</b>	Tuberculosis
<b>TDM</b>	Therapeutic Drug Monitoring
<b>TEN</b>	Toxic Epidermal Necrolysis
<b>TI</b>	Therapeutic Index
<b>TID</b>	Three Times a Day
<b>VAT</b>	Visceral Adipose Tissue
<b>VL</b>	Viral Load
<b>VZV</b>	Varicella Zoster Virus
<b>WHO</b>	World Health Organization
<b>WIHS</b>	Women's Interagency HIV Study
<b>XDR-TB</b>	Extensively Drug Resistant Tuberculosis



# HIV/AIDS-Related Resources

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## Federal Resources

### AIDS.gov

**DESCRIPTION:**

A service of the Department of Health and Human Services that works to increase HIV testing and care among people most at risk for, or living with, HIV by using emerging communication strategies to provide access to federal HIV information, policies, programs, and resources. Communication channels used include the AIDS.gov Web site and mobile site. The AIDS.gov Web site includes information on resources in Spanish.

**WEB SITE:** <http://www.aids.gov>

**Contact AIDS.gov**

**E-MAIL:** [contact@aids.gov](mailto:contact@aids.gov)

**MAIL:** U.S. Department of Health and Human Services  
Room 443 H  
200 Independence Avenue, S.W.  
Washington, D.C. 20201

### Centers for Disease Control and Prevention (CDC)

**DESCRIPTION:**

A federal agency that protects the health and safety of people at home and abroad through health promotion; prevention and control of disease, injury, and disability; and preparedness for new health threats. CDC HIV/AIDS-related services include the following:

- HIV/AIDS section of the CDC Web site
- CDC-INFO (formerly the CDC National AIDS Hotline)
- CDC National Prevention Information Network (CDC NPIN)

# Centers for Disease Control and Prevention (CDC)

- National Center for Health Statistics (NCHS)
- National HIV and STD Testing Resources

## CDC Web Site: HIV and AIDS Activities

### DESCRIPTION:

The HIV/AIDS section of the CDC Web site offers HIV-related information arranged by topic (for example, testing) and format (such as fact sheets). The section also provides daily news on HIV/AIDS and a quick link to a variety of HIV-related resources, including resources in Spanish.

**WEB SITE:** <http://www.cdc.gov/hiv/>

## CDC-INFO (formerly the CDC National AIDS Hotline)

### DESCRIPTION:

A CDC service that disseminates health information on a wide variety of disease prevention and health promotion topics to the general public, health care providers, and partners worldwide. Information is available via the Web, phone, e-mail, and postal mail. Representatives are available to answer questions in English and Spanish.

**WEB SITE:** <http://www.cdc.gov/cdc-info/>

**HOURS:** Monday - Friday, 8 a.m. – 8 p.m. Eastern Standard Time

### Contact CDC-INFO

<b>PHONE:</b>	800-CDC-INFO (800-232-4636)
<b>TTY/TDD:</b>	888-232-6348
<b>E-MAIL:</b>	<a href="mailto:cdcinfo@cdc.gov">cdcinfo@cdc.gov</a>
<b>MAIL:</b>	Centers for Disease Control and Prevention 1600 Clifton Rd Atlanta, GA 30333

## CDC National Prevention Information Network (CDC NPIN)

**DESCRIPTION:**

A CDC service that disseminates information on HIV/AIDS, viral hepatitis, other sexually transmitted diseases, and tuberculosis. Information is available via the Web, phone, e-mail, and postal mail.

**WEB SITE:** <http://www.cdcnpin.org>

### Contact CDC NPIN

**PHONE:** 800-458-5231

404-679-3860

**LIVE HELP:** Talk online with an NPIN Information Specialist,  
Monday - Friday, 9 a.m. - 6 p.m. Eastern Standard Time

**FAX:** 888-282-7681

**E-MAIL:** [info@cdcnpin.org](mailto:info@cdcnpin.org)

**MAIL:** CDC NPIN  
P.O. Box 6003  
Rockville, MD 20849-6003

## National Center for Health Statistics (NCHS)

**DESCRIPTION:**

NCHS is the principal federal agency for health statistics. NCHS compiles statistical information to guide actions and policies to improve the health of Americans. The NCHS Web site includes a section on HIV/AIDS, which provides data related to the HIV epidemic in the United States.

**WEB SITE:** <http://www.cdc.gov/nchs/fastats/aids-hiv.htm>

### Contact NCHS

**PHONE:** 800-232-4636

**E-MAIL:** [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov)

**MAIL:** NCHS  
3311 Toledo Rd  
Hyattsville, MD 20782

# Centers for Disease Control and Prevention (CDC)

## National HIV and STD Testing Resources

### DESCRIPTION:

This CDC Web site provides users with locations for HIV and STD testing and STD vaccines around the United States. The site includes answers to frequently asked questions about HIV and STD testing. The site is also available in Spanish.

**WEB SITE:** <http://hivtest.org>

### For Information About National HIV and STD Testing Resources

See CDC NPIN

# Department of Housing and Urban Development (HUD)

### DESCRIPTION:

The federal agency whose mission is to create strong, sustainable, inclusive communities and quality, affordable homes for all Americans. HUD administers the Housing Opportunities for Persons with AIDS (HOPWA) program. HOPWA is the only federal program dedicated to address the housing needs of persons living with HIV/AIDS and their families. The HIV/AIDS Housing section of the HUD Web site includes information on the HOPWA program in English and Spanish.

### HUD WEB SITE - HIV/AIDS HOUSING:

<http://www.hud.gov/offices/cpd/aidshousing>

## Contact HUD Headquarters

**TELEPHONE:** 202-708-1112

**TTY:** 202-708-1455

**MAIL:** Department of Housing and Urban Development  
451 7th Street S.W.  
Washington, DC 20410

**Find Your Local HUD Office:**

<http://portal.hud.gov/hudportal/HUD?src=/localoffices>

## Food and Drug Administration (FDA)

**DESCRIPTION:**

FDA is the federal agency responsible for ensuring the safety and effectiveness of drugs, biologics, vaccines, and medical devices. FDA also regulates the manufacture, distribution, and marketing of tobacco products and works to safeguard the nation's blood supply. The FDA Web site includes the following sections pertinent to HIV/AIDS:

- HIV and AIDS Activities
- Drugs@FDA

### FDA Web Site: HIV and AIDS Activities

**DESCRIPTION:**

HIV and AIDS Activities is the section of the FDA Web site devoted to HIV/AIDS-related information and resources. The Web pages include an overview of FDA's role in the fight against HIV/AIDS, information on clinical trials and drug development, and advice on food safety for persons living with AIDS.

**WEB SITE:** <http://www.fda.gov/oashi/aids/HIV.html>

### Contact FDA Office of Special Health Issues

**PHONE:** 301-796-8460  
**E-MAIL:** [OSHI@fda.hhs.gov](mailto:OSHI@fda.hhs.gov)  
**MAIL:** FDA Office of Special Health Issues  
10903 New Hampshire Avenue  
Bldg. 32, Room 5367  
Silver Spring, MD 20993

# Food and Drug Administration (FDA)

## FDA Web Site: Drugs@FDA

**DESCRIPTION:**

Drugs@FDA is a searchable database that provides official information about FDA approved brand name and generic drugs, including antiretroviral HIV drugs. The search results for all drug products include: drug name (brand name or generic name), active ingredient, dosage form or route of administration, strength, marketing status (prescription, over-the-counter, or discontinued), company that sponsored an application for approval, FDA action date, and approval type (type of supplement type or other regulatory action).

**WEB SITE:** <http://www.accessdata.fda.gov/scripts/cder/drugsatfda>

### Contact FDA/Human Drug Information

**PHONE:** 888-463-6332  
301-796-3400

**E-MAIL:** [druginfo@fda.hhs.gov](mailto:druginfo@fda.hhs.gov)

**MAIL:** Division of Drug Information (CDER)  
Office of Communications  
Feedback Form  
10001 New Hampshire Avenue  
Hillandale Building, 4th Floor  
Silver Spring, MD 20993

## Health Resources and Services Administration (HRSA)

**DESCRIPTION:**

The primary federal agency for improving access to health care services for people who are uninsured, isolated, or medically vulnerable. Through its HIV/AIDS bureau, HRSA administers the Ryan White HIV/AIDS Program, the largest federal program focused exclusively on

HIV/AIDS care. The section of the HRSA Web site devoted to HIV/AIDS programs includes links to help people find HIV/AIDS medical care.

**HRSA WEB SITE - HIV/AIDS PROGRAMS:** <http://hab.hrsa.gov/>

### Contact HRSA

**PHONE:** 888-ASK-HRSA (888-275-4772)

**TTY:** 877-489-4772

**E-MAIL:** [ask@hrsa.gov](mailto:ask@hrsa.gov)

## National Institutes of Health (NIH)

### DESCRIPTION:

NIH is one of the world's foremost medical research centers, and the federal focal point for medical research in the United States. NIH is one of eight health agencies of the Public Health Service, which, in turn, is part of the U.S. Department of Health and Human Services. NIH is made up of 27 Institutes and Centers, each with a specific research agenda, often focusing on particular diseases or body systems. The National Institute of Allergy and Infectious Diseases (NIAID) is the primary NIH organization for research on HIV/AIDS. The NIH Web site includes a section devoted to AIDS.

### NIH Web Site: AIDS

#### DESCRIPTION:

The AIDS section of the NIH Web site provides links to the various NIH Institutes that provide HIV/AIDS-related information, including the Office of AIDS Research (OAR) and the National Institute of Allergy and Infectious Diseases (NIAID).

**WEB SITE:** <http://health.nih.gov/topic/AIDS>

### Office of AIDS Research (OAR)

#### DESCRIPTION:

OAR coordinates the scientific, budgetary, legislative, and policy elements of the NIH AIDS research program. OAR sets scientific priorities, enhances collaboration, and ensures that research dollars are invested in the highest priority areas of scientific opportunity

## National Institutes of Health (NIH)

that will lead to new tools in the global fight against AIDS. The OAR Web site includes links to annual trans-NIH strategic plans, information on the NIH AIDS research budget, and links to other federal and international AIDS programs.

**WEB SITE:** <http://www.oar.nih.gov/>

### Contact OAR

**PHONE:** 301-496-0357  
**FAX:** 301-496-2119  
**E-MAIL:** oartemp1@od31em1.od.nih.gov  
**MAIL:** Office of AIDS Research  
National Institutes of Health  
5635 Fishers Lane MSC 9310  
Bethesda, Maryland 20892-9310

## National Institute of Allergy and Infectious Diseases (NIAID)

### DESCRIPTION:

NIAID is the primary NIH organization for research on HIV/AIDS. NIAID supports basic and applied research to prevent, diagnose, and treat infectious and immune-mediated illnesses, including HIV/AIDS and other sexually transmitted diseases. The Institute also supports medical research studies on tuberculosis, malaria, autoimmune disorders, asthma, allergies, and illnesses from potential bioterrorism agents. The HIV/AIDS section of the NIAID Web site includes basic information on HIV, detail on NIAID's HIV/AIDS research program, and HIV/AIDS-related news and events.

### NIAID WEB SITE - HIV/AIDS:

<http://www.niaid.nih.gov/topics/hivaids/Pages/Default.aspx>

### Contact NIAID

NIAID information specialists are available Monday – Friday, 8:30 a.m. – 5 p.m., Eastern Standard Time, to answer questions about infectious and immune-mediated diseases and research topics.



**Contact NIAID**

**PHONE:** 866-284-4107  
301-496-5717

**TDD:** 800-877-8339

**FAX:** 301-402-3573

**E-MAIL:** [aspxocpostoffice@niaid.nih.gov](mailto:aspxocpostoffice@niaid.nih.gov)

**MAIL:** NIAID Office of Communications  
and Government Relations  
6610 Rockledge Drive, MSC 6612  
Bethesda, MD 20892-6612

## National Library of Medicine (NLM)

**DESCRIPTION:**

NLM, the world's largest medical library, collects materials in all areas of biomedicine and health care. NLM makes its resources available around the world, primarily through its electronic information services. The library's Division of Specialized Information Services (SIS) coordinates many of NLM's HIV/AIDS information activities. The SIS Web site provides access to the following HIV/AIDS-related resources:

- HIV/AIDS Information
- MedlinePlus
- Directory of Information Resources Online (DIRLINE)
- Health Hotlines
- ClinicalTrials.gov

### SIS Web Site: HIV/AIDS Information

**DESCRIPTION:**

The HIV/AIDS section of the SIS Web site provides links to HIV/AIDS-related information, including information in the following areas: testing, treatment, nutrition and exercise, prevention, research, and special populations. The section also includes links to information in Spanish.

**WEB SITE:** <http://sis.nlm.nih.gov/hiv.html>

# National Library of Medicine (NLM)

## MedlinePlus Web Site: Health Topics - HIV/AIDS

### DESCRIPTION:

MedlinePlus has extensive information from the National Institutes of Health and other trusted sources on over 900 diseases and conditions. There are directories; a medical encyclopedia and a medical dictionary; easy-to-understand tutorials on common conditions, tests, and treatments; health information in Spanish; extensive information on prescription and nonprescription drugs; health information from the media; and links to thousands of clinical trials. MedlinePlus includes a section on HIV/AIDS, with links to information on all aspects of HIV and links to information in multiple languages.

**WEB SITE:** <http://www.nlm.nih.gov/medlineplus/hiv aids.html>

## Directory of Information Resources Online (DIRLINE)

### DESCRIPTION:

DIRLINE is an online, annotated directory listing some 10,000 health organizations. It includes information on over 1,000 national and international organizations that provide AIDS-related services or information, including direct support services, counseling, and databases; clinics and hospitals are not included.

**WEB SITE:** <http://dirline.nlm.nih.gov>

### For information about the DIRLINE

**PHONE:** 301-496-1131

**FAX:** 301-480-3537

**E-MAIL:** [tehip@tehl.nlm.nih.gov](mailto:tehip@tehl.nlm.nih.gov)

**MAIL:** Specialized Information Services  
National Library of Medicine  
Two Democracy Plaza, Suite 510  
6707 Democracy Boulevard, MSC 5467  
Bethesda, MD 20892-5467

## Health Hotlines

**DESCRIPTION:**

Health Hotlines is an online database of health-related organizations operating toll-free telephone services, including organizations that serve people with HIV. Organizations fall into many categories, including federal, state, and local government agencies; information and referral centers; professional societies; support groups; and voluntary associations. The database also includes information on services and publications available in Spanish.

**WEB SITE:** <http://healthhotlines.nlm.nih.gov>

### Contact Health Hotlines

**PHONE:** 301-496-3147  
**FAX:** 301-480-3537  
**E-MAIL:** [HealthHotlines@nih.gov](mailto:HealthHotlines@nih.gov)

## ClinicalTrials.gov

**DESCRIPTION:**

An online, searchable database offering up-to-date information on thousands of federally and privately supported clinical trials for a wide range of diseases and conditions, including HIV/AIDS. ClinicalTrials.gov provides information on a trial's purpose, who may participate, and trial locations and phone numbers.

**WEB SITE:** <http://www.clinicaltrials.gov>

### Contact NLM/ClinicalTrials.gov

**PHONE** 888-FINDNLM (888-346-3656)  
**E-MAIL:** [custserv@nlm.nih.gov](mailto:custserv@nlm.nih.gov)

# Office of Minority Health Resource Center (OMHRC)

**DESCRIPTION:**

OMHRC is the nation's largest repository of information on health issues specific to African Americans, American Indians/Alaska Natives, Asian Americans, Hispanics, Native Hawaiians, and other Pacific Islanders. The resource center collects and distributes information on a wide variety of health topics, including HIV/AIDS. OMHRC offers customized responses to telephone, e-mail, and mail inquiries. The resource center can provide database searches, funding searches, and current data and statistics on a variety of health conditions and issues affecting racial and ethnic minorities. The center also disseminates targeted publications and provides referrals to local, state, and national organizations.

**WEB SITE:** <http://www.minorityhealth.hhs.gov/>

**Contact OMHRC**

Information specialists are available Monday – Friday, 9 a.m. – 5 p.m., Eastern Standard Time, to respond to questions in English or Spanish.

**PHONE:** 800-444-6472

**TDD:** 301-251-1432

**E-MAIL:** [info@minorityhealth.hhs.gov](mailto:info@minorityhealth.hhs.gov)

## Non-Federal Resources

### AIDS Community Research Initiative of America (ACRIA)

**DESCRIPTION:**

ACRIA is a leading community-based HIV research, treatment, and education organization, operating programs both domestically and internationally. ACRIA provides a database of currently enrolling studies for HIV/AIDS and related diseases. ACRIA also conducts drug trials and offers a comprehensive HIV health literacy program to organizations across the country. ACRIA publications are available in Spanish.

**WEB SITE:** <http://www.acria.org/>

**Contact ACRIA**

**PHONE:** 212-924-3934  
**FAX:** 212-924-3936  
**E-MAIL:** [info@acria.org](mailto:info@acria.org)  
**MAIL:** ACRIA  
230 West 38th Street, 17th Floor  
New York, NY 10018

### AIDS Education Global Information System (AEGiS)

**DESCRIPTION:**

AEGiS is a nonprofit organization that was established in response to the growing HIV/AIDS pandemic. The AEGiS Web site provides HIV care providers and people living with HIV access to current, reliable information on HIV/AIDS. AEGiS also aims to preserve a global history of the HIV/AIDS pandemic through its historical news, scientific publications, and treatment database. AEGiS provides information in a variety of languages.

**WEB SITE:** <http://www.aegis.com>

**Contact AEGiS**

**PHONE:** 949-495-1952  
**FAX:** 949-443-1775

## AIDS Education Global Information System (AEGiS)

### Contact AEGiS

**E-MAIL:** help@aegis.org  
**MAIL:** AEGiS  
32302 Alipaz St., No. 267  
P.O. Box 184  
San Juan Capistrano, CA 92693-0184

## AIDSMAP

### DESCRIPTION:

The AIDSMAP Web site provides information for health care professionals and people living with HIV. The site includes comprehensive, searchable databases of HIV treatment and care information. The organization's e-atlas allows users to search for HIV-related services worldwide and access country-specific information and news.

**WEB SITE:** <http://aidsmap.com>

### Contact AIDSMAP

**PHONE:** +44-0-20-7840-0050  
**FAX:** +44-0-20-7735-5351  
**E-MAIL:** info@nam.org.uk  
**MAIL:** AIDSMAP  
Lincoln House 1 Brixton Road  
London SW9 6DE UK

## America Academy of HIV Medicine (AAHIVM)

### DESCRIPTION:

AAHIVM supports the HIV care community by offering continuing medical education; credentialing HIV specialists, HIV experts, and HIV pharmacists; providing practice management information; advocating on behalf of the HIV care provider at the federal and state levels for

issues relevant to clinical and professional support; and advancing health care resources for people living with HIV.

**WEB SITE:** <http://aahivm.org>

### **Contact AAHIVM**

**PHONE:** 202-659-0699  
**FAX:** 202-659-0976  
**E-MAIL:** [info@aahivm.org](mailto:info@aahivm.org)  
**MAIL:** AAHIVM National Office  
1705 DeSales Street, NW  
Suite 700  
Washington, DC 20036

## **Antiretroviral Pregnancy Registry**

### **DESCRIPTION:**

A project established to monitor prenatal exposures to antiretroviral (ARV) drugs and to detect any potential increase in the risk of major birth defects. Pregnant women exposed to ARV drugs voluntarily enroll in the Registry through their health care providers. Information provided to the Registry includes no identifying patient information.

**WEB SITE:** <http://www.apregistry.com>

### **Contact the Antiretroviral Pregnancy Registry**

**PHONE:** 800-258-4263  
**FAX:** 800-800-1052  
**E-MAIL:** [registries@Kendle.com](mailto:registries@Kendle.com)  
**MAIL:** Antiretroviral Pregnancy Registry  
Research Park  
1011 Ashes Drive  
Wilmington, NC 28405

## HIV InSite

**DESCRIPTION:**

HIV InSite is a project of the University of California San Francisco (UCSF) Center for HIV Information. The site serves as a source for comprehensive, in-depth HIV/AIDS information and knowledge. The site includes a section called "For Patients and the Public," which provides pages on HIV/AIDS basics, population-specific information, advice on living with HIV, and much more.

**WEB SITE:** <http://hivinsite.ucsf.edu/InSite>

**Contact HIV InSite**

**FAX:** 415-379-5547  
**E-MAIL:** [info@hivinsite.ucsf.edu](mailto:info@hivinsite.ucsf.edu)  
**MAIL:** HIV InSite  
University of California San Francisco (UCSF)  
Center for HIV Information  
4150 Clement Street, Box 111V  
San Francisco, CA 94121

## HIV Medicine Association (HIVMA)

**DESCRIPTION:**

HIVMA is a membership organization whose members include medical professionals who practice HIV medicine in fields such as internal medicine, family practice, infectious diseases, oncology, and obstetrics/gynecology. The HIVMA Web site provides useful resources and information on HIV/AIDS, including testing, accessing prescription drugs, and finding an HIV care provider.

**WEB SITE:** <http://www.hivma.org/Resources.aspx>

**Contact HIVMA**

**PHONE:** 703-299-1215  
**FAX:** 703-299-8766  
**E-MAIL:** [info@hivma.org](mailto:info@hivma.org)  
**MAIL:** HIVMA  
1300 Wilson Blvd. Suite 300  
Arlington, VA 22209



## International AIDS Society (IAS)

### DESCRIPTION:

IAS, an association of HIV/AIDS professionals worldwide, is the custodian of the International AIDS Conference, the largest regular conference on any health or development issue. The conference and other IAS sponsored meetings provide critical platforms for presenting new research, promoting dialogue, and building consensus to advance the global fight against HIV.

**WEB SITE:** [www.iasociety.org/](http://www.iasociety.org/)

### Contact IAS Headquarters

**PHONE:** +41-022-7 100 800  
**FAX:** +41-022-7 100 899  
**E-MAIL:** [info@iasociety.org](mailto:info@iasociety.org)  
**MAIL:** IAS  
Ave. Louis Casai 71  
P.O. Box 28  
CH - 1216 Cointrin  
Geneva, Switzerland

## International Association of Physicians in AIDS Care (IAPAC)

### DESCRIPTION:

IAPAC counts among its membership more than 12,000 physicians and allied health professionals in over 100 countries. IAPAC provides its members with opportunities for online continuing education on the management of HIV, a bi-monthly journal that presents original research on the treatment of HIV, and updates on HIV/AIDS- related news and events.

**WEB SITE:** <http://www.iapac.org/>

### Contact IAPAC Headquarters

**PHONE:** 312-795-4930  
**FAX:** 312-795-4938

**Contact IAPAC Headquarters**

**E-MAIL:** iapac@iapac.org  
**MAIL:** IAPAC  
123 Madison Street Suite 1400  
Chicago, IL 60602

## Joint United Nations Programme on HIV/AIDS (UNAIDS)

**DESCRIPTION:**

UNAIDS is a joint venture of the United Nations (UN) family, bringing together the efforts and resources of 10 UN system organizations to help the world prevent new HIV infections, care for people living with HIV, and mitigate the impact of the epidemic. The UNAIDS Web site, available in English, French, Russian, and Spanish, provides country-specific information on the HIV epidemic; links to a range of tools for data collection, reporting and analysis; and a variety of publications on the global response to HIV.

**WEB SITE:** <http://www.unaids.org/>

**Contact UNAIDS**

**PHONE:** +41-22-791-36-66  
**FAX:** +41-22-791-41-87  
**E-MAIL:** [aidsinfo@unaids.org](mailto:aidsinfo@unaids.org)  
**MAIL:** UNAIDS Secretariat  
20, Avenue Appia  
CH-1211 Geneva 27  
Switzerland

## Kaiser Family Foundation

**DESCRIPTION:**

The Kaiser Family Foundation is a nonprofit, private-operating foundation focusing on the major health care issues facing the United States. The Kaiser Family Foundation Web site includes a section on HIV/AIDS. The section provides data and information on the HIV/AIDS

epidemic in the U.S. and around the world, including policy reports, fact sheets, and survey data. In addition, the site includes online news summaries and information resources related to HIV/AIDS.

**WEB SITE:** <http://kff.org/hivaids/>

### Contact Kaiser Family Foundation Headquarters

**PHONE:** 650-854-9500  
**FAX:** 650-854-4800  
**E-MAIL:** [news@kaiserhealthnews.org](mailto:news@kaiserhealthnews.org)  
**MAIL:** Kaiser Family Foundation  
2400 Sand Hill Road  
Menlo Park, CA 94025  
Washington, DC 20005

## National Alliance of State and Territorial AIDS Directories (NASTAD)

### DESCRIPTION:

NASTAD represents the nation's chief state health agency staff who have programmatic responsibility for administering HIV/AIDS and viral hepatitis health care, prevention, education, and supportive service programs funded by state and federal governments. Resources available through the NASTAD Web site include publications on community planning for HIV/AIDS programs; resources for HIV/AIDS counseling, testing, and referral; and examples of locally developed HIV/AIDS-related interventions.

**WEB SITE:** <http://www.nastad.org>

### Contact NASTAD

**PHONE:** 202-434-8090  
**FAX:** 202-434-8092  
**E-MAIL:** [nastad@nastad.org](mailto:nastad@nastad.org)  
**MAIL:** NASTAD  
444 North Capital Street, NW Suite 339  
Washington, DC 20001

## National HIV/AIDS Clinicians' Consultation Center (NCCC)

### DESCRIPTION:

A federally funded service that offers HIV-related clinical consultation and guidance to health care professionals. Faculty members of the University of California San Francisco (UCSF) at San Francisco General Hospital provide the free and confidential service via three distinct toll free hotlines:

- National HIV/AIDS Telephone Consultation Service (Warmline)
- National Clinicians' Post-Exposure Prophylaxis Hotline (PEPline)
- National Perinatal HIV Consultation & Referral Service (Perinatal HIV Hotline)

**WEB SITE:** <http://www.nccc.ucsf.edu/home/>

### FOR INFORMATION ON CONSULTATIONS IN SPANISH:

[http://www.nccc.ucsf.edu/contact\\_us/appointment\\_spanish/](http://www.nccc.ucsf.edu/contact_us/appointment_spanish/)

### Contact NCCC

**TELEPHONE:** 415-206-8700

**FAX:** 415-476-3454

**MAIL:** UCSF  
Box 1365  
San Francisco, CA 94143-1365

## National HIV/AIDS Telephone Consultation Service (Warmline)

### DESCRIPTION:

The Warmline offers physicians and other health care providers up-to-the-minute HIV clinical information and individualized expert case consultation across the broad range of clinical HIV/AIDS problems. The Warmline is a free service staffed by clinicians experienced in HIV care.

**WEB SITE:** [http://www.nccc.ucsf.edu/about\\_nccc/warmline/](http://www.nccc.ucsf.edu/about_nccc/warmline/)

### Contact the Warmline

**WARMLINE:** 800-933-3413

**HOURS:** Monday - Friday, 5:00 a.m. - 5:00 p.m. Pacific Time.  
Voice mail is available 24 hours a day.

## National Clinicians' Post-Exposure Prophylaxis Hotline (PEPline)

### DESCRIPTION:

The PEPline offers clinicians up-to-the-minute advice on managing occupational exposures to HIV, hepatitis viruses, and other blood-borne pathogens. PEPline clinicians will help assess the risk of the exposure, discuss the most recent post-exposure prophylaxis protocols, and review specific treatment and follow-up options. Written materials supporting the telephone discussion are sent by mail or fax whenever needed.

**WEB SITE:** [http://www.nccc.ucsf.edu/about\\_nccc/pepline/](http://www.nccc.ucsf.edu/about_nccc/pepline/)

### Contact the PEPline

**PEPLINE:** 888-448-4911

**HOURS:** 24 hours a day, 7 days a week. Emergency calls received during evening, weekend, and holiday hours are forwarded to on-call clinicians. Non-emergency calls are returned during business hours.

## National Perinatal HIV Consultation and Referral Service (Perinatal HIV Hotline)

### DESCRIPTION:

The Perinatal HIV Hotline provides free 24-hour clinical consultation and advice on HIV testing in pregnancy, management of HIV in pregnant women, and care of HIV-exposed infants. Hotline staff can link callers with local perinatal HIV specialists.

**WEB SITE:** [http://www.nccc.ucsf.edu/about\\_nccc/perinatal\\_hotline/](http://www.nccc.ucsf.edu/about_nccc/perinatal_hotline/)

## National HIV/AIDS Clinicians' Consultation Center (NCCC)

### Contact the Perinatal HIV Hotline

**PERINATAL HIV HOTLINE:** 888-448-8765

**HOURS:** 24 hours a day, 7 days a week. Emergency calls received during evening, weekend, and holiday hours are forwarded to on-call clinicians. Non-emergency calls are returned during business hours.

## Tufts University School of Medicine

Department of Public Health and Community Medicine,  
Nutrition/Infection Unit

### DESCRIPTION:

The Nutrition/Infection Unit section of the Tufts University School of Medicine Web site includes a focus on HIV resources. Articles on healthy eating and snacking, lipodystrophy, and diarrhea are available in the HIV Nutrition and Health section. The site also includes a listing of HIV links for additional information.

### NUTRITION/INFECTION UNIT WEB SITE - HIV RESOURCES:

<http://www.tufts.edu/med/nutrition-infection/hiv/health.html>

### Contact the Nutrition/Infection Unit

**PHONE:** 617-636-3811

**FAX:** 617-636-3810

**E-MAIL:** [med-nutrition-infection@tufts.edu](mailto:med-nutrition-infection@tufts.edu)

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## Women, Children, and HIV Web Site

**DESCRIPTION:**

A Web site sponsored by the University of California San Francisco (UCSF) Center for HIV Information that provides resources on the prevention and treatment of HIV infection in women and children. The Women, Children, and HIV Resource Library offers materials in a variety of languages, including Spanish.

**WEB SITE:** <http://www.womenchildrenhiv.org/>

**Contact Women, Children and HIV**

**E-MAIL:** [Editor@WomenChildrenHIV.org](mailto:Editor@WomenChildrenHIV.org)

## World Health Organization (WHO)

**DESCRIPTION:**

WHO is the agency of the United Nations that provides global leadership on health-related matters. The WHO Web site includes a section devoted to HIV/AIDS. The section offers general information on HIV/AIDS related publications—including treatment guidelines—and links to regional WHO HIV programs and activities. The WHO Web site is available in English, French, Russian and Spanish.

**WEB SITE** [http://www.who.int/topics/hiv\\_aids/en/](http://www.who.int/topics/hiv_aids/en/)

**Contact WHO Headquarters**

**PHONE:** +41-22-791-21-11

**FAX:** +41-22-791-31-11

**E-MAIL:** [info@who.int](mailto:info@who.int)

**MAIL:** World Health Organization  
Avenue Appia 20  
1211 Geneva 27  
Switzerland

# FDA-Approved Antiretroviral HIV Drugs

Antiretroviral therapy (ART) is the recommended treatment for HIV infection. ART involves taking a combination of antiretroviral (ARV) HIV drugs (a regimen) daily. A regimen contains three or more ARV drugs from at least two different drug classes. ARV drugs prevent HIV from multiplying. ARV drugs keep people with HIV healthy, but they cannot cure HIV infection or prevent HIV transmission.

The following table lists ARV drugs approved by the U.S. Food and Drug Administration (FDA) for treatment of HIV in the United States. The medications are presented by drug class and identified by generic name/acronym and brand name.

Drug Class	Generic Name (Acronym)	Brand Name
Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs)		
NNRTIs bind to and alter reverse transcriptase, an enzyme HIV needs to make copies of itself.	Delavirdine (DLV)	Rescriptor
	Rilpivirine (RPV)	Edurant
	Efavirenz (EFV)	Sustiva
	Etravirine (ETR)	Intelence
	Nevirapine (NVP)	Viramune
Nucleoside Reverse Transcriptase Inhibitors (NRTIs)		
NRTIs block reverse transcriptase, an enzyme HIV needs to make copies of itself.	Abacavir (ABC)	Ziagen
	Didanosine (ddl)	Videx Videx EC (enteric-coated)
	Emtricitabine (FTC)	Emtriva, Coviracil
	Lamivudine (3TC)	Epivir
	Stavudine (d4T)	Zerit
	Tenofovir DF (TDF)	Viread
	Zidovudine (ZDV, AZT)	Retrovir



Drug Class	Generic Name (Acronym)	Brand Name
<b>Protease Inhibitors (PIs)</b>		
PIs block HIV protease, an enzyme HIV needs to make copies of itself.	Atazanavir (ATV)	Reyataz
	Darunavir (DRV)	Prezista
	Fosamprenavir (FPV)	Lexiva
	Indinavir (IDV)	Crixivan
	Nelfinavir (NFV)	Viracept
	Ritonavir (RTV)	Norvir
	Saquinavir (SQV)	Invirase
	Tipranavir (TPV)	Aptivus
<b>Fusion Inhibitors</b>		
Fusion inhibitors block HIV from entering the CD4 cells of the immune system.	Enfuvirtide (T-20)	Fuzeon
<b>CCR5 Antagonists</b>		
CCR5 entry inhibitors block CCR5, a protein on the CD4 cells that HIV needs to enter the cells.	Maraviroc (MVC)	Selzentry
<b>Integrase Inhibitors</b>		
Integrase inhibitors block HIV integrase, an enzyme HIV needs to make copies of itself.	Raltegravir (RAL)	Isentress
<b>Fixed-Dose Combinations</b>		
Fixed-dose combination tablets contain two or more antiretroviral HIV drugs from one or more drug classes.	Abacavir, Lamivudine	Epzicom
	Abacavir, Lamivudine, Zidovudine	Trizivir
	Efavirenz, Emtricitabine, Tenofovir DF	Atripla
	Emtricitabine, Rilpivirine, Tenofovir DF	Complera
	Emtricitabine, Tenofovir DF	Truvada
	Lamivudine, Zidovudine	Combivir
	Lopinavir, Ritonavir	Kaletra



# Sponsors

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## **National Institutes of Health (NIH)**

### **Office of AIDS Research (OAR)**

<http://www.oar.nih.gov/>

### **National Institute of Allergy and Infectious Diseases (NIAID)**

<http://www.niaid.nih.gov>

### **National Library of Medicine (NLM)**

<http://www.nlm.nih.gov>

## **Health Resources and Services Administration (HRSA)**

<http://hrsa.gov>

## **Centers for Disease Control and Prevention (CDC)**

<http://cdc.gov>

## **AIDSinfo.nih.gov**

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E-mail: [ContactUs@aidinfo.nih.gov](mailto:ContactUs@aidinfo.nih.gov)  
Live Chat: [aidinfo.nih.gov/LiveHelp/](http://aidinfo.nih.gov/LiveHelp/)

Hours: (Monday–Friday, Eastern Time):

Telephone and TTY/TDD: 12:00 p.m. to 5:00 p.m.

Live Chat: 12:00 p.m. to 4:00 p.m.

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