

## GLOSSARY FOR HIV/AIDS MODULES

### **Abruptio Placentae**

Premature separation of the placenta from the site of implantation on the uterus before delivery of the fetus.

### **Accidental Inoculation**

An occupational exposure to HIV that occurs during the performance of job duties (by a nurse or doctor, for example). Includes a needlestick or cut with a sharp object, contact of mucous membranes (mouth, eyes), or contact of skin (especially when the exposed skin is chapped, abraded, or afflicted with dermatitis--skin rash or sores--or the contact is prolonged or involving an extensive area) with blood, tissues, or other body fluids (stool, urine, vaginal secretions, saliva, mucous) to which universal precautions apply.

### **ACP**

AIDS Control Program

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

The most severe manifestation of infection with the Human Immunodeficiency Virus (HIV). The Centers for Disease Control and Prevention (CDC), the World Health Organization, and many national governments list numerous opportunistic infections and cancers that, in the presence of HIV infection, result in an AIDS diagnosis. AIDS is also defined on the basis of the degree of immunodeficiency in an HIV-infected individual. AIDS can also affect the central nervous system and can result in neurological problems, infections, or cancers.

### **Active Immunity**

Protection from a disease as a result of previous exposure to the disease-causing infectious agent or part of the infectious agent (antigen). The protection can be a result of having had the disease or having received a vaccine to prevent getting the disease.

### **Active Tuberculosis**

Active disease caused by *Mycobacterium tuberculosis*, as evidenced by a confirmatory culture, or, in the absence of culture, suggestive clinical symptoms, including productive cough lasting >3 weeks, chest pain, hemoptysis, fever, night sweats, weight loss, and easy fatigability. Active TB is a communicable disease that is treatable, curable, and preventable. Persons with active TB disease should be under the care of a health care provider. Active TB disease may indicate immune deficiency. For HIV-infected persons, active TB disease is considered an opportunistic infection and a qualifying condition for AIDS.

### **Acute HIV Infection**

The period following infection when there is rapid production of virus. An estimated 80 to 90% of individuals with primary HIV infection develop an acute syndrome (disorder) characterized by

flulike symptoms of fever, fatigue, swollen lymph nodes, sore throat, headache, aching muscles, and sometimes skin rash. Following infection, the immune system produces antibody and a cellular response to the virus (seroconversion) and a broad HIV-1 specific immune response occurs, usually within an average of 3 weeks after HIV infection. High levels of virus (HIV RNA) can be found in the blood at this time.

### **Adenopathy**

Any disease involving or causing enlargement of lymph nodes.

### **Adherence**

The extent to which a patient continues the agreed-upon treatment as prescribed.

### **Adjuvant**

An ingredient added to a prescription or solution that increases or modifies the action of the principal ingredient. May be used in treatment of HIV or for HIV vaccines.

### **Adverse Reaction**

(Adverse event) An unwanted effect caused by the administration of drugs or vaccines. Onset may be sudden or develop over time.

### **Aerosolized**

A form of giving a drug in which a drug, such as pentamidine, is turned into a fine spray or mist by a nebulizer and inhaled.

### **Agammaglobulinemia**

A nearly total absence of antibodies (immunoglobulins) resulting in the loss of ability to produce immune antibodies.

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

(HIV-associated dementia or HAD) A degenerative (destructive) neurological condition attributed to HIV infection, characterized by a group of clinical presentations including loss of coordination, mood swings, loss of inhibitions, and widespread inability to think. It is the most common central nervous system complication of HIV infection.

### **AIDS Wasting Syndrome**

An AIDS-defining condition that includes at least 10% weight loss in the presence of diarrhea, chronic weakness, and documented fever for at least 30 days that is not the result of another infection or disease. In developing countries, it is often called "slim disease."

### **AIDS-Related Cancers**

Several cancers are more common or more aggressive in persons living with HIV. These malignancies include certain types of immune system cancers known as lymphomas, Kaposi sarcoma, and anogenital cancers that primarily affect the anus and the cervix.

### **AIDS-Related Complex (ARC)**

(Early symptomatic HIV infection) A group of common complications found in early stages of HIV infection. They include progressive generalized lymphadenopathy (PGL), recurrent fever, unexplained weight loss, swollen lymph nodes, diarrhea, herpes, hairy leukoplakia, fungus infection of the mouth and throat, and the presence of HIV antibodies. Also includes symptoms that appear to be related to infection by HIV such as an unexplained, chronic deficiency of white blood cells (leukopenia) or a poorly functioning lymphatic system with swelling of the lymph nodes (lymphadenopathy) lasting for >3 months without the opportunistic infections required for a diagnosis of AIDS.

### **Alanine Aminotransferase (ALT)**

A liver enzyme that plays a role in protein metabolism. Abnormally high blood levels of ALT are a sign of liver inflammation or damage from infection or drugs. A normal level is below approximately 50 IU/L.

### **Alkaline Phosphatase**

An enzyme normally present in certain cells within the liver, bone, kidney, intestine, and placenta. When the cells are destroyed in those tissues, more of the enzyme leaks into the blood, and levels rise in proportion to the severity of the condition. Measurement of this enzyme is used as an indication of the health of the liver.

### **Alopecia**

Loss of hair that frequently occurs in patients undergoing treatment for cancer or suffering from other diseases, such as AIDS, where cell-killing, or cytotoxic, drugs are used.

### **Alpha Interferon (Interferon Alpha, IFN)**

A protein produced by the immune system in response to infection that assists in controlling virus infection.

### **Alternate Test Site**

A site that provides only HIV services. Sometimes referred to as an anonymous test site.

### **Alternative Medicine**

A broad category of treatment systems (e.g. chiropractic, herbal medicine, acupuncture, homeopathy, naturopathy, and spiritual devotions) or culturally based healing traditions such as Chinese, Ayurvedic, and Christian Science. Alternative medicines share the common characteristic of nonacceptance by the biomedical (i.e. mainstream Western) establishment. Alternative medicine is also referred to as "complementary medicine." The designation "alternative medicine" is not equivalent to holistic medicine, a narrower term.

### **Amebiasis**

An inflammation of the intestines caused by infection with *Entamoeba histolytica* (a type of amoeba) and characterized by frequent, loose stools flecked with blood and mucus.

**Anal Intercourse/ Anal Sex**

A type of sexual intercourse in which a man inserts his penis in his partner's anus. Anal sex can be insertive or receptive.

**Anaphylactic Shock**

A life-threatening allergic reaction characterized by a swelling of body tissues (including the throat) and a sudden decrease in blood pressure. Symptoms include difficulty breathing, violent coughing, and tightness of the chest.

**ANC**

Antenatal clinic

**Anemia**

A lower than normal number of red blood cells.

**Anergy**

The loss or weakening of the body's immunity to an irritating agent, or antigen. Patients may be so immunodeficient that they are unable to produce a reaction to an infectious agent. For example, such patients will usually not test positive for tuberculosis (TB) on a tuberculin skin test (or Mantoux test).

**Anogenital**

Related to the anal (rectum) and/or genital (sexual) area of the body.

**Anonymous**

Without an ability to identify a person. In anonymous testing, patient-identifying information is not linked to testing information, including the request for tests or test results.

**Anorexia**

The lack or loss of appetite that leads to significant decline in weight.

**Antenatal**

Occurring before birth.

**Antenatal**

The period between conception and birth. Same as prenatal.

**Antibiotic**

A natural or manufactured substance that prevents the growth of bacteria or fungi. Some antibiotics are used to treat infectious diseases.

**Antibody**

Substances in the blood or other body fluids that destroy bacteria, viruses, or other harmful agents (antigens). They are members of a class of proteins known as immunoglobulins, which are produced by special white blood cells called B-lymphocytes.

### **Antibody-Dependent Cell-Mediated Cytotoxicity (ADCC)**

An immune response in which antibodies bind to target cells, identifying them for attack by the immune system.

### **Antibody-Mediated Immunity**

Also called humoral immunity. Immunity that results from the activity of antibodies in blood and lymphoid tissue.

### **Antifungal**

A substance that kills or slows the growth of a fungus.

### **Antigen**

A substance that, when introduced into the body, stimulates production of an antibody.

### **Antineoplastic**

A substance that prevents the development or growth of cancer cells.

### **Antiprotozoal**

A substance that kills or inhibits the growth of single-celled microorganisms called protozoa, such as *Pneumocystis jiroveci*.

### **Antiretroviral**

A substance that kills or suppresses a retrovirus, such as HIV.

### **Antiretroviral Drugs**

Substances used to kill or stop the multiplication of retroviruses such as HIV.

### **Antiviral**

A substance or process that destroys a virus or suppresses its replication (i.e. reproduction).

### **Aphthous Ulcer**

A painful mouth or throat sore of unknown cause. Aphthous ulcers are common in persons living with HIV.

### **Approved Drugs**

In the United States, the Food and Drug Administration (FDA) and similar government departments must approve a substance as a drug before it can be sold.

### **ART**

Antiretroviral therapy

**Arthralgia**

A pain in a joint.

**Aspergillosis**

A fungal infection--resulting from the fungus *Aspergillus*--of the lungs that can spread through the blood to other organs. Symptoms include fever, chills, difficulty in breathing, and coughing up blood.

**Assay**

A qualitative or quantitative analysis of a substance; a test.

**Asymptomatic**

Without symptoms or not sick. Usually used in HIV/AIDS literature to describe a person who has a positive reaction to one of several tests for HIV antibodies but who shows no clinical symptoms of the disease and who is not sick. Even though a person is asymptomatic, he or she may still infect another person with HIV.

**Ataxia**

Loss of balance.

**Attenuated**

Weakened or decreased. For example, an attenuated virus can no longer produce disease but might be used to produce a vaccine.

**AZT** -- a medicine to slow the growth of HIV.

**Bedsore** -- sores on the skin caused by lying in bed too long.

**Booster** -- an extra dose of a vaccine to bring immunity back to full strength and stop illnesses.

**B Lymphocytes (B Cells)**

One of the two major classes of lymphocytes (white blood cells); they are involved in the production of antibodies.

**Bacteriostatic**

Capable of slowing the growth of bacteria.

**Bactrim**

Brand name of Trimethoprim/Sulphamethoxazole.

**BCG**

Bacille of Calmette and Guerin--a TB vaccine.

### **bDNA Test**

#### **BID**

Twice each day.

#### **Bilirubin**

A yellow pigment occurring in liver bile, blood, and urine. Its measurement can be used as an indication of the health of the liver. Bilirubin is the product of the breakdown of red blood cells. An elevated level of bilirubin in blood is an indication of liver disease or drug-induced liver impairment.

#### **Biopsy**

Surgical removal of a piece of tissue from a person for microscopic examination to make a diagnosis (e.g. to determine whether abnormal cells such as cancer cells are present).

#### **Bisexual**

Having sexual relations with both females and males.

#### **BIW**

Twice each week.

#### **Blinded Study**

A clinical research study in which participants are unaware as to whether they are receiving the experimental drug.

#### **BMI**

Body mass index (kilogram/meter<sup>2</sup>)

#### **BMS**

#### **Body Fluids**

Any fluid in the human body, such as blood, urine, saliva (spit), sputum, tears, semen, mother's milk, or vaginal secretions. Only blood, semen, mother's milk, and vaginal secretions have been linked directly to the transmission of HIV.

#### **Body Surface Area (BSA)**

A measure of the overall surface of a person calculated from height and weight. Body surface area is expressed in meters squared (m<sup>2</sup>).

#### **Booster**

A second or later dose of a vaccine given to increase the immune response to the original dose.

#### **Branched DNA Assay**

(bDNA test) A test developed by Bayer for measuring the amount of HIV (as well as other viruses) in blood plasma. Test results are calibrated in numbers of virus particle equivalents per milliliter of plasma.

### **Breakthrough Infection**

An infection caused by the infectious agent the substance is designed to protect against. As it pertains to a vaccine trial, the infection may be caused by exposure to the infectious agent, such as HIV, before the vaccine has taken effect, before all doses of the vaccine have been given, or because the vaccine is not effective.

### **Breast Abscess**

This is a collection of pus in part of the breast. It results in painful swelling of the breast and usually requires a surgical incision for drainage.

### **Breast Milk Substitute**

Any food being marketed or otherwise presented as partial or total replacement for breast milk, whether or not suitable for that purpose.

### **Breast Milk Substitute**

Any food being marketed or otherwise represented as a partial or total replacement for breast milk, whether or not suitable for that purpose. A breast milk substitute can be commercial infant formula or home-modified animal milk.

### **Breast-feeding**

Feeding a child breast milk (direct from the breast or expressed). Breast-feeding practices may be further described according to timing and frequency.

### **Bronchoscopy**

Examination of the bronchial (lung) passages through the tube of an endoscope (usually a curved flexible tube containing fibers that carry light down the tube and project an enlarged image up the tube to the viewer) that is inserted into the upper lungs.

### **Burkitt Lymphoma**

A B-cell-type lymphoma.

**Catheter (urinary)** -- a tube put in the bladder to drain urine.

**Chickenpox** -- a very contagious viral disease, very common in children, that causes sores (called pox) on the skin.

**CMV** -- a virus, cytomegalovirus, that causes a flu-like illness and, in severe cases, swollen glands, pneumonia, eye infections (retinitis), and birth defects.

**Condom** -- a thin protective sheath that fits over the penis during vaginal, anal, or oral sex to prevent sexually transmitted disease or pregnancy. There are also female condoms that fit inside the vagina.

## **C/S**

Cesarean Section.

## **Cachexia**

General ill health and malnutrition, marked by weakness and emaciation, usually associated with serious disease.

## **Candida**

Yeastlike fungi commonly found in the normal flora of the mouth, skin, intestinal tract, and vagina, which can become infectious in individuals with an abnormal immune system.

## **Candidiasis**

An infection with a yeastlike fungus of the *Candida* family, generally *Candida albicans*. Candidiasis of the esophagus, trachea, bronchi, or lungs is an indicator disease for AIDS. Oral or recurrent vaginal candida infection is an early sign of immune system abnormalities.

## **Carcinogen**

Any cancer-producing substance.

## **Casual Contact**

Can be defined as normal day-to-day contact among people at home, school, work, or in the community. A contagious infectious agent (e.g. chicken pox, flu) can be transmitted by casual contact.

## **CD4 (T4) Cells**

A type of lymphocyte involved in protecting against viral, fungal, and protozoal infections. They are also known as T helper cells. They are HIV's preferred targets for infection. Destruction of CD4 lymphocytes is the major cause of the immunodeficiency observed in AIDS, and decreasing CD4 lymphocyte levels appear to be the best indicator for developing opportunistic infections.

## **CD4 Count**

A test that measures the number of CD4 lymphocytes in the blood, thus reflecting the state of the immune system. A normal count in a healthy adult is 500-1,200 cells/ $\mu$ L. When the CD4 count of an adult falls below 200 cells/ $\mu$ L, there is a high risk of opportunistic infection.

## **CD4, CD4 Receptor**

One of the protein structures on the surface of a human cell that allows HIV to attach, enter, and thus infect the cell. Present on CD4 cells (helper T lymphocytes) among others.

## **CD8 (T8) Cells**

White blood cells (lymphocytes) with the CD8 protein on their surface. These white blood cells kill some cancer cells and cells infected by bacteria and viruses. Also called cytotoxic T cells, T8 cells, cytotoxic T lymphocytes.

### **Cell-Mediated Immunity (CMI)**

Part of the immune system that deals with viruses and other infectious agents as well as cancer cells.

### **Centers for Disease Control and Prevention (CDC)**

The U.S. Department of Health and Human Services agency with the mission to promote health and quality of life by preventing and controlling disease, injury, and disability.

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

The central nervous system is composed of the brain, spinal cord, and meninges (protective membranes surrounding them). The central nervous system is often affected in advanced AIDS, causing dementia.

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

Blood monocytes and macrophages that are infected by HIV appear to be relatively resistant to killing. However, these cells travel throughout the body and carry HIV to various organs, especially the lungs and the brain. Persons living with HIV often experience abnormalities in the central nervous system such as dementia (deterioration in intellectual function and emotional disturbances). Investigators have hypothesized that an accumulation of HIV in brain and nerve cells or the inappropriate release of chemical or toxic byproducts of infected cells that reach the central nervous system may be to blame for the neurological manifestations of HIV disease.

### **Cerebrospinal Fluid (CSF)**

Fluid that bathes the brain and the spinal cord.

### **Cervical Cancer**

A cancer of the uterine cervix.

### **Cervical Dysplasia**

Abnormality in the size, shape, and organization of adult cells of the cervix. It is often found before cancer cells appear. A precursor lesion for cervical cancer. Studies indicate an increase of cervical dysplasia among women living with HIV.

### **Cervical Intraepithelial Neoplasia (CIN)**

An abnormality of the epithelium (lining) of the cervix, often precancerous. Considerable evidence implicates a virus called human papilloma virus (HPV) in the development of CIN.

### **Cervix**

The lower part of the uterus that extends into the lower vagina and contains a narrow canal connecting the upper and lower parts of a woman's reproductive tract.

## **Cesarean Section**

A delivery procedure for the baby that involves making a cut through the abdominal wall to remove the baby from the uterus.

## **Chancroid**

A highly contagious sexually transmitted disease caused by the *Haemophilus ducreyi* bacterium with symptoms appearing 3 to 5 days after exposure.

## **Chemokine Receptor**

An alternate receptor used by HIV to infect cells.

## **Chemokines**

Chemokines are messenger molecules secreted by CD8 cells whose major function is to attract immune cells to sites of infection. Several chemokines--called RANTES, MIP-1A, and MIP-1B--interfere with HIV multiplication by occupying these receptors.

## **Chemotherapy**

In general, it is the use of medicines to treat any disease. It is more commonly used to describe medicines to treat cancer.

## **Chlamydia**

A sexually transmitted disease (STD) caused by *Chlamydia trachomatis* that infects the genital tract. The infection is frequently asymptomatic (i.e. shows no symptoms), but if left untreated, it can cause sterility in women.

## **Chorioamnionitis**

An infection of the placental tissues and amniotic fluid occurring during pregnancy. Can cause blood infection in the mother and may lead to premature birth and serious infection in the newborn baby.

## **Clade**

Also called a subtype. A clade is a group of related HIV viruses classified according to their degree of virus similarity. There are currently three groups of HIV-1 M, N, and O. Isolate M (major strains) consists of at least 10 clades; A through J. Group O (outer strains) may consist of a similar number of clades.

## **Clinical**

Pertaining to observations, tests, or treatment of patients.

## **Clinical Latency**

The period of time a virus or bacteria or other organism is living or developing in the body without causing symptoms. The period of time in which a person with HIV infection does not exhibit any evidence of disease or sickness.

**Clinical Trial**

A scientifically designed study of the effects of a drug, vaccine, biologic, or behavior in humans. The goal is to define the safety, the benefit, and side effects of the drug. Most countries require strict testing of all new drugs and vaccines prior to their approval for use.

**Coccidioidomycosis**

An infectious fungal disease caused by the breathing in of *Coccidioides immitis*, which are carried on windblown dust particles.

**Cognitive Impairment**

Loss of the ability to process, learn, and remember information.

**Cohort**

A group of individuals with some characteristics in common.

**Colitis**

Inflammation of the colon, the lower part of the intestine.

**Colostrum**

The first thick yellow milk secreted by a woman beginning lactation. Colostrum contains high levels of proteins and antibodies.

**Combination Therapy**

Two or more drugs or treatments used together to obtain the best results against HIV infection and/or AIDS. Combination drug therapy (treatment) has proven more effective than monotherapy (single-drug therapy) in controlling the growth of the virus. An example of combination therapy would be the use of two drugs such as zidovudine and lamivudine together.

**Commercial Sex Worker (CSW)**

A woman or man who offers sexual intercourse for a fee. The terms prostitute or prostitution are used more frequently used outside the AIDS area.

**Community Planning**

Community planning groups are responsible for developing HIV prevention, treatment, and care plans that are used in their communities. The goal of HIV community planning is to improve the effectiveness of HIV programs and to be certain that the needs of the community are being met.

**Community-Based Organization (CBO)**

A service organization that provides social, support, education, and care services at the local level.

## **Complementary and Alternative Therapy**

Broad range of healing approaches and treatments that Western (conventional) medicine does not commonly use to improve health conditions. Examples include acupuncture, herbs, etc.

## **Complementary Feeding**

Any food, whether manufactured or locally prepared, suitable as a complement to breast milk or to infant formula, when either become insufficient to satisfy the nutritional requirements of the infant. Such food is commonly called "weaning food" or "breast milk supplement."

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

A frequently ordered blood test that provides the white count, red blood cell count, hematocrit, and hemoglobin in a microliter of whole blood.

## **Concomitant Drugs**

Drugs that are taken together. Certain concomitant medications may have adverse interactions.

## **Condyloma**

A wartlike skin growth usually on the external genitalia or perianal area.

## **Condyloma Acuminatum**

A wart in the genital and perianal area. Although the lesions are usually few in number, they may aggregate to form large cauliflower-like masses. Caused by the human papilloma virus (HPV), it is infectious capable of being transmitted from one part of the body to another). Also called genital warts, venereal warts, or verruca acuminata.

## **Confidential HIV Test**

Performing an HIV test and being certain that the result remains confidential.

## **Confidentiality**

Relating to a piece of information about a person that should not be given to another person without that person's permission. An example would be the result, whether positive or negative, of an HIV test.

## **Confidentiality**

Ensuring that personal medical information is accessible only to those authorized to have access, unless the patient provides consent.

## **Confirmatory Test**

Because the diagnosis of HIV infection is so important, a second test, to show that the first test was correct, is recommended. A confirmatory test for an ELISA test is usually the Western blot. A confirmatory test could also be another HIV test such as a rapid test or a DNA or RNA PCR test.

**Confirmed Positive**

For HIV, a blood sample that is positive on an initial ELISA test, repeatedly positive on a second ELISA run on the same specimen, or confirmed positive on Western blot or other supplemental test indicates that the client is infected.

**Contagious**

Any infectious disease capable of being transmitted by direct or indirect contact from one person to another.

**Contraindication**

Any condition that renders a particular line of treatment improper or undesirable. Some drugs may be contraindicated when given together (eg, zidovudine and lamivudine).

**Controlled Clinical Trials**

Performing a study in human in which a control is used. A control is a standard against which study observations may be evaluated. For example, in clinical trials, one group of patients is given an experimental drug, while another group (i.e. the control group) is given either the normal treatment for the disease or a placebo.

**Cord Traction**

A maneuver in which the umbilical cord is pulled gently with one hand while the other hand pushes the uterus up from the pubis. This is done to prevent uterine inversion.

**Cotrimoxazole**

Also known as trimethoprim/sulphamethoxazole, Bactrim, or Septra. A combination antibiotic drug effective at preventing and treating *Pneumocystis jiroveci* pneumonia (PCP); also serves as a prophylaxis against toxoplasmosis. The drug is also active against certain bacterial infections.

**Counseling**

Confidential dialogue between individuals and their health care providers. The term can refer to discussions between health care workers and clients/patients specific to HIV testing to help clients examine their risk of acquiring or transmitting HIV infection.

**Creatinine**

A protein found in muscles and blood, and excreted by the kidneys in the urine. The level of creatinine in the blood or urine provides a measure of kidney function.

**Cross-Resistance**

The process in which an infectious agent that acquires resistance to one drug through direct exposure also turns out to have resistance to one or more other drugs to which it has not been exposed.

**Cryptococcal Meningitis**

A life-threatening infection of the membranes surrounding the brain and the spinal cord caused by the fungus *Cryptococcus neoformans*. Symptoms include headache, dizziness, stiff neck, and, if untreated, coma and death.

### **Cryptococcosis**

An infectious disease due to the fungus *Cryptococcus neoformans*, which is acquired via the respiratory tract. It can spread from the lungs to the central nervous system (especially the membranes surrounding the brain), the skin, the skeletal system, and the urinary tract. It is considered an AIDS-defining opportunistic infection in persons infected with HIV.

### **Cryptococcus Neoformans**

A fungus found in soil contaminated by bird droppings. Most people have been exposed to this organism, which does not usually cause disease in healthy people. In persons with AIDS, this organism can cause illness and death.

### **Cryptosporidiosis**

A diarrheal disease caused by the protozoa *Cryptosporidium* that grows in the intestines. Symptoms include abdominal cramps and severe chronic diarrhea. It is considered an AIDS-defining opportunistic infection in persons with HIV infection as immunological deterioration progresses.

### **Cryptosporidium**

The protozoan (parasite *Cryptosporidium parvum*), which causes Cryptosporidiosis. The parasite is found in the intestines of animals and may be transmitted to humans by direct contact with an infected animal, by eating contaminated food, or by drinking contaminated water. The parasite grows in the intestines and in people with HIV disease causes Cryptosporidiosis.

### **CSF**

Cerebrospinal Fluid (CSF).

### **C-T Scan (Computed Tomography Scan)**

An x-ray in which a three-dimensional image of a body structure is constructed by computer from a series of images.

### **Cutaneous**

Of, pertaining to, or affecting the skin.

### **Cytomegalovirus (CMV)**

A common herpes virus that is a common cause of opportunistic diseases in persons with AIDS and other persons with immune suppression. CMV has infected most adults; however the virus does not cause disease in healthy people. Because the virus remains in the body for life, it can cause disease if the immune system becomes severely damaged by drugs. While CMV can infect

most organs of the body, persons with AIDS are most susceptible to CMV retinitis (disease of the eye) and colitis (disease of the colon).

### **Cytomegalovirus (CMV) Retinitis**

An eye disease caused by the CMV virus, common among persons who are living with HIV. Without treatment, persons with CMV retinitis can lose their vision. CMV infection can affect both eyes and is the most common cause of blindness among persons with AIDS.

### **Cytopenia**

Deficiency in the cellular elements of the blood.

### **Cytotoxic**

An agent or process that is toxic or destructive to cells.

### **Cytotoxic T Lymphocyte (CTL)**

A lymphocyte (white blood cell) that is able to kill foreign cells marked for destruction by the cellular immune system. CTLs can destroy cancer cells and cells infected with viruses, fungi, or certain bacteria. CTLs are also known as killer T cells; they carry the CD8 marker.

**Dementia** -- severe mental problems caused by disease affecting the brain, "losing one's mind."

**Diarrhea** -- excessive or loose, watery bowel movements, "the runs."

### **D4T**

Stavudine, an antiretroviral drug belonging to the reverse transcriptase class that inhibits HIV growth.

### **DDC**

Zalcitabine, a reverse transcriptase inhibitor.

### **DDI**

Didanosine stavudine, an antiretroviral drug belonging to the reverse transcriptase class that inhibits HIV growth.

### **Dementia**

Chronic impairment of thinking (i.e. loss of mental capacity) that affects a person's ability to function in a social or occupational setting.

### **Demyelination**

Destruction, removal, or loss of the myelin sheath of a nerve or nerves.

### **Dendritic Cells**

Immune system cells that may initiate HIV infection by carrying the virus from the site of the infection to the lymph nodes, where other cells, such as CD4 T-cells, become infected. Dendritic cells circulate through the body and bind to infectious agents in tissues, such as the skin and membranes lining the intestinal tract, lungs, and reproductive tract. Once in contact with CD4 T-cells they initiate an immune response to the virus.

### **Deoxyribonucleic Acid (DNA)**

The twisted double-stranded molecular chain found in genes within the nucleus of each cell. DNA carries the genetic information that enables cells to reproduce and transmit hereditary characteristics.

### **Desensitization**

Gradually increasing the dose of a medicine in order to overcome severe reactions.

### **Diabetes Mellitus (DM)**

A disorder of carbohydrate (sugar) metabolism characterized by elevated blood glucose (blood sugar) levels and glucose in the urine resulting from inadequate production or use of insulin (e.g. hyperglycemia).

### **Diagnosis**

The decision that a patient has a specific disease or infection, usually accomplished by evaluating clinical symptoms and laboratory tests.

### **Diarrhea**

Uncontrolled, loose, and frequent bowel movements caused by diet, infection, medication, and irritation or inflammation of the intestine. Severe or prolonged diarrhea can lead to weight loss and malnutrition. The excessive loss of fluid that may occur with AIDS-related diarrhea can be life threatening. There are many possible causes of diarrhea in persons who have AIDS. The most common infectious organisms causing AIDS-related diarrhea include Cytomegalovirus (CMV), the parasites *Cryptosporidium*, *Microsporidia*, and *Giardia lamblia*, and the bacteria *Mycobacterium avium* and *Mycobacterium intracellulare*. Other bacteria and parasites that cause diarrheal symptoms in otherwise healthy people may cause more severe, prolonged, or recurrent diarrhea in persons with HIV or AIDS.

### **Diplopia**

Double vision.

### **Disseminated**

Spread of a disease throughout the body.

### **DLV**

Delavirdine, a drug in the non-nucleoside reverse transcriptase inhibitor class.

### **Dormant**

Inactive infection that is still present in the body.

**DOT (S)**

Directly observed therapy (short course). Treatment that is given under the observation of a health care worker.

**Double-Blind Study**

A clinical trial design in which neither the patient nor the study staff know which patients are receiving the experimental drug and which are receiving a placebo (or another therapy).

**Drug Resistance**

The ability of some disease-causing infectious agents, such as bacteria and viruses, to adapt themselves, grow, and multiply even in the presence of drugs that usually kill them.

**Drug-Drug Interaction**

A change in the effect of a drug when administered with another drug. The effect may be an increase or a decrease in the action, or it may be an adverse effect that is not normally associated with either drug.

**Dysplasia**

Any abnormal development of tissues or organs.

**Dyspnea**

Difficult or labored breathing.

**Eczema** -- a skin condition with itching, sores, redness, and scaling of the skin.

**Epidemic** -- an outbreak of disease.

**EBM**

Expressed breast milk

**EDD**

Expected date of delivery

**Efficacy**

The maximum ability of a drug or treatment to produce a result regardless of the drug dose.

**EFV**

Efavirenz

**EFZ**

Efavirenz

**EGPAF**

Elizabeth Glaser Pediatric AIDS Foundation

**EIA**

Enzyme-linked immunosorbent assay.

**ELISA**

(Enzyme-linked immunosorbent assay) A type of enzyme immunoassay to determine the presence of antibodies to HIV in the blood or oral fluids. Repeatedly (i.e. two or more) reactive ELISA test results should be confirmed with a second test such as the Western blot test, a rapid HIV test, or a DNA or RNA PCR. Availability of the confirmatory test often determines which one is performed.

**Encephalitis**

A brain inflammation of viral or other infectious disease origin. Symptoms include headaches, neck pain, fever, nausea, vomiting, and nervous system problems. Several types of opportunistic infections can cause encephalitis.

**Encephalopathy**

Any degenerative disease of the brain.

**Endemic**

Pertaining to diseases associated with particular locations or population groups.

**Endogenous**

Relating to or produced by the body.

**Endoscopy**

Viewing the inside of a body cavity (e.g. colon or throat) with an endoscope, a device using flexible fiber optics.

**Endotoxin**

A toxin present inside a bacterial cell.

**Endpoint**

A category of data used to compare the outcome of a clinical trial. Common endpoints are severe toxicity, disease progression, or death.

**End-Stage Disease**

Final period or phase in the course of a disease leading to a person's death.

**Enfuvirtide**

(T-20) A fusion inhibitor drug that inhibits HIV by interfering with the binding of the virus to CD4 cell receptors.

### **Engorgement/Engorged Breasts**

Breasts that are overly full, partly with milk and partly with increased tissue fluid and blood. As a result, milk flow is inhibited. Engorged breasts are often painful, shiny, and diffusely red. Nipples may be stretched tight and flat. The condition may be accompanied by fever lasting 24 hours or less.

### **Enteric**

Pertaining to the intestines.

### **Enteritis**

Inflammation of the intestine.

### **Entry Inhibitors**

Compounds designed to prevent the interactions between the HIV virus and the cell surface. These compounds can block or prevent HIV binding to human cell surface receptors.

### **Eosinophil**

A type of white blood cell, called granulocyte, that can digest infectious agents.

### **Eosinophilia**

The formation and accumulation of an abnormally large number of eosinophils in the blood. Eosinophils are a type of white blood cell that helps to destroy infectious agents. Increased numbers are seen in allergy and parasitic infection.

### **Epidemic**

A disease that spreads rapidly through a part of the human population--such as everyone in a given geographic area, a military base, school, or village--or everyone of a certain age or sex, such as the children or women of a region. Epidemic diseases can be spread from person to person or from a contaminated source such as food or water.

### **Epidemiologic Surveillance**

The ongoing organizing and collection, analysis, and interpretation of facts about a disease or health condition.

### **Epidemiology**

The branch of medical science that deals with the study and distribution and control of a disease in a population.

### **Episiotomy**

A surgical incision into the perineum and vagina at the time of delivery to prevent traumatic tearing during delivery.

### **Epithelium**

The covering of the internal and external organs of the body. Also the lining of blood vessels, body cavities, glands, and organs.

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

A herpeslike virus that causes one of the two kinds of mononucleosis (the other is caused by CMV). It infects the nose and throat and is contagious. It has been associated with Burkitt lymphoma and hairy leukoplakia.

### **Erythema**

Redness or inflammation of the skin or mucous membranes.

### **Erythema Multiforme**

A type of hypersensitivity reaction (rash) that occurs in response to drugs, infections, or illness. The exact cause is unknown. A severe form of this condition is called Stevens-Johnson syndrome.

### **Erythrocyte Sedimentation Rate (ESR)**

A test that measures the rate at which red blood cells settle through a column of liquid. This test is used to detect and monitor inflammation in the body.

### **Erythrocytes**

Red blood cells whose major function is to carry oxygen to cells.

### **Etiology**

The study or theory of the factors that cause disease.

### **Evaluation**

The study of a patient to determine the cause and effect of an illness, the study of a set of facts to determine what the facts mean, or the study of a program to determine its effectiveness.

### **Exclusion/Inclusion Criteria**

The medical determining of whether a patient may or may not be allowed to participate in a clinical trial. For example, some trials may not include persons with chronic liver disease, or may exclude persons with certain drug allergies.

### **Exclusive Breast-feeding**

Feeding an infant only breast milk from his/her mother or a wet nurse, or expressed breast milk and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements, or medicines.

**Exogenous**

Developed or originating outside the body.

**Exotoxin**

A toxic substance made by bacteria released outside the bacterial cell that causes illness in a patient.

**Experimental Drug**

A drug that is not approved or licensed for use in humans.

**Feces** -- waste from the bowels, excrement, bowel movements, "crap."

**Failure to Thrive (FTT)**

Weight loss or gradual but steady deterioration in weight gain as compared with the expected growth, as indicated in a child's growth chart.

**False Negative**

A test result that is not correct. This may be a result of performing the test incorrectly or using a test that is not accurate. A false negative test in HIV would be a test that is negative in a person who is actually infected.

**False Positive**

A test result that is not correct. This may be a result of performing the test incorrectly or using a test that is not accurate. A false positive test in HIV would be a test that is positive in a person who is not infected. For this reason, a second confirmatory test is recommended when a person tests HIV positive.

**Fat Redistribution**

Also called body fat redistribution syndrome (BFR). Changes in body fat distribution, sometimes referred to as "lipodystrophy syndrome" or "fat redistribution syndrome," have been observed in patients taking protease inhibitors. Changes may include abdominal fat accumulation ("protease paunch"), fat accumulation over the back of the neck ("buffalo hump"), wasting of legs and arms with prominence of the veins, facial thinning, and breast enlargement.

**FHI**

Family Health International

**Food and Drug Administration (FDA)**

The U.S. Department of Health and Human Services agency responsible for ensuring the safety and effectiveness of all drugs, biologics, vaccines, and medical devices, including those used in the diagnosis, treatment, and prevention of HIV infection, AIDS, and AIDS-related opportunistic infections.

**FP**

Family planning

**Fungus**

One of a group of primitive, nonvascular organisms including mushrooms, yeasts, rusts, and molds.

**Fusion Inhibitor**

A class of antiretroviral agents that binds to the envelope protein and blocks the structural changes necessary for the virus to fuse with the host CD4 cell. A recently approved drug in this class is enfuvirtide (T-20).

**Gamma Interferon**

A T-cell-derived stimulating substance that suppresses virus reproduction, stimulates other T cells, and activates macrophage cells.

**Gammaglobulin**

One of the proteins in blood serum that contains antibodies obtained from pooled human plasma.

**Gastrointestinal (GI)**

Relating to the stomach and intestines.

**Gay**

Having sexual relations with an individual of the same sex. Usually refers to male-male relations. The term lesbian is most often used for female-female sexual relationships.

**Genital Ulcer Disease**

Ulcerative lesions on the genitals usually caused by a sexually transmitted disease such as herpes, syphilis, or chancroid. The presence of genital ulcers may increase the risk of transmitting HIV.

**Genitals**

The area of the sexual organs. In the male, the penis and scrotum. In the female, the vulva and vagina.

**Genitourinary Tract**

The organs concerned with the production and excretion of urine and those concerned with reproduction. Also called genitourinary system, urogenital system, or urogenital tract.

**Genotype**

The genetic makeup of an individual organism such as HIV. In reference to HIV, genotypic resistance testing determines whether the HIV genetic structure contains certain mutations that make it resistant to a drug. Contrast with Phenotype.

### **Gestation**

Pregnancy.

### **Giardiasis**

A common protozoal infection of the small intestine, spread via contaminated food and water and direct person-to-person contact.

### **Globulins**

Simple proteins found in the blood serum containing various substances that function in the immune system function.

### **Gonorrhea**

An infection caused by *Neisseria gonorrhoeae*. Although gonorrhea is considered primarily a sexually transmitted disease, it can also be transmitted to newborns during the birth process.

### **Granulocyte**

A type of white blood cell filled with granules of compounds that digest infectious agents. Granulocytes are part of the innate immune system and have broad-based activity.

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

A substance (cytokine) that stimulates the growth of granulocytes, a type of white blood cell. G-CSF improves the neutropenia that is a side effect of certain drugs and infections.

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

A substance secreted by cells (cytokine) that stimulates the growth of granulocytes and macrophages. Like the granulocyte colony-stimulating factor (G-CSF), it improves neutropenia.

### **Granulocytopenia**

A lack or low level of granulocytes in the blood. Often used interchangeably with neutropenia.

**Genitals** -- the sex organs: penis and testicles, vagina and uterus.

**Hemophilia** -- a hereditary disorder in which the blood does not clot normally, so that cuts or sores bleed for longer than normal.

**Hepatitis B** -- an infectious viral disease that inflames the liver.

**HIV** -- human immunodeficiency virus, the virus that causes AIDS.

**Hospice** -- services provided for dying people.

## **HAART**

See [Highly Active Antiretroviral Therapy \(HAART\)](#).

## **Hairy Leukoplakia**

See [Oral Hairy Leukoplakia \(OHL\)](#).

## **Harm Reduction**

A prevention activity that aims to provide services to HIV-infected persons and their sex and needle-sharing partners so they can reduce their risk for infection or, if already infected, prevent transmission of HIV to others. It also seeks to help partners gain earlier access to individualized counseling, HIV testing, medical evaluation, treatment, and other prevention and support services.

## **HCW**

Healthcare worker

## **Helper T Cells**

Lymphocytes bearing the CD4 marker that are responsible for many immune system functions, including turning antibody production on and off.

## **Helper/Suppressor Ratio (of T Cells)**

T cells are lymphocytes (white blood cells) that are formed in the thymus and are part of the immune system. They have been found to be abnormal in persons with AIDS. The normal ratio of helper T cells (also known as CD4 T cells) to suppressor T cells (also known as CD8+ T cells) is approximately 2 to 1. This ratio becomes inverted in persons with AIDS but also may be abnormal for other temporary reasons.

## **Hematocrit**

A laboratory measurement that determines the percentage of packed red blood cells in a given volume of blood. In women red blood cells are normally 37 to 47 percent of their blood, and in men red blood cells are normally 40 to 54 percent of their blood.

## **Hematotoxic**

Poisonous to the blood or bone marrow.

## **Hemoglobin (HGB)**

The red, iron-based pigment in red blood cells that enables them to transport oxygen; normal hemoglobin values are 14-18 g/dL in men and 12-16 g/dL in women. Normal values in resource-poor countries may be lower.

## **Hemolysis**

The rupture of red blood cells.

## **Hepatic**

Pertaining to the liver.

## **Hepatitis**

An inflammation of the liver. May be caused by bacterial or viral infection, parasitic infestation, alcohol, drugs, toxins, or transfusion of incompatible blood. Although many cases of hepatitis are not a serious threat to health, the disease can become chronic and can sometimes lead to liver failure and death. There are four major types of viral hepatitis: A, B, C, and D.

### **Hepatitis A**

Caused by infection with the hepatitis A virus, which is spread by fecal-oral contact.

### **Hepatitis B**

Caused by infection with the hepatitis B virus (HBV), which is most commonly passed on to a partner during sexual intercourse, especially during anal sex, as well as through sharing of drug needles.

### **Hepatitis C**

Approximately 40% of patients infected with HIV are also infected with the hepatitis C virus (HCV), mainly because both viruses share the same routes of transmission. HCV is one of most important causes of chronic liver disease in the United States. Clinical studies have demonstrated that HIV infection causes a more rapid progression of chronic hepatitis C to liver failure in HIV-infected persons.

## **Hepatomegaly**

Enlargement of the liver.

## **Hepatosplenomegaly**

Abnormal enlargement of both the liver and the spleen.

## **Hepatotoxicity**

Liver damage due to toxic effects of poisons or drugs. Early damage is usually detected by measuring liver enzymes.

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

A virus that causes cold sores or fever blisters on the mouth or around the eyes, and can be transmitted to the genital region. Stress, trauma, other infections, or suppression of the immune system can reactivate the latent virus.

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

A virus causing painful sores of the anus or genitals that may lie dormant in nerve tissue. It can be reactivated to produce symptoms. HSV-2 may be transmitted to a newborn during birth

from an infected mother, causing retardation and/or other serious complications. HSV-2 is a precursor of cervical cancer.

### **Herpes Varicella Zoster Virus (VZV)**

The varicella virus causes chicken pox in children and may reappear in adults as herpes zoster. Also called shingles, herpes zoster consists of very painful blisters on the skin that follow nerve pathways.

### **Herpes Viruses**

A group of viruses that includes herpes simplex type 1 (HSV-1), herpes simplex type 2 (HSV-2), Cytomegalovirus (CMV), Epstein-Barr virus (EBV), varicella zoster virus (VZV), human herpes virus type 6 (HHV-6), and HHV-8, a herpes virus associated with Kaposi sarcoma. See entries under names of some of the individual viruses.

### **Herpes Zoster**

A painful infection with the varicella virus that normally causes chicken pox. The virus may be dormant for many years in the cells of the nervous system. When reactivated it appears on the skin in various locations as painful sores. Also called shingles.

### **Highly Active Antiretroviral Therapy (HAART)**

The name given to treatment regimens recommended by HIV experts to aggressively decrease viral multiplication and progress of HIV disease. The usual HAART treatment combines three or more different drugs, such as two nucleoside reverse transcriptase inhibitors (NRTIs) and a protease inhibitor, two NRTIs and a non-nucleoside reverse transcriptase inhibitor (NNRTI), or other combinations. These treatment regimens have been shown to reduce the amount of virus so that it becomes undetectable in a patient's blood.

### **High-Risk Behavior**

A reported sexual, injection drug use, or other non-work-related HIV exposure that might put a patient at high risk for acquiring HIV infection.

### **Histoplasmosis**

A fungal infection, commonly of the lungs, caused by the fungus *Histoplasma capsulatum*. This fungus is commonly found in bird and bat droppings. It is spread by breathing in the spores of the fungus. Persons with severely damaged immune systems, such as those with AIDS, are susceptible to a very serious disease known as progressive disseminated histoplasmosis.

### **HIV**

Human Immunodeficiency Virus.

### **HIV Prevention Counseling**

Provision of information on how HIV is transmitted, how an individual becomes infected, and how to prevent infection. Encompasses all modes of transmission including sexual (homosexual

and bisexual), intravenous drug use, mother-to-child transmission, breast-feeding, accidental exposure from an infected patient, and HIV-infected blood transfusion.

### **HIV Set Point**

The point where the level of virus stabilizes and remains at a particular level in each individual after the period of primary infection.

### **HIV-Exposed Infant**

An infant born to a mother infected with HIV and exposed to HIV during pregnancy, childbirth, or breast-feeding.

### **Hodgkin Disease**

A progressive cancer of the lymphatic system. Symptoms include lymphadenopathy, wasting, weakness, fever, itching, night sweats, and anemia. Treatment includes radiation and chemotherapy.

### **Home Sample Collection Test**

A test kit that a consumer purchases and uses to collect blood (or other bodily fluid) to send away for testing.

### **Homosexual**

Pertaining to sexual activity with a person of the same sex.

### **Hormone**

An active chemical substance formed in one part of the body and carried in the blood to other parts of the body where it stimulates or suppresses cell and tissue activity.

### **Host Factors**

The body's mechanisms for containing HIV, including immune system cells.

### **HTLV-1; HTLV-2**

HTLV-I and HTLV-II, like all retroviruses, are single-stranded RNA that divide through DNA made possible by the presence of an enzyme, reverse transcriptase, which converts a single-stranded viral RNA into a double-stranded DNA. HTLV-I attacks T lymphocytes; it appears to be the causative agent of certain T-cell leukemias, T-cell lymphomas, and HTLV-I-associated neurologic disease.

### **Human Immunodeficiency Virus Type 1 (HIV-1)**

The retrovirus isolated and recognized as the etiologic (i.e. causing or contributing to the cause of a disease) agent of AIDS. HIV-1 is classified as a lentivirus in a subgroup of retroviruses. Also, the genetic material of a retrovirus such as HIV is the RNA itself. HIV inserts its own RNA into the host cell's DNA, preventing the host cell from carrying out its natural functions and turning it into an HIV factory.

## **Human Immunodeficiency Virus Type 2 (HIV-2)**

A virus closely related to HIV-1 that has also been found to cause AIDS. It was first isolated in West Africa. Although HIV-1 and HIV-2 are similar in how they are transmitted and result in similar opportunistic infections, they have differed in their geographic patterns of infection. HIV-1 remains the most common cause of AIDS and represents the major type distributed worldwide.

## **Human Papilloma Virus (HPV)**

HPV is transmitted through sexual contact and is the virus that causes genital warts and plays a causative role in cervical dysplasia and cervical cancer.

## **Humoral Immunity**

The branch of the immune system that relies primarily on antibodies.

## **Hypercholesterolemia**

Abnormally high levels of cholesterol in the bloodstream. High cholesterol levels contribute to heart disease.

## **Hypergammaglobulinemia**

Abnormally high levels of immunoglobulins in the blood. Common in persons with HIV.

## **Hyperglycemia**

An abnormally high concentration of glucose (sugar) in the circulating blood, seen especially in patients with diabetes mellitus. Hyperglycemia, new onset diabetes mellitus, diabetic ketoacidosis, and worsening of existing diabetes mellitus in patients receiving protease inhibitors have been reported.

## **Hyperlipidemia**

An increase in the blood levels of triglycerides and cholesterol (fats) that can lead to heart disease and inflammation of the pancreas. As related to HIV, hyperlipidemia is a side effect of HAART. (All protease inhibitors have been shown to cause hyperlipidemia in clinical studies.)

## **Hyperplasia**

Abnormal increase in the parts of tissue or cells.

## **Hypertriglyceridemia**

Elevated levels of triglycerides (fatty acid compounds) in the bloodstream. High levels contribute to heart disease.

## **Hypogammaglobulinemia**

Abnormally low levels of immunoglobulins.

## **Hypothesis**

An assumption as a basis for reasoning or argument, or as a guide to experimental investigation.

### **Hypoxia**

Reduction of oxygen supply to tissues.

**Immune system** -- the parts of the body that fight germs.

**Immunizations** -- shots or other medical treatments that protect a person from getting a particular infectious illness.

**Impetigo** -- a bacterial, infectious disease in which the skin erupts with sores filled with pus.

**Infection** -- germs (bacteria, viruses, or parasites) present in the body. Infection may or may not result in illness.

**Infectious disease** -- a disease caused by a germ (bacteria, viruses, fungi, parasites).

### **Idiopathic**

Without a known cause.

### **Idiopathic Thrombocytopenia**

Low level of platelets without a cause.

### **IDU**

Intravenous (injection) drug user

### **IDV**

Indinavir

### **Immune Deficiency**

A breakdown or inability of certain parts of the immune system to function, thus making a person susceptible to certain diseases that they would not ordinarily develop.

### **Immune Response**

The activity of the immune system against foreign substances.

### **Immune System**

The body's complicated natural defense against disruption caused by invading foreign agents (eg bacteria, viruses). Acquired, or learned, immune response arises when specialized cells (dendritic cells and macrophages) process pieces of infectious agents. The ultimate result is the creation of antibody-producing B cells and cytotoxic T lymphocytes.

### **Immune Thrombocytopenic Purpura (ITP)**

Also called idiopathic immune thrombocytopenic purpura. A condition in which the body produces antibodies against the platelets in the blood, which are cells responsible for blood clotting. ITP is very common in persons infected with HIV.

### **Immunity**

A natural or acquired resistance to a specific disease. Immunity may be partial or complete, long lasting or temporary.

### **Immunization**

Protection against an infectious disease by vaccination, usually with a weakened (attenuated) or killed form of the disease-causing microorganism. While people are usually immunized against an infectious disease by getting vaccinated, having a disease such as measles, mumps, or rubella one time usually prevents or "immunizes" a person from getting this disease again.

### **Immunocompetent**

Capable of developing an immune response; possessing a normal immune system.

### **Immunocompromised**

Refers to an immune system in which the ability to resist or fight off infections and tumors is subnormal.

### **Immunodeficiency**

Breakdown of the immune system in which certain parts of the immune system no longer function. This condition makes a person more susceptible to certain diseases.

### **Immunogen**

(Antigen) A substance capable of provoking an immune response.

### **Immunogenicity**

The ability of an antigen or vaccine to stimulate an immune response.

### **Immunoglobulin (Ig)**

Also called immune serum globulin. A class of proteins also known as antibodies made by the B cells of the immune system in response to a specific antigen. There are five classes of immunoglobulins.

### **Immunoglobulin A (IgA)**

A class of antibodies that is secreted into bodily fluids such as saliva. IgA protects the body's mucosal surfaces from infections.

### **Immunoglobulin D (IgD)**

A class of antibodies that is present in low concentration in serum.

### **Immunoglobulin E (IgE)**

A class of antibodies involved in antiparasite immunity and in allergies.

### **Immunoglobulin G (IgG)**

The dominant class of antibodies and the one that provides long-term protection against infection. In pregnancy, IgG crosses the placenta to the fetus and protects it against infection. Also called gammaglobulin.

### **Immunoglobulin M (IgM)**

A class of antibodies that is made by the body as the initial response to an infection or immunization. If IgM is made in response to an immunization, a booster shot will result in a "switch" from IgM to mostly immunoglobulin G.

### **Immunomodulator**

Any substance that influences the immune system.

### **Immunostimulant**

Any agent or substance that triggers or enhances the body's defense; also called immunopotentiator.

### **Immunosuppression**

A state of the body in which the immune system is damaged and does not perform its normal functions. Immunosuppression may be induced by drugs (e.g. in chemotherapy) or result from certain disease processes, such as HIV infection.

### **Immunotherapy**

Treatment aimed at restoring an impaired immune system.

### **Immunotoxin**

A plant or animal toxin (i.e. poison) that is attached to an antibody and used to destroy a specific target cell.

### **In Utero**

Before birth; literally, in the uterus.

### **In Vitro**

An artificial environment created outside a living organism (e.g. a test tube or culture plate) used in experimental research to study a disease or process.

### **In Vivo**

("In life") Within living organisms. (Often refers to animal or human studies.)

### **Incidence**

The number of new cases (e.g. of a disease) occurring in a given population over a certain period of time. Also called seroincidence.

### **Inclusion/Exclusion Criteria**

The medical or social standards determining whether a person may or may not be allowed to enter a clinical trial. For example, some trials may not allow persons with chronic liver disease or with certain drug allergies; others may exclude men or women, or include only persons with a lowered T-cell count.

### **Incubation Period**

The time interval between the initial infection with an infectious agent (e.g. HIV) and the appearance of the first symptom or sign of disease.

### **Indeterminate Test Result**

A laboratory test result that does not give a clear answer. Either additional laboratory studies should be performed or the test should be repeated.

### **Infection**

The state or condition in which the body (or part of the body) is invaded by an infectious agent (e.g. a bacterium, fungus, or virus), which multiplies and produces an injurious effect (active infection). As related to HIV, infection typically begins when HIV encounters a CD4 cell.

### **Infectious**

An infection capable of being transmitted by direct or intimate contact (e.g. sex).

### **Informed Consent**

A process during which the patient learns the key facts about HIV testing--including what will occur during HIV testing and counseling and the purpose and benefits of HIV testing--before deciding whether to allow testing to proceed.

### **Infusion**

The process of administering fluid, other than blood, to an individual by slowly injecting a solution of the compound into a vein. Infusions are often used when the drug is too toxic or the volume is too large to be given by quick injection.

### **Inoculation**

The introduction of a substance (inoculum; e.g. a vaccine, serum, or virus) into the body to produce or to increase immunity to the disease or condition associated with the substance.

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

A committee of physicians, statisticians, researchers, community advocates, and others that ensures that a clinical trial is ethical and that the rights of study participants are protected.

### **Insulin Resistance**

A condition in which the body is unable to respond to and use the insulin it produces. As a result, the pancreas secretes more insulin into the bloodstream in an effort to reduce blood glucose levels.

### **Integrase**

A little-understood enzyme that plays a vital role in the HIV infection process. Integrase inserts HIV's genes into a cell's normal DNA.

### **Integrase Inhibitors**

A class of experimental anti-HIV drugs that prevents the HIV integrase enzyme from inserting viral DNA into a host cell's normal DNA.

### **Intent to Treat**

Analysis of clinical trial results that includes all data from patients in the groups to which they were randomized (i.e. assigned through random distribution) even if they never received the treatment.

### **Interferon**

One of a number of antiviral proteins that control the immune response. Interferon (IFN) alpha is secreted by a virally infected cell and strengthens the defenses of nearby uninfected cells. A manufactured version of IFN alpha (trade names Roferon, Intron A) is an FDA-approved treatment for Kaposi sarcoma, hepatitis B, and hepatitis C. Interferon gamma is synthesized by immune system cells (natural killer cells and CD4 cells). It activates macrophages and helps promote cellular immunity.

### **Interleukins**

Substances (cytokines) that are released from immune and other cells. There are many types referred to as Interleukin (IL) 1, 2, 3, 4, 5, etc.

### **Interstitial**

Relating to or situated in the small, narrow spaces between tissues or parts of an organ.

### **Intervention**

An action or strategy to change a particular problem or outcome or accomplish a specific result (eg, use of ART to prevent HIV disease progression).

### **Intramuscular (IM)**

Injected directly into a muscle.

### **Intrapartum**

Time during labor and delivery.

### **Intravenous (IV)**

Of or pertaining to the inside of a vein, as of a thrombus. An injection made directly into a vein.

### **Intravenous Immunoglobulin (IVIG)**

A sterile solution of concentrated antibodies extracted from healthy people. IVIG is used to prevent bacterial infections in persons with low or abnormal antibody production. IVIG is injected into a vein.

### **Isolate**

An individual part of an organism (such as a spore or a bacteria or virus) that has been separated (as from diseased tissue, contaminated water, or the air) from the whole.

### **Isoniazid (INH)**

An orally administered drug used to eliminate tuberculosis infection in people without active disease. INH is also administered in combination with other drugs to treat active tuberculosis

**Jaundice** -- a condition sometimes caused by an infection (hepatitis) that causes the eyes, skin, and urine to turn unusually yellow; can result from damage to the liver.

**Latex** -- a type of rubber used to make condoms, medical gloves, and other very thin, flexible materials.

### **Jaundice**

Yellow pigmentation of the skin, mucous membranes, whites of the eyes, and body fluids caused by elevated blood levels of bilirubin. The condition is associated with either liver or gallbladder disease or excessive destruction of red blood cells.

### **Kaposi Sarcoma (KS)**

An AIDS-defining illness consisting of individual cancerous sores caused by an overgrowth of blood vessels. KS typically appears as pink or purple painless spots or nodules on the surface of the skin or mouth. KS also can occur internally, especially in the intestines, lymph nodes, and lungs, and in this case is life threatening. A species of herpes virus--also referred to as Kaposi sarcoma herpes virus (KSHV) or HHV-8--similar to the Epstein-Barr virus is the probable cause.

### **Karnofsky Score**

A score from 0 to 100 assigned by a physician based on observations of a patient's ability to perform common tasks. Thus, 100 signifies normal physical abilities with no evidence of disease. Decreasing numbers indicate a reduced ability to perform activities of daily living.

### **Ketoacidosis**

Increased acid in the bloodstream accompanied by the accumulation of ketone bodies. Ketones are a byproduct of fat metabolism. When glucose levels are inadequate, the liver converts fatty acids to ketones, which are used as fuel by the muscles.

### **Killer T Cells**

Because viruses lurk inside host (e.g. human) cells where antibodies cannot reach them, the only way they can be eliminated is by killing the infected host cell. To do this, the immune system uses a kind of white blood cell, called killer T cells. Also known as cytotoxic T cells (or cytotoxic T lymphocytes).

### **KSHV**

Kaposi sarcoma herpes virus.

### **Lactic Acidosis**

A buildup of lactic acid in the blood, accompanied by low blood pH. This is a potentially fatal condition characterized by nausea, abdominal pain, fatigue, muscle weakness, and shortness of breath. Also referred to as lactic acidemia.

### **Lactoferrin**

Iron-binding protein of very high affinity found in milk, tears, mucus, bile, and some white blood cells. Lactoferrin has antibiotic, antioxidant, antifungal, and antiviral properties.

### **Lamivudine**

(3TC) Nucleoside analogue with anti-HIV and anti-hepatitis B activity.

### **Latency**

The period when an infecting organism is in the body but is not producing any clinically noticeable ill effects or symptoms. In HIV disease, clinical latency is an asymptomatic period in the early years of HIV infection. The period of latency is characterized by near-normal CD4 T-cell counts. Recent research indicates that HIV remains quite active in the lymph nodes during this period.

### **Lentivirus**

"Slow" virus characterized by a long time between infection and the onset of symptoms. HIV is a lentivirus, as is the simian immunodeficiency virus (SIV) that infects nonhuman primates.

### **Lesion**

A general term to describe an area of altered tissue (e.g. the infected patch or sore in a skin disease).

### **Leukocytes**

Any of the various white blood cells that together make up the immune system. Neutrophils, lymphocytes, and monocytes are all leukocytes.

### **Leukocytosis**

An abnormally high number of leukocytes in the blood. This condition can occur during many types of infection and inflammation.

### **Leukopenia**

A decrease in the number of white blood cells. The threshold value for leukopenia is usually taken as <5,000 white blood cells per cubic millimeter of blood.

### **Lipid**

Any of a group of fats and fatlike compounds, including sterols, fatty acids, and many other substances.

### **Lipodystrophy**

A disturbance in the way the body produces, uses, and distributes fat. Lipodystrophy is also referred to as buffalo hump, protease paunch, or Crixivan potbelly. In HIV disease, lipodystrophy has come to refer to a group of symptoms that seem to be related to the use of protease inhibitor and NRTI drugs.

### **Listeriosis**

Infection with one of the *Listeria* bacteria, which are capable of causing miscarriage, stillbirth, and premature birth.

### **Live Vector Vaccine**

As pertaining to HIV, a vaccine that uses an attenuated (i.e. weakened) virus or bacterium to carry pieces of HIV into the body to directly stimulate a cell-mediated immune response.

### **Liver Function Test (LFT)**

A test that measures the blood serum level of any of several enzymes (e.g. SGOT and SGPT) produced by the liver. An elevated liver function test is a sign of possible liver damage.

### **Lochia**

Vaginal discharge of blood, mucus, and tissue that takes place during the first week or two after childbirth.

### **Long-Term Nonprogressors**

Individuals who have been living with HIV for at least 7 to 12 years (different authors use different time spans) and have stable CD4 T-cell counts of 600 or more cells per cubic millimeter of blood, no HIV-related diseases, and no previous antiretroviral therapy. Data suggest that this phenomenon is associated with the maintenance of the integrity of the lymphoid tissues and with less virus trapping in the lymph nodes than is seen in other individuals living with HIV.

### **Lumbar**

Lower back region.

### **Lumbar Puncture**

A procedure in which cerebrospinal fluid from the subarachnoid space in the lumbar region is removed for examination. Also known as spinal tap.

## **Lymph**

A transparent, slightly yellow fluid that carries lymphocytes. Lymph is derived from tissue fluids collected from all parts of the body and is returned to the blood via lymphatic vessels.

## **Lymph Nodes**

Small, bean-sized organs of the immune system, distributed widely throughout the body. Lymph fluid is filtered through the lymph nodes in which all types of lymphocytes take up temporary residence. Lymph nodes contain T cells, B cells, as well as other cells of the immune system.

## **Lymphadenopathy**

Swollen or enlarged lymph nodes.

## **Lymphadenopathy Syndrome (LAS)**

Swollen, firm, and possibly tender lymph nodes. The cause may range from an infection such as HIV, the flu, or mononucleosis to lymphoma (cancer of the lymph nodes).

## **Lymphocyte**

A white blood cell. Present in the blood, lymph, and lymphoid tissue.

## **Lymphoid Interstitial Pneumonitis (LIP)**

A type of pneumonia that affects 35 to 40% of children with AIDS, and which causes hardening of the lung membranes involved in absorbing oxygen. LIP is an AIDS-defining illness in children. The cause of LIP is not clear. There is no established treatment for LIP, but the use of corticosteroids for progressive LIP has been advocated.

## **Lymphoid Organs**

Include tonsils, adenoids, lymph nodes, spleen, thymus, and other tissues. These organs act as the body's filtering system, trapping any invading foreign particles (e.g. bacteria and viruses) and presenting them to squadrons of immune cells that congregate there.

## **Lymphokines**

Chemical products of the lymphatic cells that stimulate the production of disease-fighting agents and the activities of other cells of the immune system. Among the lymphokines are the interferons and interleukins.

## **Lymphoma**

Cancer of the lymphoid tissues. Lymphomas are often described as being large-cell or small-cell types, cleaved or noncleaved, or diffuse or nodular. The different types often have different prognoses (i.e. prospect of survival or recovery). Lymphomas can also be referred to by the organs where they are active, such as CNS lymphomas, which are in the central nervous system, and GI lymphomas, which are in the gastrointestinal tract. The types of lymphomas most commonly associated with HIV infection are called non-Hodgkin lymphomas or B-cell

lymphomas. In these types of cancers, certain cells of the lymphatic system grow abnormally. They divide rapidly, growing into tumors.

### **Lymphopenia**

A relative or absolute reduction in the number of lymphocytes in the circulating blood.

### **Lymphoproliferative Response**

A specific immune response that results in a rapid T-cell replication.

### **Lysis**

Rupture and destruction of a cell.

**Measles** -- a very contagious viral disease, usually in children, causes red spots on the skin and high fevers. Also called rubeola. All children should receive measles vaccine.

**Mumps** -- a very contagious viral disease, common in children, causes swelling of the salivary glands. All children should receive mumps vaccine.

### **Macrophage**

A large immune cell that destroys invading infectious agents. Macrophages can hide large quantities of HIV without being killed, acting as reservoirs of the virus.

### **Macrophage-Tropic Virus**

HIV strains that infect macrophages. They readily fuse with cells that have both CD4 and CCR5 molecules on their surfaces, whereas the same viral isolates fail to fuse with cells expressing only CD4. These isolates are the main ones found in patients during the symptom-free stage of HIV disease.

### **Magnetic Resonance Imaging (MRI)**

A noninvasive, non-x-ray diagnostic technique that provides computer-generated images of the body's internal tissues and organs.

### **Maintenance Therapy**

Also referred to as secondary prophylaxis. A therapy that prevents reoccurrence of an infection that has been brought under control.

### **Malabsorption Syndrome**

Decreased intestinal absorption of foods and nutrients resulting in loss of appetite, muscle pain, and weight loss.

### **Malaise**

A generalized, nonspecific feeling of discomfort or tiredness.

### **Malaria**

An infectious disease characterized by cycles of chills, fever, and sweating, caused by a parasite transmitted by a host mosquito.

### **Malignant**

Refers to cells or tumors growing in an uncontrolled fashion. Such growths may spread to and disrupt nearby normal tissue, or reach distant sites via the bloodstream. By definition, cancers are always malignant, and the term "malignancy" implies cancer.

### **Mast Cell**

A granulocyte found in tissue. The contents of the mast cells, along with those of basophils, are responsible for the symptoms of allergy.

### **Mastitis**

An inflammation of the breast. It is a condition that commonly results from inadequate or poor drainage of milk from the breast. Mastitis can be infective or noninfective in origin. Noninfective mastitis, which is most common, is usually the result of a blocked milk duct, which causes inflammation of the breast tissue. Mastitis frequently affects only one breast (whereas engorgement often occurs bilaterally) and is characterized by hard swelling, severe pain, fever (24 hours or longer), and localized redness around the affected area. Other causes include infrequent feeds or ineffective suckling; breast trauma and tissue damage; and pressure on the breasts from clothes, fingers, or other sources that inhibit milk flow and cause milk stasis leading to breast tissue inflammation. Infective mastitis is the result of bacterial infection. Poor breast attachment causing nipple fissures is a common pathway to infectious mastitis.

### **MCH**

Maternal Child Health

### **Meconium**

The first stools of the newborn. Typically thick, viscous, sticky, and dark green; usually sterile and odorless.

### **Memory T Cells**

A subset of T lymphocytes that have been exposed to specific antigens and can then proliferate (i.e. reproduce) on subsequent immune system encounters with the same antigen.

### **Meninges**

Membranes surrounding the brain or spinal cord. Part of the so-called blood-brain barrier.

### **Meningitis**

An inflammation of the meninges (membranes surrounding the brain or spinal cord), which may be caused by a bacterium, fungus, or virus.

### **Metaanalysis**

A quantitative method of combining the results of independent studies (usually drawn from the published literature) and synthesizing summaries and conclusions.

### **Metabolism**

The chemical changes in living cells by which energy is provided for vital processes and activities and new material is assimilated.

### **Metastasis**

The spread of a disease (e.g. cancer) from an original site to other sites in the body.

### **Microbes**

Microscopic living organisms, including bacteria, protozoa, viruses, and fungi.

### **Microbicide**

An agent (e.g. a chemical or antibiotic) that destroys microbes. Research is being carried out to evaluate the use of rectal and vaginal microbicides to inhibit the transmission of sexually transmitted diseases, including HIV.

### **Micronutrients**

Vitamins or minerals that are necessary to maintain health and that the body must obtain from outside sources.

### **Microsporidiosis**

An intestinal infection that causes diarrhea and wasting in persons with HIV. It results from two species of microsporidia, a protozoal parasite. In HIV infection, it generally occurs when CD4 T-cell counts fall below 100.

### **Mitochondria**

A rod-shaped or oval portion on the inside of a cell that produces most of the cell's energy.

### **Mitochondrial Toxicity**

Also referred to as mitochondrial dysfunction. A possible side effect of certain anti-HIV drugs, primarily NRTIs, that results in mitochondrial damage. This damage can cause symptoms in the heart, nerves, muscles, pancreas, kidney, and liver, and it can also cause changes in lab tests. Some of the common conditions related to mitochondrial toxicity are muscle and nerve disease and inflammation of the pancreas.

### **Molluscum Contagiosum**

A disease of the skin and mucous membranes caused by a poxvirus (molluscum contagiosum virus, MCV) infection. It is characterized by pearly white or flesh-colored papules (bumps) on the face, neck, and genital region. In persons living with HIV, molluscum contagiosum is often a progressive disease, resistant to treatment. When CD4 cell counts fall below 200, the lesions tend to proliferate and spread.

**Monocyte**

A large white blood cell that ingests infectious agents or other cells and foreign particles. When a monocyte enters tissues, it develops into a macrophage.

**Monotherapy**

Use of a single drug or therapy to treat a disease or condition.

**Monovalent Vaccine**

A vaccine that is specific for only one antigen.

**Morbidity**

The condition of being diseased or sick; also the incidence of disease or rate of sickness.

**MSM**

Men Who Have Sex with Men; a term created to include those who do not identify as gay or bisexual.

**MTCT**

Mother-to-child transmission (of HIV).

**Mucocutaneous**

Anything that concerns or pertains to mucous membranes and the skin (e.g. mouth, eyes, vagina, lips, or anal area).

**Mucosal Immunity**

Resistance to infection across the mucous membranes. Dependent on immune cells and antibodies present in the lining of the urogenital tract, gastrointestinal tract, and other parts of the body exposed to the outside world.

**Mucous Membrane**

Moist layer of tissue lining the digestive, respiratory, urinary, and reproductive tracts--all the body cavities with openings to the outside world except the ears.

**Multiple Drug-Resistant Tuberculosis (MDR-TB)**

A strain of TB that does not respond to two or more standard anti-TB drugs. MDR-TB usually occurs when treatment is interrupted, thus allowing organisms in which mutations for drug resistance have occurred to proliferate.

**Mutation**

In biology, a sudden change in a gene or unit of hereditary material that results in a new inheritable characteristic. As related to HIV: During the course of HIV disease, mutated HIV strains may emerge in an infected individual. These mutated strains may differ widely in their

ability to infect and kill different cell types, as well as in their rate of replication. Of course, HIV does not mutate into another type of virus.

### **Myalgia**

Diffuse muscle pain or tenderness, usually accompanied by malaise (vague feeling of discomfort or weakness).

### **Mycobacterium**

Any bacterium of the genus *Mycobacterium* or a closely related genus.

### **Mycobacterium Avium Complex (MAC)**

A common opportunistic infection caused by two very similar mycobacterial organisms, *Mycobacterium avium* and *Mycobacterium intracellulare* (MAI), found in soil and dust particles. A bacterial infection that can be localized (limited to a specific organ or area of the body) or disseminated throughout the body. It is a life-threatening disease, although new treatments offer promise for both prevention and treatment. MAC disease is extremely rare in persons who are not infected with HIV. It generally occurs when the CD4 T-cell count falls below 50.

### **Mycosis**

Any disease caused by a fungus.

### **Myelin**

A substance that sheathes nerve cells, acting as an electric insulator that facilitates the conduction of nerve impulses.

### **Myelopathy**

Any disease of the spinal cord.

### **Myelosuppression**

Suppression of bone marrow activity, causing decreased production of red blood cells (anemia), white blood cells (leukopenia), or platelets (thrombocytopenia). Myelosuppression is a side effect of some drugs, such as AZT.

### **Myelotoxic**

Destructive to bone marrow.

### **Myocardial**

Refers to the heart's muscle mass.

### **Myopathy**

Progressive muscle weakness. Myopathy may arise as a toxic reaction to AZT or as a consequence of the HIV infection itself.

**Nasal fluid** -- mucus that comes out of the nose, "snot."

**Nadir**

The lowest level to which viral load falls after starting antiretroviral treatment. Studies have shown that the nadir of the viral load is the best predictor of long-term viral suppression.

**National Institutes of Health (NIH)**

In the United States, a multi-institute agency of the U.S. Department of Health and Human Services. NIH is the federal focal point for health research. It conducts research in its own laboratories and supports research in universities, medical schools, hospitals, and research institutions throughout the United States and abroad. Internet

**Natural History Study**

Study of the natural development of something (such as an organism or a disease) over a period of time.

**Natural Killer (NK) Cells**

A type of lymphocyte.

**Neonatal**

Concerning the first 6 weeks of life after birth.

**Neoplasm**

An abnormal and uncontrolled growth of tissue; a tumor.

**Nephrotoxic**

Poisonous to the kidneys.

**Neuralgia**

A sharp, shooting pain along a nerve pathway.

**Neurological**

Related to the brain, spinal cord, or nerves.

**Neurological Complications of AIDS****Neuropathy**

The name given to a group of disorders involving nerves. Symptoms range from a tingling sensation or numbness in the toes and fingers to paralysis. It is estimated that 35% of persons with HIV disease have some form of neuropathy.

**Neutralization**

The process by which an antibody binds to specific antigens, thereby "neutralizing" the microorganism.

**Neutralizing Antibody**

An antibody that keeps a virus from infecting a cell, usually by blocking receptors on the cell or the virus.

### **Neutropenia**

An abnormal decrease in the number of neutrophils (the most common type of white blood cell) in the blood. The decrease may be relative or absolute. Neutropenia may also be associated with HIV infection or may be drug induced.

### **Neutrophil**

A type of white blood cell (leukocyte) that engulfs and kills foreign microorganisms such as bacteria.

### **Nevirapine (NVP)**

A non-nucleoside reverse transcriptase inhibitor (NNRTI), FDA approved for treatment of HIV-infected adults in combination with nucleoside analogues. The drug is effective in preventing HIV transmission from mothers to infants and is widely used in developing countries because of ease of use and low cost; Viramune (trade name)

### **NFV**

Nelfinavir

### **NGO**

Nongovernmental organization

### **Night Sweats**

Extreme sweating during sleep. Although they can occur with other conditions, night sweats are also a symptom of HIV disease.

### **Non-A, Non-B Hepatitis**

Non-A, non-B hepatitis, caused by the hepatitis C virus, which appears to be spread through sexual contact as well as through sharing of drug needles. (Another type of non-A, non-B hepatitis is caused by the hepatitis E virus, principally spread through contaminated water.)

### **Non-Hodgkin Lymphoma (NHL)**

A lymphoma made up of B cells and characterized by nodular or diffuse tumors that may appear in the stomach, liver, brain, and bone marrow of persons with HIV. After Kaposi sarcoma, NHL is the most common opportunistic cancer in persons with AIDS.

### **Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI)**

A group of structurally different compounds that bind to the catalytic site of HIV-1's reverse transcriptase. They are quite specific; unlike the nucleoside reverse transcriptase inhibitors, the NNRTIs have no activity against HIV-2. Included in this class of drugs are nevirapine, delavirdine, efavirenz, and tenofovir.

## **NSAID**

A classification of drugs called nonsteroidal anti-inflammatory drugs. NSAIDs reduce inflammation and are used to treat arthritis and mild-to-moderate pain.

## **Nucleic Acid Test**

A technology that allows detection of very small amounts of genetic material (DNA or RNA) in blood, plasma, and tissue. A nucleic acid test can detect any number of viruses in blood or blood products, thereby better assuring the safety of the blood supply.

## **Nucleoside**

A building block of nucleic acids, DNA, or RNA, the genetic material found in living organisms. Nucleosides are nucleotides without the phosphate groups.

## **Nucleoside Analogue**

An artificial copy of a nucleoside. When incorporated into the DNA or RNA of a virus during viral growth, the nucleoside analogue acts to prevent production of new virus.

## **Nucleoside Reverse Transcriptase Inhibitor (NRTI)**

A nucleoside analogue antiretroviral drug whose chemical structure constitutes a modified version of a natural nucleoside. These compounds suppress replication of retroviruses by interfering with the reverse transcriptase enzyme. The nucleoside analogues cause premature termination of the proviral (viral precursor) DNA chain.

## **Nucleotide**

Nucleotides are the building blocks of nucleic acids, DNA, and RNA. Nucleotides are composed of phosphate groups, a five-sided sugar molecule (ribose sugars in RNA, deoxyribose sugars in DNA), and nitrogen-containing bases.

## **Nucleotide Analogues**

Nucleotide analogues are drugs that are structurally related to nucleotides; they are chemically altered to inhibit production or activity of disease-causing proteins.

## **Nucleus**

The central controlling body within a living cell, usually a spherical unit enclosed in a membrane and containing genetic codes for maintaining the life systems of the organism and for issuing commands for growth and reproduction.

## **NVP**

Nevirapine (generic name); Viramune (trade name)

**Oral sex** -- sexual intercourse in which the mouth of one person touches the genitals or anus of another person.

## **Occupational HIV Exposure**

Exposure to HIV as a result of work (job). Exposure may include accidental exposure to HIV-infected blood following a needlestick injury or cut from a surgical instrument.

## **Oncology**

The branch of medicine that studies cancers or other tumors.

## **Opportunistic Infection**

An illness caused by various organisms, some of which usually do not cause disease in persons with normal immune systems. Persons living with advanced HIV infection suffer opportunistic infections of the lungs, brain, eyes, and other organs. Opportunistic infections common in persons diagnosed with AIDS include *Pneumocystis jirovecipneumonia*; Kaposi sarcoma; Cryptosporidiosis; histoplasmosis; other parasitic, viral, and fungal infections; and some types of cancer.

## **Opt In**

In HIV testing, a procedure whereby an individual is counseled about HIV and is given the option of accepting or rejecting an HIV test. They "opt in" when they agree to have the tested done.

## **Opt Out**

In HIV testing, a procedure whereby an individual is counseled about HIV and is only given the option of refusing an HIV test. If they refuse the test they have "opted out" of HIV testing. Studies have shown that more individuals agree to HIV testing when an opt out approach is used.

## **OPV**

Oral polio vaccine.

## **Oral Fluid Test**

A test using oral mucosal fluid. To differentiate this fluid from saliva, an absorbent material is left in the mouth for several minutes. In an HIV-infected person, oral mucosal fluid is likely to contain HIV antibodies.

## **Oral Hairy Leukoplakia (OHL)**

A whitish lesion that appears on the side of the tongue and inside the cheeks. The lesion appears raised, with a ribbed or hairy surface. OHL occurs mainly in persons with declining immunity and may be caused by Epstein-Barr virus infection. OHL was not observed before the HIV epidemic.

## **Oral Sex**

A type of sexual intercourse in which the partner's genitals are stimulated by mouth and tongue.

## **Oropharyngeal**

Relating to the division of the pharynx between the soft palate and the epiglottis. The pharynx is a tube that connects the mouth and nasal passages with the esophagus, the connection to the stomach. The epiglottis is a thin, valvelike structure that covers the glottis, the opening of the upper part of the larynx (the part of the throat containing the vocal cords), during swallowing.

## **Oropharynx**

The area beginning at the lips and extending to the back of the mouth.

## **Otitis**

Inflammation of the ear, which may be marked by pain, fever, abnormalities of hearing, hearing loss, tinnitus, and vertigo.

## **Otitis Media**

Infection and inflammation of the middle ear space and eardrum.

## **OVC**

Orphans and vulnerable children.

## **Oxytocin**

A peptide hormone from the hypothalamus that induces smooth muscle contraction in the uterus and mammary glands.

**Parasite** -- a plant or animal that lives on or in another plant or animal, usually hurting its "host."

**Pneumonia** -- an infection of the lungs often producing cough, fever, and difficulty breathing.

**Polio** -- a viral disease (poliomyelitis) that causes inflammation of the spinal cord, often causing paralysis.

## **P24**

A bullet-shaped part of a protein that surrounds the viral RNA within the envelope of HIV. The p24 antigen test looks for the presence of this protein in a patient's blood. A positive result for the p24 antigen suggests active HIV multiplication.

## **Package Insert**

A document, approved by the FDA and furnished by the manufacturer of a drug (inserted into the package), for use when dispensing the drug. The document indicates approved uses, contraindications, and potential side effects.

## **Palliative**

A treatment that provides symptomatic relief but not a cure.

### **Palliative Care**

Palliative care is an approach to life-threatening chronic illnesses, especially at the end of life. Palliative care combines active and compassionate therapies to comfort and support patients who are living with life-ending illnesses and their families. Palliative care strives to meet physical needs through relieving pain and maintaining quality of life while emphasizing the patient's and family's rights to participate in informed discussions and to make choices. This patient- and family-centered approach uses the skills of interdisciplinary team members to provide a comprehensive continuum of care, including spiritual and emotional needs.

### **Pancreas**

A gland situated near the stomach that secretes a digestive fluid into the intestine through one or more ducts and also secretes the hormone insulin.

### **Pancreatitis**

Inflammation of the pancreas that can produce severe pain and debilitating illness. Its onset can be predicted by rises in blood levels of the pancreatic enzyme amylase.

### **Pancytopenia**

Deficiency of all cell elements of the blood.

### **Pandemic**

A disease prevalent throughout an entire country or continent, or the whole world.

### **Pap Smear**

A method for the early detection of cancer and other abnormalities of the female genital tract, especially of the cervix.

### **Papilloma**

A benign tumor (as a wart, condyloma, or polyp) resulting from an overgrowth of epithelial tissue. An epithelial tumor caused by a virus.

### **Parasite**

A plant or animal that lives and feeds on or within another living organism (host), causing some degree of harm to the host organism.

### **Parenteral**

A route other than in or through the digestive system. For example, parenteral can pertain to blood being drawn from a vein in the arm or introduced into that vein via a transfusion (intravenous), or to injection of medications or vaccines through the skin (subcutaneous) or into muscle (intramuscular).

### **Paresthesia**

Abnormal sensations such as burning, tingling, or a "pins-and-needles" feeling. Paresthesia may constitute the first group of symptoms of nerve involvement in HIV infection.

### **Parotid**

Of, pertaining to, or in the region of the parotid gland, which is one of the salivary glands situated just in front of or below the ear. It is the largest of the salivary glands in man, and its duct opens into the interior of the mouth opposite the second molar of the upper jaw.

### **Parotitis**

Inflammation of the parotid gland, which is located at the angle of the jaw. Mumps is the most frequent cause of parotid swelling. Parotid swelling associated with HIV infection is seen in patients with lymphadenopathy syndrome.

### **Partogram**

A series of charted measurements used to assess the progress of labor. Partograms usually record information on fetal heart rate, cervical dilatation, fetal head descent, uterine contractions, amniotic fluid, maternal urine, drugs given (including ARV prophylaxis), maternal blood pressure, pulse, and temperature. In HIV-infected women, the number of vaginal examinations may also be charted. Also known as a partograph.

### **Passive Antibody Transfer**

The transfer of antibodies from another person or from an animal, either naturally--as from mother to fetus or to the newborn via breast milk--or by intentional inoculation as in gammaglobulin treatment.

### **Passive Immunity**

Immunity that does not come from immunization. It comes from another individual and is given to a patient in the form of antibodies such as gammaglobulin.

### **Passive Immunotherapy**

Process in which individuals with advanced disease (who have low levels of HIV antibody production) are infused with plasma rich in HIV antibodies or an immunoglobulin concentrate (HIVIG) from such plasma. The plasma is obtained from asymptomatic HIV-positive individuals with high levels of HIV antibodies.

### **Pathogen**

Any disease-producing microorganism or material.

### **Pathogenesis**

The origin and development of a disease.

### **Pelvic Inflammatory Disease (PID)**

Gynecological condition caused by an infection (usually sexually transmitted) that spreads from the vagina to the upper parts of a woman's reproductive tract in the pelvic cavity. PID takes

different courses in different women, but can cause abscesses and constant pain almost anywhere in the genital tract. If left untreated, it can cause infertility or more frequent periods.

### **Perianal**

Around the anus.

### **Perinatal**

Pertaining to or occurring in the period shortly before and after birth, variously defined as beginning with completion of the 20th to 28th week of gestation and ending 7 to 28 days after birth.

### **Perinatal Transmission**

Transmission of a pathogen, such as HIV, from mother to baby before, during, or after the birth process.

### **Peripheral Neuritis**

Inflammation of far portion of the nerves or the nerve endings, usually associated with pain, muscle wasting, and loss of reflexes.

### **Peripheral Neuropathy**

Condition characterized by sensory loss, pain, muscle weakness, and wasting of muscle in the hands or legs and feet. It may start with burning or tingling sensations or numbness in the toes and fingers. In severe cases, paralysis may result. Peripheral neuropathy may arise from an HIV-related condition or be the side effect of certain drugs, some of the nucleoside analogues in particular.

### **Peritonitis**

Inflammation of the peritoneum (the lining of the abdominal cavity).

### **Persistent Generalized Lymphadenopathy (PGL)**

Chronic, diffuse, noncancerous lymph node enlargement. Typically it has been found in persons with persistent bacterial, viral, or fungal infections. PGL in HIV infection is a condition in which lymph nodes are chronically swollen in at least two areas of the body for 3 months or more with no obvious cause other than the HIV infection.

### **Phagocyte**

A cell that is able to ingest and destroy foreign matter, including bacteria.

### **Phagocytosis**

The process of ingesting and destroying a virus or other foreign matter by phagocytes.

### **Pharmacokinetics**

The processes (in a living organism) of absorption, distribution, metabolism, and excretion of a drug or vaccine.

### **Phenotype**

The genetic makeup of an organism such as HIV as it interacts with the environment. In the case of HIV, the virus may interact with cells and drugs. Phenotypic resistance testing determines whether an organism is susceptible to a specific drug in a test tube. Contrast with genotype.

### **Placebo**

A substance that has no activity, often used in a clinical study so that participants do not know if they are receiving the active (study drug) or the inactive placebo. This approach assists in performing clinical studies and determining whether a drug is active against a disease.

### **Placebo Effect**

A physical or emotional change, occurring after a substance is taken or administered, that is not the result of any special property of the substance. The change may be beneficial, reflecting the expectations of the patient and, often, the expectations of the person giving the substance.

### **Placebo-Controlled Study**

A method of investigation of drugs in which an inactive substance (placebo) is given to one group of patients, while the drug being tested is given to another group. The results obtained in the two groups are then compared to see if the investigational treatment is more effective in treating the condition.

### **Placenta Previa**

Positioning of the placenta over the opening to the birth canal so that separation usually precedes the infant's birth. This is an important cause of painless third-trimester bleeding.

### **Placental Barrier**

A temporary organ separating the mother and fetus. The placenta transfers oxygen and nutrients from the mother to the fetus and permits the release of carbon dioxide and waste products from the fetus through the mother.

### **Plasma**

The liquid part of the blood and lymph that contains nutrients, electrolytes (dissolved salts), gases, albumin, clotting factors, wastes, and hormones.

### **Platelets**

Active agents of inflammation that are released when damage occurs to a blood vessel. The platelets stick to the blood vessel walls, forming clots to prevent the loss of blood. Some persons living with HIV develop thrombocytopenia, a condition characterized by a platelet count of <100,000 platelets per cubic millimeter of blood.

### **PLHA**

People living with HIV/AIDS

### **PLWHA**

People living with HIV/AIDS

### **PMTCT**

Prevention of mother-to-child transmission (of HIV)

### **Pneumocystis jiroveci Pneumonia (PCP)**

An infection of the lungs caused by *Pneumocystis jiroveci*, which is thought to be a protozoan but may be more closely related to a fungus. *P. carinii* grows rapidly in the lungs of persons with AIDS and is a frequent AIDS-related cause of death. *P. carinii* infection sometimes may occur elsewhere in the body (skin, eye, spleen, liver, or heart).

### **Polymerase Chain Reaction (PCR)**

A laboratory process that selects a DNA segment from a mixture of DNA chains and rapidly multiplies it to create a large sample of a piece of DNA. It is a sensitive laboratory technique that can detect and measure HIV in a person's blood or lymph nodes (also called RT-PCR). It is also a means of measuring the amount of virus in the blood (viral load).

### **Polyneuritis**

Inflammation of many nerves at once.

### **Polyvalent Vaccine**

A vaccine that is active against multiple viral strains.

### **Positive Test**

Any result that indicates that a person has a disease or infection. For HIV, a positive test indicates that the person has been infected with HIV.

### **Postexposure Prophylaxis (PEP)**

As it relates to HIV disease, a potentially preventative treatment using antiretroviral drugs to treat individuals within 72 hours of a high-risk exposure (e.g. needlestick injury, unprotected sex, needle sharing) to prevent HIV infection.

### **Postnatal**

Occurring after birth, especially during the period immediately after birth.

### **Preconception Counseling**

Recommended for all women of childbearing age as a component of their primary medical care. The purpose of preconception care is to identify risk factors for adverse maternal or fetal outcome, provide education and counseling targeted to the patient's individual needs, and

treat or stabilize medical conditions prior to conception in order to optimize maternal and fetal outcomes.

### **Prenatal**

The period preceding birth, during which the fetus develops in the uterus.

### **Prevalence**

A measure of the proportion of people in a population affected with a particular disease at a given time.

### **Primary Isolate**

HIV taken from an infected individual (as opposed to being grown in laboratory cultures).

### **Probability**

The chance, or likelihood, that a certain event will occur.

### **Proctitis**

Inflammation of the rectum.

### **Prodrome**

A symptom that indicates the onset of a disease.

### **Products of Conception**

Tissues resulting from a pregnancy, such as the placenta.

### **Progressive Multifocal Leukoencephalopathy (PML)**

A rapidly debilitating opportunistic infection caused by the JC virus that infects brain tissue and causes damage to the brain and the spinal cord. Symptoms vary from patient to patient but include loss of muscle control, paralysis, blindness, problems with speech, and an altered mental state. PML can lead to coma and death.

### **Prophylactic Drug**

A drug that helps to prevent a disease or initial infection.

### **Prophylaxis**

Treatment to prevent the onset of a particular disease (primary prophylaxis), or the recurrence of symptoms in an existing infection that has been brought under control (secondary prophylaxis, maintenance therapy).

### **Protease**

An enzyme that breaks down proteins into their component peptides. HIV's protease enzyme breaks apart long strands of viral protein into the separate proteins making up the viral core.

The enzyme acts as new virus particles are budding off a cell membrane. Protease is the first HIV protein whose three-dimensional structure has been characterized.

### **Protease Inhibitors**

Antiviral drugs that act by inhibiting the virus' protease enzyme, thereby preventing viral replication. Specifically, these drugs block the protease enzyme from breaking apart long strands of viral proteins to make the smaller, active HIV proteins that comprise the virion. If the larger HIV proteins are not broken apart, they cannot assemble themselves into new functional HIV particles. HIV protease inhibitors include indinavir, ritonavir, saquinavir, nelfinavir, amprenavir, atazanavir, and fosamprenavir.

### **Protease-Sparing Regimen**

An antiretroviral drug regimen that does not include a protease inhibitor.

### **Proteins**

Highly complex organic compounds found naturally in all living cells. Proteins are a source of heat and energy to the body. They are essential for growth, the building of new tissue, and the repair of injured tissue.

### **Protocol**

The detailed plan for conducting clinical studies. It states the trial's rationale, purpose, drug or vaccine dosages, length of study, routes of administration, who may participate (Inclusion/Exclusion Criteria), and other aspects of trial design.

### **Protozoa**

Large group of one-celled (unicellular) animals, including amoebas. Some protozoa cause parasitic diseases in persons with AIDS, notably toxoplasmosis and cryptosporidiosis.

### **Pruritis**

Itching.

### **Pulmonary**

Pertaining to the lungs.

### **Purified Protein Derivative (PPD)**

Material used in the tuberculin skin test (TST); the most common test for exposure to *Mycobacterium tuberculosis*, the bacterium that causes tuberculosis (TB). PPD is sometimes used synonymously with TST. In the PPD test, a small amount of protein from TB is injected under the skin. If patients have been previously infected, they will mount a delayed-type hypersensitivity reaction, characterized by a hard red bump called an induration.

### **PWA**

Person with AIDS. Also known as PLWA, person living with AIDS.

**Rubella** -- a viral disease that causes birth defects in babies of women who are infected early in pregnancy. Also called German measles. All children should receive rubella vaccine.

**QD**

Once each day.

**QID**

Four times each day.

**Quality Assurance**

An examination that reviews a study, manufacture of a drug or other process in order to certify that correct methods were followed.

**Radiology**

The science of diagnosis and treatment of disease using radioactive substances, including x-rays, radioactive isotopes, ionizing radiation, and C-T scans.

**Randomized Trial**

A study in which participants are randomly (i.e. by chance) assigned to one of two or more treatment arms or regimens of a clinical study. Occasionally, placebos are utilized.

**Rapid HIV Test**

A screening test for detecting antibody to HIV that produces very quick results, usually in 5 to 30 minutes. For diagnosis of HIV infection, a positive rapid test is confirmed with a second rapid test made by a different manufacturer.

**Reagent**

A substance used in a chemical reaction to detect, analyze, or produce another substance.

**Rebound**

An increase in viral load following a previous decrease due to anti-HIV therapy.

**Receptor**

A molecule on the surface of a cell that serves as a recognition or binding site for antigens, antibodies, or other cellular or immunological components.

**Referral**

A suggestion that a patient see another individual (usually a specialist) for another opinion.

**Refractory**

Referring to a disease that does not readily respond to treatment.

**Reinfection/Superinfection**

The infection of an already HIV-infected person with another strain of HIV. The superinfection can be with a more aggressive strain of HIV.

### **Remission**

The lessening in the severity of symptoms or duration of an outbreak of a disease.

### **Renal**

Pertaining to the kidneys.

### **Replacement Feeding**

The process of feeding a child who is not receiving any breast milk with a diet that provides all the nutrients the child needs. During the first 6 months this should be with a suitable breast-milk substitute--commercial formula, or home-prepared formula with micronutrient supplements. After 6 months it preferably should be with a suitable breast-milk substitute and complementary foods made from appropriately prepared and nutrient-enriched family foods, given three times a day. If suitable breast-milk substitutes are not available, appropriately prepared family foods should be further enriched and given five times a day.

### **Replication**

The process of duplicating or reproducing.

### **Resistance**

Reduction in a microorganism's sensitivity to a particular drug. Resistance is thought to result usually from a genetic mutation. In HIV, such mutations can change the structure of viral enzymes and proteins so that an antiviral drug can no longer bind with them as well as it used to.

### **Resistance Testing**

The evaluation of bacteria or viruses such as HIV to determine whether they are resistant to the effects of drugs used for treatment. Resistance testing is an important tool to determine whether a patient with HIV infection is getting sicker because ARV drugs are no longer working.

### **Retina**

Light-sensitive tissue at the back of the eye that transmits visual impulses to the brain via the optic nerve.

### **Retinal Detachment**

Condition in which a portion of the retina becomes separated from the inner wall of the eye. In AIDS patients, it can result from retinal disease such as Cytomegalovirus (CMV) retinitis.

### **Retinitis**

Inflammation of the retina, linked in AIDS to Cytomegalovirus (CMV) infection. Untreated, it can lead to blindness.

## **Retrovirus**

A type of virus that, when not infecting a cell, stores its genetic information on a single-stranded RNA molecule instead of the more usual double-stranded DNA. HIV is an example of a retrovirus.

## **Reverse Transcriptase**

An enzyme capable of copying RNA into DNA during the HIV multiplication cycle. Several anti-HIV drugs--such as AZT, ddI, and ddC--are chemicals that act against the reverse transcriptase enzyme.

## **Reverse Transcriptase Inhibitors (RTI)**

A series of nucleoside analogues that inhibit the reverse transcriptase of HIV. Included in this category are the drugs zidovudine, lamivudine, abacavir, didanosine, stavudine, zalcitabine, and emtricitabine.

## **Reverse Transcriptase Polymerase Chain Reaction (RT-PCR)**

An FDA-approved test to measure viral load. The test is also known as PCR (polymerase chain reaction).

## **Rhinitis**

Inflammation of the mucous membrane of the nose.

## **Ribonucleic Acid (RNA)**

A nucleic acid, found mostly in the cytoplasm of cells (rather than in the nucleus) that is important in the synthesis of proteins.

## **Risk Assessment**

Risk assessment is a fundamental part of an HIV prevention counseling session in which the individual is encouraged to identify, acknowledge, and discuss in detail his or her personal risk for acquiring or transmitting HIV.

## **RTV**

Ritonavir

## **Rupture of Membranes**

Also known as water breaking. A term used to define the rupture of the amniotic sac, releasing the amniotic fluid and heralding the onset of labor.

**Saliva** -- spit, the fluid in the mouth.

**Semen** -- greyish-yellowish fluid that contains sperm and comes out of the penis at orgasm, "cum."

**Shingles** -- a viral infection (herpes zoster) that causes painful sores on the skin.

**Side effects** -- things, usually bad, that medicines do to some people in addition to what the medicines are intended to do; for example, a drug could make you dizzy, make your joints ache, or make you feel like throwing up.

### **Salmonella**

A family of gram-negative bacteria, found in undercooked poultry or eggs, that are a common cause of food poisoning, and that can cause serious disseminated disease in HIV-infected persons.

### **Salvage Therapy**

Also referred to as rescue therapy. A treatment effort for people whose antiretroviral regimens have failed at least two times and who have had extensive prior exposure to antiretroviral agents.

### **Sarcoma**

A malignant (cancerous) tumor of the skin and soft tissue.

### **Seborrheic Dermatitis**

A chronic inflammatory disease of the skin of unknown cause or origin, characterized by moderate redness; dry, moist, or greasy scaling; and yellow crusted patches on various areas, including the mid-parts of the face, ears, above the orbit of the eye, umbilicus (the navel), genitalia, and especially the scalp.

### **Sensitivity (of a test)**

The sensitivity of a test is the probability of it giving a positive result if infection is truly present. As the sensitivity of the test increases the proportion of false negatives decreases.

### **Sepsis**

The presence of harmful microorganisms or associated toxins in the blood.

### **Septra**

Trade name of trimethoprim/sulphamethoxazole.

### **Seroconversion**

The development of antibodies to a particular bacteria, virus, or vaccine. When people develop antibodies to HIV, they seroconvert from antibody-negative to antibody-positive. It may take from as little as 1 week to several months or more after infection with HIV for antibodies to the virus to develop. After antibodies to HIV appear in the blood, a person should test positive on antibody tests.

### **Seroincidence**

The rate of new infections within a specific target population in a time period.

### **Serologic Test**

Any number of tests that are performed on the clear fluid portion of blood. Often refers to a test that determines the presence of antibodies to antigens such as viruses.

### **Seroprevalence**

As related to HIV infection, the proportion of persons who have serologic (i.e. pertaining to serum) evidence of HIV infection at any given time.

### **Serostatus**

Results of a blood test for specific antibodies.

### **Serum**

The clear, thin, and sticky fluid portion of the blood that remains after coagulation (clotting). Serum contains no blood cells, platelets, or fibrinogen.

### **Set Point**

The measurable holding point or balance between the virus and the body's immune system reported as the viral load measurement. The viral set point is established within a few weeks to a few months after infection and is thought to remain steady for an indefinite period of time. Set points are thought to determine how long it will take for disease progression to occur.

### **Sexually Transmitted Disease (STD)**

Also called venereal disease (VD) (an older public health term) or sexually transmitted infection (STI). STDs are infections spread by the transfer of organisms from person to person during sexual contact. In addition to the "traditional" STDs (syphilis and gonorrhea), the spectrum of STDs now includes HIV infection, which causes AIDS; Chlamydia trachomatis infections; human papilloma virus (HPV) infection; genital herpes; chancroid; genital mycoplasmas; hepatitis B; trichomoniasis; enteric infections; and ectoparasitic diseases (i.e. diseases caused by organisms that live on the outside the host's body). The complexity and scope of STDs have increased dramatically since the 1980s; more than 20 microorganisms and syndromes are now recognized as belonging in this category.

### **SGOT**

(Serum glutamic oxaloacetic transaminase) Also known as AST (aspartate aminotransaminase), a liver enzyme that plays a role in protein metabolism. Elevated serum levels of SGOT are a sign of liver damage from disease or drugs.

### **SGPT**

(Serum glutamic pyruvate transaminase) Also known as ALT (alanine aminotransaminase), a liver enzyme that plays a role in protein metabolism similar to that of SGOT. Elevated serum levels of SGPT are a sign of liver damage from disease or drugs.

## **SHIV (Simian Human Immunodeficiency Virus)**

A genetically engineered virus having an HIV envelope and an SIV core.

## **Side Effects**

The actions or effects of a drug (or vaccine) other than those desired. The term usually refers to undesired or negative effects, such as headache, skin irritation, or liver damage. Experimental drugs must be evaluated for both immediate and long-term side effects.

## **Simian Immunodeficiency Virus (SIV)**

An HIV-like virus that infects monkeys, chimpanzees, and other nonhuman primates.

## **Sinusitis**

Inflammation of the nasal cavity and sinuses.

## **Specificity (of a test)**

The specificity of a test is the probability of the test providing a negative result if the disease is truly absent. As the specificity of a test increases, the proportion of false positives decreases.

## **Spleen**

Large lymphatic organ in the upper left of the abdominal cavity with several functions, including trapping of foreign matter in the blood, destruction of degraded red blood cells and foreign matter by macrophages, formation of new lymphocytes and antibody production, and storage of excess red blood cells.

## **Splenomegaly**

An enlarged spleen.

## **Sputum**

Mucus and other matter that is brought up from the lungs by coughing.

## **Sputum Analysis**

Method of detecting certain infections (especially tuberculosis) by culturing of sputum--the mucus matter that collects in the respiratory and upper digestive passages and is expelled by coughing.

## **SQV**

Saquinavir

## **SSA**

Sub-Saharan Africa

## **Standards of Care**

Treatment regimen or medical management based on state-of-the-art patient care.

**Staphylococcus**

Type of bacteria that may cause various types of infection.

**Stem Cells**

Cells from which all blood cells derive. Bone marrow is rich in stem cells.

**Stevens-Johnson Syndrome**

A severe and sometimes fatal form of erythema multiforme that is characterized by severe skin manifestations; conjunctivitis (eye inflammation), which often results in blindness; Vincent's angina (trench mouth); and ulceration of the genitals and anus.

**Stomatitis**

Any of numerous inflammatory diseases of the mouth (e.g. canker sores, thrush, fever blisters) having various causes, such as mechanical trauma, irritants, allergy, vitamin deficiency, or infection.

**Strain**

Subgroup of a species. For HIV, different types of HIV such as HIV-1, HIV-2, clade A, clade B, etc.

**Study Endpoint**

A primary or secondary outcome used to judge the effectiveness of a treatment.

**Subclinical Infection**

An infection, or phase of infection, without readily apparent symptoms or signs of disease.

**Subcutaneous (SQ)**

Beneath the skin or introduced beneath the skin (e.g. subcutaneous injections).

**Subunit HIV Vaccine**

A vaccine that is based on only part of the HIV molecule.

**Sulfa Drug**

A sulfonamide drug used to treat bacterial infections. These drugs inhibit the action of p-aminobenzoic acid, a substance bacteria need in order to reproduce.

**Sulfonamides**

Synthetic derivatives of p-aminobenzene sulfonamide.

**Suppressor T Cells**

(T8, CD8) Subset of T cells that halts antibody production and other immune responses.

**Surrogate Markers**

Variables (measures) that are followed in clinical trials when the variable of interest cannot be conveniently observed in a direct manner. Two commonly used surrogate markers in HIV studies are CD4 T-cell counts and quantitative plasma HIV RNA (viral load).

### **Susceptible**

Vulnerable or predisposed to a disease or infection.

### **Symptoms**

Any perceptible, subjective change in the body or its functions that indicates disease or phases of disease, as reported by the patient.

### **Syndrome**

A group of symptoms as reported by the patient and signs as detected in an examination that together are characteristic of a specific condition.

### **Synergism, Synergistic**

An interaction between two or more treatments (e.g. drugs) that produces or enhances an effect that is greater than the sum of the effects produced by the individual treatments.

### **Syphilis**

A primarily sexually transmitted disease resulting from infection with the spirochete (a bacterium) *Treponema pallidum*. Syphilis can also be acquired in the uterus during pregnancy.

### **Systemic**

Concerning or affecting the body as a whole. A systemic therapy is one that the entire body is exposed to, rather than just the target tissues affected by a disease.

**TB** -- a disease (tuberculosis) that usually affects the lungs; formerly called consumption.

**Toxoplasmosis** -- an infection that can damage the eyes and central nervous system, as well as some internal organs.

**Transfusion** -- a transfer of blood or blood products into the body from one or more other people.

### **3TC**

Lamivudine

### **T Cells**

(T lymphocytes) T cells are white blood cells derived from the thymus gland that participate in a variety of cell-mediated immune reactions. Three fundamentally different types of T cells are recognized helper, killer, and suppressor. They are essential for a normal functioning immune system.

## **T Suppressor Cells**

T lymphocytes responsible for turning off the immune response after an infection is cleared. They are a subset of the CD8+ lymphocytes.

## **T4 Cell**

(Also called T-helper cell.) Antibody-triggered immune cells that seek and attack invading microorganisms. Macrophages summon T4 cells to the infection site. There, the T4 cell reproduces and secretes potent chemicals that stimulate B cells to produce antibodies, signal natural killer or cytotoxic (cell-killing) T cells, and summon other macrophages to the infection site. In healthy immune systems, T4 cells are twice as common as T8 cells.

## **TDF**

Tenofovir disoproxil fumarate

## **Teratogenicity**

The production of physical defects in offspring in utero (i.e. causing birth defects). Teratogenicity is a potential side effect of some drugs, such as thalidomide.

## **Tetanus**

An acute, often fatal infectious disease caused by the bacterium *Clostridium tetani*. The agent usually enters the body through contaminated puncture wounds (eg, those caused by metal nails, wood splinters, or insect bites), although other portals of entry include burns, surgical wounds, the umbilical stump of neonates, and the postpartum uterus. The disease can be prevented by immunizing with tetanus toxoid.

## **Therapeutic HIV Vaccine**

Also called treatment vaccine. A vaccine designed to boost the immune response to HIV infection. A therapeutic vaccine is different from a preventive vaccine, which is designed to prevent an infection or disease from becoming established in a person.

## **Therapy**

Any form of treatment. Drugs, radiation, and psychiatric counseling are forms of therapy.

## **Thrombocytopenia**

A decreased number of blood platelets (cells important for blood clotting).

## **Thrush**

Sore patches in the mouth caused by the fungus *Candida albicans*. Thrush is one of the most frequent early symptoms or signs of an immune disorder. The fungus commonly lives in the mouth, but only causes problems when the body's resistance is reduced either by antibiotics that have reduced the number of competitive organisms in the mouth or by an immune deficiency such as HIV disease.

## **Thymus**

A mass of glandular tissue (lymphoid organ) found in the upper chest under the breastbone in humans. The thymus is essential to the development of the body's system of immunity beginning in fetal life (i.e. before birth). The thymus processes white blood cells (lymphocytes), which kill foreign cells and stimulate other immune cells to produce antibodies.

### **TID**

Three times each day

### **Tissue**

A collection of similar cells acting together to perform a particular function. There are four basic tissues in the body: epithelial, connective, muscle, and nerve.

### **Titer (Titre)**

A laboratory measurement of the amount--or concentration--of a given compound in solution.

### **TIW**

Three times each week

### **TMP/SMZ**

Trimethoprim/sulfamethoxazole (generic name); Cotrimoxazole, Bactrim, Septra (trade names).

### **TOT**

Training of trainers

### **Total Lymphocyte Count**

A count of the number of lymphocytes (white blood cells) in the blood.

### **Toxicity**

The extent, quality, or degree of being poisonous or harmful to the body.

### **Toxoplasmosis (toxoplasmosis)**

An opportunistic infection caused by the protozoan parasite *Toxoplasma gondii*, which is found in undercooked meat and cat feces. A common manifestation is toxoplasmic encephalitis, characterized by brain swelling, confusion, lethargy, and possible coma.

### **Transaminase**

A liver enzyme. A laboratory test that measures transaminase levels is used to assess the functioning of the liver.

### **Transfusion**

The process of transfusing fluid (such as blood) into a vein.

### **Transmission**

In the context of HIV disease, HIV is spread most commonly by sexual contact with an infected partner. The virus can enter the body through the mucosal lining of the vagina, vulva, penis, rectum, or, rarely, the mouth during sex. The likelihood of transmission is increased by factors that may damage these linings, especially other sexually transmitted diseases that cause ulcers or inflammation. HIV also is spread through contact with infected blood, most often by the sharing of drug needles or syringes contaminated with minute quantities of blood containing the virus. Children can contract HIV from their infected mothers either during pregnancy or birth, or postnatally through breast-feeding. In developed countries, HIV is now rarely transmitted by transfusion of blood or blood products because of screening measures.

### **Transplacental**

Across or through the placenta. Usually refers to the exchange of nutrients, waste products, and other materials (e.g. drugs) between the developing fetus and the mother. Also refers to transmission of virus such as HIV across the placenta to the infant.

### **Treatment Failure**

Inability of a medical therapy to achieve the desired results.

### **Triglyceride**

A compound made up of a fatty acid (such as oleic, palmitic, or stearic acid) and glycerol. Triglycerides make up most animal and vegetable fats and are the basic water-insoluble substances (lipids) that appear in the blood where they circulate.

### **Trimethoprim/Sulphamethoxazole**

(Cotrimoxazole, Bactrim) A combination antibiotic drug effective at preventing and treating *Pneumocystis jiroveci* pneumonia (PCP); also serves as a prophylaxis against toxoplasmosis.

### **Tuberculin Skin Test (TST)**

A purified protein derivative (PPD) of the tubercle bacilli, called tuberculin, is introduced into the skin by scratch, puncture, or intradermal injection. If a raised, red, or hard zone forms around the test site, the person is said to be sensitive to tuberculin, and the test is read as positive.

### **Tuberculosis (TB)**

Infection with the bacteria *Mycobacterium tuberculosis*, as evidenced by a positive tuberculin skin test (TST) that screens for infection with this organism. Sometimes, TST is called a purified protein derivative (PPD) or Mantoux test. A positive skin test might or might not indicate active TB disease. Thus, any person with a positive TST should be screened for active TB and, once active TB is excluded, evaluated for treatment to prevent the development of TB disease. TB infection alone is not considered an opportunistic infection indicating possible immune deficiency.

**Urinal** -- a container or jar for urine, especially for use by people who cannot get out of bed.

**Urine** -- the liquid waste product of the body excreted by the kidneys, "piss," "pee."

**Vaccine** -- an injection (shot) of dead or weakened germs intended to cause the immune system to make antibodies to a particular germ.

**Vaginal sex** -- sexual intercourse in which the penis is put into the vagina.

**Vaginal fluids**-- the secretions (wetness) produced inside the vagina. During sexual arousal these secretions usually increase to lubricate the vagina for sexual intercourse.

## **UNAIDS**

Joint United Nations Program on AIDS

### **Universal Precautions**

A simple set of effective practices designed to protect health workers and patients from infection with a range of pathogens, including blood-borne viruses. These practices are used when caring for all patients regardless of diagnosis.

### **Uptake**

Usually, the numbers of individuals who agree to a procedure such as the number of pregnant women who agree to take an HIV test or agree to participate in prenatal care.

### **Vaccination**

Inoculation of a substance (i.e. vaccine) into the body for the purpose of producing active immunity against a disease. Initially associated with smallpox vaccination but now often used interchangeably with immunization.

### **Vaccine**

A substance that contains antigenic components from an infectious microorganism. By stimulating an immune response--but not the disease--it protects against subsequent infection by that organism. There can be preventive vaccines (e.g. measles or mumps) as well as therapeutic (treatment) vaccines.

### **Vaginal Candidiasis**

Infection of the vagina caused by the yeastlike fungus *Candida* (especially *Candida albicans*). Symptoms include, pain, itching, redness, and white patches in the vaginal wall. It can occur in all women, but it is especially common in women with HIV infection. The usual treatment is a cream applied locally to the vagina. Women with HIV infection may experience frequent reoccurrence of symptoms and may require systemic medications in order to treat these symptoms successfully.

### **Vaginal Intercourse**

A type of sexual intercourse in which the man's penis enters the woman's vagina.

**Vaginal Sex**

Vaginal intercourse.

**Varicella Zoster Virus (VZV)**

A virus in the herpes family that causes chicken pox during childhood and may reactivate later in life to cause shingles in immunosuppressed individuals.

**VCT**

Voluntary counseling and testing

**VDRL**

(Venereal diseases research laboratory) A test for syphilis.

**Venipuncture**

The puncture of a vein (usually in the arm) with a hollow-bore needle for the purpose of obtaining a blood specimen.

**Vertical Transmission**

Transmission of a pathogen such as HIV from mother to fetus or baby during pregnancy or birth.

**Viral Burden/Viral Load**

The amount of HIV in the circulating blood. Monitoring a person's viral burden is important because of the apparent correlation between the amount of virus in the blood and the severity of the disease. Sicker patients generally have more virus than those with less advanced disease. A sensitive, rapid test--called the viral load assay for HIV-1 infection--can be used to monitor the HIV viral burden. This procedure may help clinicians decide when to give anti-HIV therapy or to switch drugs. It may also help investigators determine more quickly whether experimental HIV therapies are effective.

**Viral Culture**

A laboratory method for growing viruses.

**Viral Load Test**

In relation to HIV, a test that measures the quantity of HIV RNA in the blood. Results are expressed as the number of copies per milliliter of blood plasma. Research indicates that viral load is a better predictor of the risk of HIV disease progression than the CD4 count. The lower the viral load, the longer the time to AIDS diagnosis and the longer the survival time. Viral load testing for HIV infection is being used to determine when to initiate and/or change therapy.

**Viremia**

The presence of virus in the bloodstream.

**Viricide**

Any agent that destroys or inactivates a virus.

**Virion**

A virus particle existing freely outside a host cell. A mature virus.

**Virologic Suppression**

Suppression of viral replication (eg, HIV) by antiviral therapy.

**Virology**

The study of viruses and viral disease.

**Virus**

Organism composed mainly of nucleic acid within a protein coat. When viruses enter a living plant, animal, or bacterial cell, they make use of the host cell's chemical energy, protein, and nucleic acid-synthesizing ability to multiply. Some viruses do not kill cells but transform them into a cancerous state. Some cause illness and then seem to disappear, while remaining dormant and later causing another, sometimes much more severe, form of disease. In humans, viruses cause measles, mumps, yellow fever, poliomyelitis, influenza, and the common cold, among others. Some viral infections can be treated with drugs.

**Visceral**

Involving the major organs inside the body.

**Voluntary HIV Testing**

An individual is usually counseled regarding HIV prevention and how HIV infection occurs. Participants have the opportunity to accept or refuse HIV testing.

**VTC**

Voluntary testing and counseling

**VTR**

Vertical transmission rate

**Vomit** -- matter from the stomach ejected through the mouth, "throw up," "spit-up."

**Western Blot**

A laboratory test for specific antibodies to confirm repeatedly positive results on the HIV ELISA or EIA tests. In the United States, Western blot is the validation test used most often for confirmation of these other tests. In developing countries, a rapid HIV test is utilized most commonly. A positive rapid HIV test should be confirmed by a second rapid HIV test made by a different manufacturer.

**Wild-Type Virus**

The original type of HIV, unchanged by having developed any resistance to antiretroviral drugs. Also, the most common type of a virus in the host population before genetic manipulation or mutation; virus that is isolated from a host as opposed to one that is grown in a laboratory culture.

**Window Period**

Time from infection with HIV until antibodies are detected.

**ZDV**

Zidovudine

**Zidovudine**

(ZDV; AZT; Retrovir (trade name)) A nucleoside analogue for treatment of HIV infection and also approved for preventing maternal-fetal HIV transmission.

Resources

<http://www.hiv.va.gov/provider/glossary/a.asp>

<http://www.cdc.gov/hiv/resources/brochures/careathome/gloss.htm>