AIDS and HIV Infection Information for United Nations Employees and Their Families

UNAIDS

UNAIDS/99.31E (English original, June 1999)

1st revision, April 2000

© Joint United Nations Programme on HIV/AIDS (UNAIDS) 2000. All rights reserved. This document, which is not a formal publication of UNAIDS, may be freely reviewed, quoted, reproduced or translated, in part or in full, provided that the source is acknowledged. The document may not be sold or used in conjunction with commercial purposes without prior approval from UNAIDS (contact : UNAIDS Information Centre).

The views expressed in documents by named authors are solely the responsibility of those authors.

The designations employed and the presentation of the material in this work do not imply the expression of any opinion whatsoever on the part of UNAIDS concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by UNAIDS in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

UNAIDS 20 avenue Appia — 1211 Geneva 27 — Switzerland Tel. (+41 22) 791 46 51 — Fax (+41 22) 791 41 65 E-mail: unaids@unaids.org — http://www.unaids.org

AIDS and HIV Infection

Information for United Nations Employees and Their Families



UNAIDS Geneva, Switzerland 2000

Table of Contents

- 5 Foreword
- 7 United Nations HIV/AIDS Personnel Policy
- **11** Chapter 1 The Facts
- 11 What is AIDS?
- 13 How HIV is transmitted
- 17 How HIV is not transmitted
- **19** Chapter 2 Preventing HIV Transmission
- **19** Preventing sexual transmission of HIV
- 21 Preventing transmission of HIV via blood and blood products
- **22** Preventing transmission of HIV via contaminated needles
- 23 Protecting children
- **25** Chapter 3 Being Tested
- 25 What the HIV antibody test can tell you
- 25 The HIV antibody test and employment
- **26** The HIV antibody test and pregnancy
- **29** Chapter 4 Living with HIV and AIDS
- **29** Coping with confirmed HIV infection
- **32** HIV and your infant's health
- **35** Chapter 5 A Global Overview of the Epidemic
- **39** Chapter 6 The UN Response to AIDS
- **41** Chapter 7 Staying Informed and Getting Help
- 47 Glossary
- 51 <u>References</u>
- 53 Further Reading from UNAIDS

Foreword

As we leave the 20th century, there is still no cure in sight for one of the most frightening and devastating diseases the world has known.

HIV and AIDS continue to affect the lives of millions around the world. But they

are not faceless millions. Almost all of us know a friend, family member or co-worker who has been affected. In our work as United Nations employees, we also see at first hand how the pandemic is ravaging the developing world, particularly Africa and South Asia.

"...we must foster a work environment of compassion and understanding, not discrimination or fear."

Until a vaccine or a cure is found, our greatest weapon against HIV/AIDS is knowledge. The United Nations is committed to providing a supportive workplace for its employees, regardless of their HIV status. To do this, we must foster a work environment of compassion and understanding, not discrimination or fear.

This booklet is a straightforward and practical resource, designed to give you and your families the most up-to-date information available on HIV and AIDS, such as:

- basic facts about HIV/AIDS, how it is transmitted and how it is not transmitted;
- ways to protect yourselves and your families against infection;
- advice on HIV antibody testing and how to cope with the disease if you or a family member test positive;
- a global overview of the epidemic and the UN's response to AIDS at international and country levels; and
- a list of valuable resources to direct you and your family to additional information or support services.

This booklet also contains the United Nations HIV/AIDS Personnel Policy. It is important that each of us be aware of the policy and be guided by it in our daily lives. I urge you to seek out additional information and to stay informed. The United Nations Staff Counsellors and the United Nations Medical Directors, both part of the Office of Human Resource Management, are available to answer your questions.

When the world looks back on the end of the 20th century, let us be remembered for our vigilance in combatting one of the greatest killers in our lifetime. But let us also be remembered for our solidarity with all those who suffer from this terrible disease.

Kofi A. Annan United Nations Secretary-General

United Nations HIV/AIDS Personnel Policy

A. Information, education and other preventive health measures

i. UN Staff and their families should be provided with sufficient, updated information to enable them to protect themselves from HIV infection and to cope with the presence of AIDS.

To this end, all UN bodies are encouraged to develop and implement an active staff education strategy for HIV/AIDS using the handbook on AIDS for UN employees and their families produced by UNAIDS and identifying in the field local sources experienced in HIV/AIDS counselling, to provide confidential follow-up.

The staff of the UN Medical Service should be fully involved in such staff education programmes. They should receive any additional professional education that may be required; and all pertinent information material on HIV/AIDS, supplied and updated by UNAIDS, should be available through them at all duty stations.

ii. All UN staff members and their families should be made aware of where safe blood may be obtained.

To accomplish this task, the WHO Blood Safety Unit, in cooperation with the UN Medical Service, should establish and regularly update a list of reliable and operational blood transfusion centres for circulation to UN headquarters, regional offices and duty stations. The UN Medical Service and local linked medical facilities should also make efforts to ensure that blood transfusions are performed only when absolutely necessary.

iii. UN Resident Coordinators must exercise their responsibility to adopt measures to reduce the frequency of motor vehicle accidents, not only because of their attendant high mortality and morbidity, but because they represent a particular risk for HIV infection in those localities lacking safe blood supplies.

UN Resident Coordinators are, therefore, encouraged to consider the following measures for reinforcement or for general adoption if not already applied; and to circulate them to all personnel at the duty station together with instructions on the use of public transport:



- proper training in off-road use of 4-wheel drives;
- prohibition against the personal use of vehicles when an official driver is available;
- compulsory use of helmets for all riders of motorbikes;

prohibition against substance abuse by vehicle drivers;

- organization of first-aid training sessions; and
- equipping UN vehicles with first-aid kits containing macromolecular solutions (plasma expanders).

iv. All UN staff members and their families should have access to disposable syringes and needles.

The UN Medical Service should provide disposable syringes and needles to staff on duty travel areas where there is no guarantee of the proper sterilization of such materials. They should be accompanied by a certificate in all UN official languages explaining the reasons why they are being carried. Regional offices and other duty stations should stock disposable injection material for use by UN staff and their families. This stock should be available at UN dispensaries, where such exist, or at the WHO duty station in the country.

v. All UN staff members and their families should have access to condoms.

Condoms should be available through the United Nations Population Fund (UNFPA) and/or WHO at those duty stations where there is not a reliable and consistent supply of high quality condoms from the private sector. Access should be free, simple and discreet.

B. Voluntary testing, counselling and confidentiality

Voluntary testing with pre- and post-counselling and assured confidentiality should be made available to all UN staff members and their families.

Adequate and confidential facilities for voluntary and confirmatory testing and counselling should be made available locally to UN staff members and their families, with UN bodies acting in close collaboration with the UN Medical Service and WHO. Specific procedures must be developed by UN bodies to maintain confidentiality with respect to negative as well as positive results from an HIV test, including whether such a test has been taken. Only the person tested has the right to release information concerning his/her HIV status.

C. Terms of appointment and service

Pre-recruitment and Employment Prospects

- The only medical criterion for recruitment is fitness to work.
- HIV infection does not, in itself, constitute a lack of fitness to work.
- There will be no HIV screening of candidates for recruitment.
- AIDS will be treated as any other medical condition in considering medical classification.

HIV testing with the specific and informed consent of the candidate may be required if AIDS is clinically suspected.

- Nothing in the pre-employment examination should be considered as obliging any candidate to declare his or her HIV status.
- For any assignment in a country which requires HIV testing for residence, this requirement must appear in the vacancy notice.

Continuity of Employment

- HIV infection or AIDS should not be considered as a basis for termination of employment.
- If fitness to work is impaired by HIV-related illness, reasonable alternative working arrangements should be made.
- UN staff members with AIDS should enjoy health and social protection in the same manner as other UN employees suffering from serious illness.
- HIV/AIDS screening, whether direct (HIV testing), indirect (assessment of risk behaviours) or asking questions about tests already taken, should not be required.
- Confidentiality regarding all medical information, including HIV/AIDS status, must be maintained.
- There should be no obligation on the part of the employee to inform the employer regarding his or her HIV/AIDS status.
- Persons in the workplace affected by, or perceived to be affected by HIV/AIDS, must be protected from stigmatization and discrimination by co-workers, unions, employers or clients.
- HIV-infected employees and those with AIDS should not be discriminated against, including access to and receipt of benefits from statutory social security programmes and occupationally-related schemes.
- The administrative, personnel and financial implications of these principles under terms of appointment and service should be monitored and periodically reviewed.

D. Health insurance benefits programmes

i. Health insurance coverage should be available for all UN employees regardless of HIV status.

There should be no pre- or post-employment testing for HIV infection.

ii. Health insurance premiums for UN employees should not be affected by HIV status.

No testing for HIV infection should be permitted with respect to any health insurance scheme.

Chapter 1 The Facts

What is AIDS?

AIDS stands for acquired immunodeficiency syndrome, a pattern of devastating infections caused by the human immunodeficiency virus, or HIV, which attacks and

destroys certain white blood cells that are essential to the body's immune system.

When HIV infects a cell, it combines with that cell's genetic material and may lie inactive for years. Most people infected with HIV are still healthy and can live for years with no symptoms or only minor illnesses. They are infected with HIV, but they do not have AIDS.

After a variable period of time, the virus becomes activated and then leads progressively to the serious infections and other conditions that characterize AIDS. Although there are treatments that can extend life, AIDS is a fatal disease.

Persons who are HIV-positive are both infected and infectious for life. Even when they look and feel healthy, they can transmit the virus to others.

Research continues on possible vaccines and, ultimately, a cure. For the moment, however, prevention of transmission remains the only method of control.



The route of infection in adults

HIV targets two groups of white blood cells called CD4+ lymphocytes and monocytes/ macrophages. Normally, CD4+ cells and macrophages help recognize and destroy bacteria, viruses or other infectious agents that invade a cell and cause disease. In an HIV-infected person, the CD4+ lymphocytes are killed by the virus, while the macrophages act as reservoirs, carrying HIV to a number of vital organs.

HIV attaches itself to the CD4+ lymphocyte and makes its way inside. This causes the cell to produce more HIV but, in doing so, the cell is destroyed. As the body's CD4+ cells are depleted, the immune system weakens and is less able to fight off viral and bacterial infections. The infected person becomes susceptible to a wide range of "opportunistic" infections, such as The symptoms of HIV disease are varied and complex, but can include:

Fever Enlarged lymph glands Skin rash Persistent diarrhoea Cough Severe weight loss Fatigue Skin lesions Loss of appetite *Pneumocystis carinii* pneumonia, which rarely occurs in persons with normal immune systems. Tuberculosis (TB) poses a particular threat to HIV-positive people, especially in areas of the world where both TB and HIV infection are increasing at alarming rates. Millions of TB carriers who would otherwise have escaped active tuberculosis are now developing the disease because their immune systems are under attack from HIV. TB also progresses faster in HIV-infected persons, and is more likely to be fatal if undiagnosed or untreated. TB is now the leading killer of HIV-infected Africans.

HIV-infected persons are also more susceptible to

tumour of the blood vessels or the lymphatic vessels. HIV may also attack the brain, causing neurological and neuro-psychiatric problems.

In general, about 50 percent of HIV-infected adults are likely to develop AIDS within 10 years after first becoming infected. The good news is that early treatment with improved drugs is significantly prolonging life for persons with AIDS.

A history of the epidemic

A pattern of highly unusual infections in otherwise healthy young adults emerged in the early 1980s. This pattern, or syndrome, was caused by an unknown entity that apparently attacked the body's immune system. It became known as AIDS. Between 1983 and 1984, researchers isolated a new virus—HIV—the cause of AIDS. This made possible a blood test for antibodies to the virus. HIV was found to be an infectious agent known as a retrovirus. Different retroviruses were found in some animals but, until that point, were rare in humans. HIV may have been infecting some human populations relatively benignly for more than 20 years (1).

Since the discovery of HIV, several strains of the virus have been identified. In 1985, a related virus was found in parts of West Africa and was called HIV-2 to distinguish it from the earlier virus (HIV-1). The pattern of illness is similar for both HIV-1 and HIV-2.

In the early 1980s, only about 100,000 adults worldwide were thought to have been infected with HIV. As of the end of 1998, the number of adults and children living with HIV or AIDS rose to more than 33.4 million (2). More information on the history of HIV/AIDS can be found in the Encyclopedia of AIDS at http://www.thebody.com/encyclo/encyclo.html

The route of infection in infants and children

Most HIV-infected infants and children acquired the infection from their mothers before, during or shortly after birth, or during breastfeeding. Only a small proportion are infected through HIV-contaminated blood transfusions or injections. There are two patterns of disease progression in children infected from birth. About half these children progress rapidly to AIDS, but others remain symptom free for years, as adults do. Studies show that, in developed countries, approximately two-thirds of infected children are still alive at age 5 years. In developing countries, the figure ranges between 30 and 65 percent. (For more information, see the section on mother-to-child transmission of HIV later in this chapter.)

How HIV is transmitted

To date, there are only four primary methods of transmission:

- sexual intercourse (anal and vaginal);
- contaminated blood and blood products, tissues and organs;
- contaminated needles, syringes and other piercing instruments; and
- mother-to-child transmission (MTCT).

Sexual intercourse

HIV can be transmitted through unprotected sexual intercourse—that is, any penetrative sexual act in which a condom is not used. Anal and vaginal intercourse can transmit the virus from an HIV-infected man to a woman or to another man, or from an infected woman to a man.

The risk of becoming infected through unprotected sexual intercourse depends on four main factors: the probability that the sex partner is infected, the type of sex act, the amount of virus present in the blood or sexual secretions (semen, vaginal or cervical secretions) of the infected partner, and the presence of other sexually transmitted diseases and/or genital lesions in either partner. Age may also be a factor as young girls are physiologically more vulnerable.

The probability of HIV infection in the partner

The prevalence of HIV infection among sexually active men and women varies according to geographical area or population subgroup, such as heterosexuals, men who have sex with men (MSM), sex workers, or injecting drug users (see page 36). Generally, the likelihood of becoming infected with HIV sexually is related to the number of sexual partners and unprotected sex acts you have. In other words, the more sexual partners you have, the greater your chance of becoming infected.

The type of sex act

All unprotected acts of sexual penetration (anal, vaginal, oral) carry a risk of HIV transmission because they bring body fluids secreted during sex directly into contact with exposed mucous membranes (the lining of the rectum, the vagina, the urethra and the mouth).

- Men and women who engage in unprotected receptive anal intercourse with an HIV-infected partner run the highest risk of becoming infected.
- The next highest risk is that associated with unprotected vaginal intercourse.
- Unprotected oral intercourse involves some risk as well, particularly if there are mouth or throat injuries present such as bleeding gums, lesions, sores, abscessed teeth, throat infections, oral gonorrhoea or other STDs present.

This risk is reduced, although not entirely eliminated, by the proper use of condoms. Injury to the mucous membrane of the rectum, vagina or mouth may help the virus enter the bloodstream. However, HIV can be transmitted even through unbroken mucous membrane.

Kissing has not been shown to transmit HIV, as saliva contains very little of the virus. Nevertheless, there is a theoretical risk of HIV transmission during deep or "wet" kissing (tongue kissing) if blood from gum or mouth sores is present in the saliva. There



is no evidence that HIV has

actually been transmitted this way.

Self-masturbation involves no risk of HIV transmission. There are no known cases of transmission through mutual masturbation, either. However, masturbation of a partner poses a theoretical risk of HIV transmission if his or her sexual secretions come in contact with mucous membrane or broken skin.





The amount of virus present in the infected partner

HIV-infected individuals become more infectious as they progress to HIV-related disease and AIDS. There is also an early one- to two-week period of infectiousness around the time of seroconversion—that is, when antibodies first develop.

The presence of other sexually transmitted diseases in either partner

There is a strong link between sexually transmitted diseases (STDs) and the sexual transmission of HIV infection (3). The presence of an untreated STD—such as gonorrhoea, chlamydial infection, syphilis, herpes or genital warts—can enhance both the acquisition and transmission of HIV by a factor of up to 10. Thus, STD treatment is an important HIV prevention strategy in a general population.

Contaminated blood or blood products, tissues and organs

Blood transfusions save millions of lives each year, but in places where a safe blood supply is not guaranteed, those receiving transfused blood have an increased

risk of being infected with HIV.

In most industrialized countries, the risk of acquiring HIV infection from transfusions is extremely low. This is due in large part to effective recruitment of regular, volunteer blood donors; improved donor testing procedures; universal screening of blood and blood products with highly sensitive and specific tests for the antibody to HIV; and the appropriate use of blood.

In the developing world, however, the risk is much higher. One estimate is that up to 5 percent of HIV infections may be caused by transfusions in high-prevalence areas such as sub-Saharan Africa. The lack of coordinated national blood transfusion systems, the WHO's Blood Safety Unit is helping countries strengthen their blood transfusion systems. Partners include UNAIDS, WHO, UNDP, the International Federation of Red Cross and Red Crescent Societies and several other interested organizations. Goals include:

- educating, motivating, recruiting and retaining low-risk volunteer, non-remunerated blood donors;
- 2. screening all donated blood;
- reducing unnecessary or inappropriate transfusions;
- 4. developing a sustainable national blood transfusion service; and
- 5. improving political commitment and support from within countries.

absence of non-remunerated volunteer blood donors, lack of testing, and inappropriate use of blood products compound the problem (4-6).

To prevent transmission by tissue and organ donation, including sperm for artificial insemination, the HIV-infection status of the donor should be carefully evaluated.

Contaminated needles, syringes or other piercing instruments

HIV can be transmitted through the use of HIV-contaminated needles or other invasive instruments. The sharing of syringes and needles by injecting drug users is responsible for the very rapid rise in HIV infection among these persons in many parts of the world.

A risk is also attached to non-medical procedures if the instruments used are not properly sterilized. Such procedures include ear- and body-piercing, tattooing, acupuncture, male and female circumcision, and traditional scarification. The actual risk depends on the local prevalence of HIV infection.

HIV transmission by means of injection equipment can also occur in health care settings where syringes, needles and other instruments, such as dental equipment, are not properly sterilized, or through injury by needles and other sharps.

Mother-to-child transmission (MTCT)

Mother-to-child transmission (MTCT) is the overwhelming source of HIV infection in young children. The virus may be transmitted during pregnancy, labour, delivery or after the child's birth during breastfeeding. Among infected infants who are not breastfeeding. Among infected infants who are not breastfeeding. Among infected infants who are of delivery (just before or during labour and delivery). In populations where breastfeeding is the norm, breastfeeding may account for more than one-third of all cases of MTCT transmission (7,8).

Paediatric AIDS can be difficult to diagnose because some symptoms of HIV infection, such as diarrhoea, are also common in infants and children

who are not infected.



For more information, read the UNAIDS Technical Update on Mother-to-Child Transmission of HIV at http://www.unaids.org Therefore, these symptoms cannot be considered a reliable basis for diagnosis. There are blood-based tests that allow early diagnosis of HIV infection in infants. These are used extensively in developed countries. However, these tests are quite expensive and are not readily available in developing countries.

How HIV is not transmitted

Family, friends and co-workers should not fear becoming infected with HIV through casual contact with an HIV-infected person at home, at work, or socially. These activities will not transmit the virus:

- shaking hands, hugging or kissing (see paragraph on deep kissing, page 14)
- coughing or sneezing

using a public phone

- visiting a hospital
- opening a door
- sharing food, eating or drinking utensils
- using drinking fountains
- using toilets or showers
- using public swimming pools
- getting a mosquito or insect bite.

AIDS and work

For the vast majority of occupations, the workplace does not pose a risk of acquiring HIV. The exceptions include laboratory workers, health care workers, per-

sons dealing with hospital waste products, emergency medical response personnel and any other occupation where there is a possibility of exposure to blood. Their risk is very low, but real. Among the hazards to which these persons may be exposed are needlestick injuries and other skinpiercing accidents, and blood splashing into the eyes while they are administering treatment or otherwise performing their duties.

AIDS and sports

There are no documented cases of HIV being transmitted during participation in a sports

WHO Guidelines on AIDS and First Aid in the Workplace

Mouth-to-mouth resuscitation is a life-saving procedure that you should not withhold because of an unsubstantiated fear of contracting HIV or other infection. No case of HIV transmission via this route has been reported. A theoretical risk exists if the person you must resuscitate is bleeding from the mouth. In this case, use a clean cloth to wipe away any blood from the person's mouth.

A person who is bleeding needs immediate attention. Apply pressure to the wound with a clean, thick cloth. Avoid blood contact with your eyes, mouth and any broken skin. Ensure that any open cuts or wounds you have are covered before giving first aid. Always wash your hands with soap and water as soon as possible after giving first aid (9). activity. The very low risk of transmission during sports participation would involve sports with direct body contact in which bleeding might be expected to occur (10).

It is theoretically possible for the virus to be transmitted if an HIV-infected athlete had a bleeding wound or skin lesion with fluids that came in contact with another athlete's skin lesion, cut or exposed mucous membrane. Even in such an unlikely event, risk of transmission would be very low. However, in sports involving direct body contact or combative sports where bleeding might occur, it is sensible to follow two simple procedures:

- cleanse any skin lesion with antiseptic and cover it securely; and
- if a bleeding injury occurs, interrupt participation until the bleeding has stopped and the wound has been both cleansed with antiseptic and securely covered.

Chapter 2 Preventing HIV Transmission

Preventing sexual transmission of HIV

Know your partner

Whether you are male or female—heterosexual, homosexual or bisexual—your risk of acquiring HIV infection is directly related to the likelihood that your partner is infected. Your risk is substantially higher if your partner has ever injected drugs, has unprotected sex with casual partners, or has a sexual history unknown to you. Be aware that it is impossible to detect someone's HIV-infection status simply from his or her physical appearance. Individuals who look perfectly clean and healthy may be infected even if they are unaware of it themselves—and hence, capable of infecting you.

Understand which sexual acts put you at most risk

All forms of penetrative sexual intercourse (anal, vaginal, oral) with an HIVinfected man or woman carry a risk of transmission. Unprotected anal intercourse is one of the riskiest practices. This is true even when a condom is used because of the increased likelihood that the condom will be damaged during this form of sex.

Preventing transmission if you are infected with HIV...

- Do not donate blood, semen or organs (kidney, cornea, etc.)
- Inform sexual partners. Avoid penetration, otherwise always use a condom.
- Do not share syringes or needles.
- Inform any doctors or dentists consulted.
- Consider pregnancy carefully (see page 32).
- Cover any cuts or scratches with a dressing until healed.
- Do not share toothbrushes, razors or sharp instruments (12).
- Seek early and correct treatment for STDs.

Unprotected vaginal intercourse carries the next highest risk of infection. Oral sex also carries a small risk of transmission, particularly if there are mouth or throat injuries present such as bleeding gums, lesions, sores, abscessed teeth, throat infections, or oral STDs present.

To protect yourself, always use a condom during penetrative sexual acts (11).

What you need to know about condoms

Latex condoms lubricated with silicone or a water-based lubricant are recommended as a barrier method to reduce the risk of HIV transmission during anal, vaginal and oral intercourse. (If additional lubricant is desired, a water-based variety such as K-Y Lubricating Jelly® should be used rather than an oil-based lubricant such as Vaseline®, which can break down the latex.) Latex condoms are only effective if they are used properly and do not break.

Natural membrane condoms, often made from sheep gut, are not recommended because they have tiny pores through which HIV could pass.

For maximum effectiveness, the condom



must be put on before the penis touches any part of the







Male condom

rectum, vagina or mouth. It should be put on when the penis is erect, taking care to leave a reservoir at the tip to contain the semen. Care should be taken during withdrawal of the penis (with the condom still in place) to avoid spillage.

Female condoms, such as the REALITY® condom, are now available. The female condom is a soft, loose-fitting plastic pouch made of polyurethane (not latex) that lines the vagina. It has a semi-stiff plastic ring at each end. The inner ring is used to insert the device inside the vagina and hold it in place. The outer ring partly covers the labia area and holds the condom open.

Or, to be even safer, you can engage in sexual practices that involve no penetration such as caressing or massaging any part of the body, masturbation (provided that sexual secretions do not come in contact with cuts or sores on the other partner's skin), and kissing that does not involve heavy exchange of saliva and possibly blood. The safest course of all is abstinence.

Seek medical advice or treatment for STDs

The presence of an untreated sexually transmitted disease—such as gonorrhoea, chlamydial infection, syphilis, herpes or genital warts—can enhance both your acquisition and transmission of HIV by a factor of up to 10. If you suspect you have an STD, or have been exposed to one, it is imperative that you seek medical advice and treatment immediately.

Common symptoms include an unusual discharge from the vagina or penis, burning or pain during urination, and sores or blisters

Microbicides and HIV prevention

Microbicides are products intended for vaginal or rectal administration that can decrease the transmission of HIV and other micro-organisms that cause STDs. Discovery of an effective microbicide is needed to expand prevention options. In recent years, it was suggested that spermicides might have microbicidal properties. To date, two trials have failed to show that the spermicide nonoxynol-9 is effective against HIV and STD transmission. However, more than 35 microbicides are undergoing trials, and research continues into this method of prevention (13).

near the mouth or genitals. Other symptoms in women may include unusual bleeding (other than the menstrual cycle) and vaginal pain during intercourse.

Preventing transmission of HIV via blood and blood products

In industrialized countries, the risk of transmission of HIV via blood and blood products is very rare for each unit of blood transfused.

It is also very rare to contract HIV in the health care setting. For example, evidence from the USA indicates that health care workers who accidentally puncture their skin with a needle contaminated with HIV have an estimated risk of less than five in a 1000 (0.5 percent) of developing HIV infection.

Also, HIV is a fragile virus, meaning it is vulnerable to changes in temperature and other environmental factors, and has been shown not to be viable in dried blood for more than an hour. The concentration of virus particles of HIV per millilitre of blood is also very low in contrast to other viruses. Despite the low level of occupational risk posed by HIV, safe work practices should be followed at all times by laboratory personnel and health workers (14). Don't be afraid to ask your health care professional, clinic or hospital if they follow "universal precautions", or safety measures to prevent the transmission of HIV in health care settings.

If you must travel to areas of the world where the safety of the blood supply is not guaranteed, you should follow these measures (15,16):

- before you travel, identify sources of reliable medical help in your destination country;
- carry sterile disposable needles and syringes for your personal use (as part of the WHO medical kit);
- be aware of emergency medical evacuation procedures;
- reduce your risk of injury by following safety precautions such as using seatbelts and driving carefully; and
- if you are injured and lose blood, consider using a plasma substitute (crystalloids/colloids). If severe or acute blood loss has occurred, efforts should be made to ensure that the blood has been screened for HIV and hepatitis B virus.

Preventing transmission of HIV via contaminated needles

Do not share needles or syringes

Injecting drug use is one of the fastest growing routes of HIV infection in many parts of the world, primarily because needles, syringes and drug preparation equipment are frequently shared, enabling rapid spread of the virus.



Avoid invasive, skin-piercing procedures

Ear- or body-piercing, tattoos, acupuncture or any procedure that requires invasive, skin-piercing instruments carry some risks of transmission. If you are considering any of these procedures, make sure that all equipment is properly sterilized. Do not be afraid to ask questions of the technician or health care personnel. HIV is easily destroyed by heat; instruments should be sterilized by steam or by dry heat. If this is not possible, instruments should be disinfected by boiling (17).

Protecting children

Parents should make sure that children know the facts about HIV transmission and how they can protect themselves against infection. Specifically, children should:

- be aware that HIV is transmitted through blood;
- avoid any skin-piercing procedures or accidental injury from unsterilized needles and other sharp instruments;
- receive injections or other medical or dental treatment only when necessary and only with properly sterilized equipment;
- receive blood transfusions only when medically necessary and only with properly screened blood; and
- avoid the risk of traumatic injury necessitating blood transfusion.

Older children need information and encouragement that will help them avoid becoming infected through unprotected sexual intercourse or through sharing druginjecting equipment.

Children also need to be reassured about the ways in which HIV cannot be transmitted (see Chapter 1).

They should be encouraged to be sympathetic toward children and adults who are infected, and should not fear becoming infected through casual contact with these persons. If you have difficulty or are embarrassed speaking to your children about sex, drug use and AIDS, these resources can help.

A Children's Book About HIV/AIDS: By Children For Children available online at http://www.sonic.net/yofee/hivaids

Does AIDS Hurt? Educating Young Children About AIDS by Sylvia Villarreal, MD (1992)*

100 Questions and Answers About AIDS: A Guide for Young People by Michael Thomas Ford (1992)*

*Both available for purchase from http://www.amazon.com

Chapter 3 Being Tested

What the HIV antibody test can tell you

The standard tests to determine whether you are infected with HIV are based on detection of antibodies to HIV in the blood, not of the virus itself (11). Different types of antibody tests exist such as the enzyme-linked immunosorbent assay (ELISA) and simple rapid (S/R) tests. In recent years, tests have been developed that detect HIV antibodies in saliva and urine.

The first antibody test a person gets is called a screening test. If the screening test is negative, it means that no antibodies were found. The person tested is considered HIV-negative and confirmatory tests are not necessary. If the screening test

is repeatedly positive, it must be confirmed. Confirmation can be done by using special tests, e.g. Western Blot or line immunoassays (LIA). It is also possible to confirm a positive result by using combinations of ELISA or S/R tests. Although the confirmation can be done on the same sample of



blood, it is preferable to do the confirmation on a second blood sample in order to avoid any errors.

HIV screening tests can sometimes give false-positive readings, especially in populations where HIV is not present in high numbers, which is why confirmatory testing is always done on positive screening test results. This confirmation is needed to rule out false-positive screening results.

In regard to the accuracy of the antibody tests:

It takes, on average, 25 days for an HIV test to show positive after a person becomes infected with HIV. This is a much shorter timeframe than before the introduction of very sensitive tests now used.

If a person has been infected very recently, the test may show a negative result.

- When saliva and urine are tested, it takes longer for antibodies to become detectable.
- More than 99 percent of infected persons will show positive after three months.

The HIV antibody test and employment

In the vast majority of occupations and occupational settings, work does not involve a risk of transmitting HIV between workers or from worker to client. The following recommendations have been put forward on AIDS and the workplace.

- Pre-employment HIV/AIDS testing as part of assessing fitness to work is unnecessary and should NOT be required. This applies to both direct methods such as HIV testing and indirect assessment of risk behaviours and questioning the applicant about HIV tests already taken. Pre-employment HIV/AIDS screening for insurance or other purposes raises serious concerns about discrimination, and merits close scrutiny.
- For persons currently employed, HIV/AIDS screening, whether direct or indirect, should NOT be required.
- All medical information, including HIV/AIDS status, must be kept confidential.
- Employees should not be required to inform the employer regarding their HIV/AIDS status.
- Persons in the workplace who are HIV-infected (or perceived to be) must be protected from stigmatization and discrimination by co-workers, unions, employers and clients. Information and education are essential to maintain a climate of mutual understanding necessary to ensure this protection.
- HIV-infected employees should not be discriminated against with respect to their access to and receipt of benefits from statutory social security programmes and occupationally-related schemes.
- HIV infection alone does not limit fitness to work. If fitness to work is impaired by HIV-related illness, reasonable alternative working arrangements should be made.

"Persons in the workplace who are HIVinfected (or perceived to be) must be protected from stigmatization and discrimination by co-workers, unions, employers and clients."

HIV infection is not a cause for termination of employment. As with many other illnesses, persons with HIV-related illnesses should be allowed to work for as long as they are medically fit for available, appropriate work (18).

While these measures are designed to protect your rights if you are HIV-infected, you also have a responsibility to adopt behaviour that does not put others in your workplace at risk of infection.

The HIV antibody test and pregnancy

If you or your partner are concerned about your HIV status, and you are thinking about having a baby, the HIV antibody test may help clarify your choices.

HIV testing should be available, with pre- and post-test counselling, on a voluntary, confidential basis. You and your sex partner should be counselled on the implications that a positive test result will have for both of you, for the fetus and for the infant if pregnancy is considered. An HIV-infected woman can transmit HIV to her infant. The most likely time for an HIV-infected pregnant woman to pass the virus on to her baby is either in the very early stages or in the advanced stage of her infection. Thus, the risk of transmission ranges from low (if the HIV-infected woman has no signs and symptoms) to high (if she has AIDS). The transmission rate ranges from 12% to over 30%.

If you are pregnant and HIV-infected, you should be counselled on the options of continuing or terminating your pregnancy (where abortion is legal) and about reducing mother-to-child transmission (MTCT) through treatment with zidovudine (sometimes called ZDV or AZT) during your pregnancy (see page 32 for more information).

Pregnancy does not appear to accelerate the progression of the clinical course of HIV infection.

Chapter 4 Living with HIV and AIDS

Coping with confirmed HIV infection

Learning that you are infected with HIV will change your life dramatically. You may experience a wide range of emotions—fear, loss, grief, depression, denial, anger, anxiety. No matter how reassuring the doctor, how effective drug therapies are now and will become, how minimal the physical impact of the infection, or how intellectually prepared you may be, your need for counselling and support will be great.

The psychological issues faced by most persons with HIV infection revolve around uncertainty. Your future hopes and expectations, your relationships and your

career will all require some adjustment in order for you to cope with your illness and lead a happy, productive life.

The impact on your health

The impact to your health is likely to depend on the stage of infection you have reached when you discover you are HIVpositive, the psychological support available to you, and your access to good medical care.

Soon after becoming infected with the virus, some people experience a brief flu-like illness with fever, swollen lymph glands, skin rash or cough. You may then remain perfectly fit and healthy for many years despite being infected. For approximately 50 percent of infected persons, the time between becoming infected and the appearance of the oppor-

Put your health first!

If you are HIV-infected, it is important to take care of your physical health to decrease the risk of progression toward a symptomatic form of AIDS (12).

- Adopt a healthy diet.
- Exercise regularly.
- Avoid alcohol and tobacco.
- Avoid stress.
- Avoid all forms of infection if possible because they could compromise your health.
- Do not use illicit drugs.
- See your doctor regularly.

tunistic infections that characterize AIDS is more than 10 years.

Antiretroviral combination therapy, while expensive, has been shown to slow the onset of AIDS and prolong life expectancy. Your quality of life could also be improved by the preventive and therapeutic use of drugs that fight off common opportunistic infections and other diseases to which HIV-infected person are vulnerable, such as tuberculosis. Active TB screening and contact tracing through sputum examination are also important for families with an HIV-positive member.

In addition to good medical care, psychological support-from family, friends

and counselling—is critical. In many countries, there are support groups made up of persons living with HIV and AIDS. There are also numerous support groups and resources to be found on the Internet (see Chapter 7).

The impact on your personal relationships

Partners are likely to suffer the consequences of HIV infection and disease as much as the infected person, albeit indirectly. This is so even if partners know that they are not HIVinfected themselves. Their lives are likely to experience the same kind of pressures and upheavals, and they can experience similar feelings of uncertainty, grief, loss and anger.

Do not lose hope!

Maintaining the quality of your life is just as important as maintaining your physical health. Here are two resources that recognize the physical, psychological, spiritual and social needs of persons living with HIV and AIDS.

POZ Magazine

http://www.thebody.com/poz/pozix .html

Body Positive http://www.bodypositive.org.uk/ homepage.html

Communication between the two partners and between partners and professional counsellors is important to foster understanding of the adjustments that will be needed. For example, adjustments in sexual behaviour are necessary to stop further



transmission of infection. Counselling can also address the physical and psychological changes and needs that the partners will experience.

If you have HIV, you have an opportunity to make others more aware of the disease. By educating others, you may decrease the prejudice against persons with HIV or AIDS. However, consider carefully to whom you reveal your HIV status. Misunderstanding and discrimination do exist, and can affect you and the ones you love. Again, professional counselling can help with these issues.

Often, families are the main source of care and support for HIV-infected persons, and the type of care required may change depending on the stage of the infection. Counselling for family members, both as individuals and as the family unit, can be very important, particularly as the disease progresses.

The impact on your work life

How your work life is impacted will depend on how you feel physically and mentally, and at what stage your infection is discovered. Experience has shown that persons with HIV infection, with or without symptoms, should keep working as long as possible. After the initial period of coming to terms with HIV infection, there usually comes a period of wanting to move on with life—and work can be an important part of this transition.

Although you are not obliged to inform your employer and colleagues of your HIV status, certain circumstances may make it necessary for you to do so. If your job calls for you to travel, for example, you may need to go to countries where entry depends on a certificate that shows you are not HIV-infected. In addition, you may require certain vaccinations. Theoretically, you could become infected by the "live" but weakened pathogens in certain vaccines, particularly if your immune system has already been damaged by HIV. It is always best to consult your physician to determine the risks involved with vaccines or if alternatives exist.

Your workplace rights as an UN employee

The United Nations is committed to workplace rights for all persons, regardless of their HIV status. HIV infection or AIDS is not considered a basis for terminating your employment. If your fitness to work is impaired by HIV-related illness, reasonable alternative working arrangements should be made. The UN believes that staff members with AIDS should enjoy the same health and social protections as other UN employees suffering from serious illness.

The complete UN HIV/AIDS Personnel Policy is included at the beginning of this booklet. Also, turn to pages 25-26 in Chapter 3 for more information on recommendations regarding AIDS and the workplace.

HIV and your infant's health

Having a baby

Pregnancy is something you and your partner will need to discuss very carefully with your physician and possibly your counsellor if either or both of you are infected. It is very important to receive medical care early in your pregnancy.

Your HIV treatment should not change very much from what it was before you became pregnant. If you decide to continue your pregnancy, talk with your doctor about how you can prevent giving HIV to your baby. The chances of passing HIV to your baby before or during birth are about 15-25 percent in developed countries and 25-45 percent in developing countries. Treatment with zidovudine (sometimes called ZDV or AZT) associated with replacement feeding has been shown to greatly lower this risk.



Although you are pregnant, you should still use condoms each time you have sex to avoid

contracting other diseases and to avoid spreading HIV. Even if your partner already has HIV, he should still use condoms. After birth, your baby should be tested for



HIV, even if you took ZDV and/or other drugs during pregnancy. Talk with your doctor about your baby's special medical needs and any medications he or she will need (19).

Breastfeeding

Breastfeeding is normally the best way to feed an infant. However, if a mother is HIV-infected, it may be preferable to replace breastmilk to reduce the risk of HIV transmission to the infant. The risk of replacement feeding should

be less than the potential risk of HIV transmission through infected breastmilk, so that infant illness and death from other causes do not increase. Otherwise, there is no advantage to replacement feeding. According to joint guidelines from UNAIDS, UNICEF and WHO (20), the following issues should be considered:

- replacement feeding needs to provide all the infant's nutritional requirements as completely as possible;
- breastmilk substitutes must be prepared and given hygienically to avoid contamination with bacteria. This requires access to clean water and fuel;
- breastmilk substitutes must be affordable to families; and
- affordable family planning must be accessible, as women who do not breastfeed lose the child-spacing benefits that breastfeeding can provide.

Childhood immunizations

Some parents may worry that their HIV-infected children might be adversely affected by routine childhood immunizations. In response, WHO and UNICEF have issued the following guidelines. HIV-infected children should be immunized against diphtheria, tetanus and pertussis (with DTP); poliomyelitis (with OPV or IPV); and measles (with measles vaccine), according to standard schedules. Children with known or suspected HIV infection are at increased risk of severe measles, and these children should be given an extra dose of measles vaccine as soon after six months as possible, with the scheduled dose given at nine months as usual.

Parents of HIV-infected children are often HIV-infected themselves and have a higher incidence of tuberculosis than the general population. Early protection against tuberculosis with BCG immunization is therefore recommended for HIV-infected children who are not symptomatic. Symptomatic HIV-infected children, however, should not be immunized with BCG (21) or yellow fever vaccine.

Chapter 5 A Global Overview of the Epidemic

By the end of 1998, the number of people living with HIV is estimated to have grown to 33.4 million, according to estimates from UNAIDS and WHO. Most of these people do not know that they are infected. The epidemic has not been overcome anywhere. Virtually every country in the world saw new infections in 1998 and the epidemic is frankly out of control in many places.

More than 95 percent of all HIV-infected people now live in the developing world, which has experienced 95 percent of all deaths to date from AIDS. These deaths are largely among young adults who would normally be in their peak productive and reproductive years. The multiple repercussions of these deaths are reaching crisis level in some parts of the world. Whether measured against the yardstick of deteriorating child survival, crumbling life expectancy, overburdened health care systems, increasing orphanhood, or bottom-line losses to business, AIDS has never posed a bigger threat to development.

According to UNAIDS/WHO estimates, 11 men, women and children around the world were infected per minute during 1998—close to 6 million people in all. One-tenth of newly-infected people were under age 15, which brings the number of children now alive with HIV to 1.2 million. Most of them are thought to have acquired their infection from their mother before or at birth, or through breastfeeding.

While mother-to-child transmission can be reduced by providing pregnant HIVpositive women with antiretroviral drugs and alternatives to breastmilk, the ultimate



Hot zones of HIV around the world

Region	Epidemic started	Adults and children living with HIV/AIDS	Adults and children newly infected with HIV in 1998	Adult prevalence rate ¹	Percentage of HIV-positive adults who are women	Main mode(s) of transmission for those living with HIV/AIDS ²
i Africa	late '70s—early '80s	22.5 million	4.0 million	8.0%	50%	Hetero
and Middle East	late '80s	210,000	19,000	0.13%	20%	IDU, Hetero
south-east Asia	late '80s	6.7 million	1.2 million	0.69%	25%	Hetero
nd Pacific	late '80s	560,000	200,000	0.068%	15%	IDU, Hetero, MSM
д	late '70s—early '80s	1.4 million	160,000	0.57%	20%	MSM, IDU, Hetero
	late '70s—early '80s	330,000	45,000	1.96%	35%	Hetero, MSM
ope and Central Asia	early '90s	270,000	80,000	0.14%	20%	IDU, MSM
rope	late '70s—early '80s	500,000	30,000	0.25%	20%	MSM, IDU
ca	late '70s—early '80s	890,000	44,000	0.56%	20%	MSM, IDU, Hetero
d New Zealand	late '70s—early '80s	12,000	600	0.1%	5%	MSM, IDU
		33.4 million	5.8 million	1.1%	43%	

2 MSM (sexual transmission among men who have sex with men), IDU (transmission through injecting drug use), Hetero (heterosexual transmission). 1 The proportion of adults (15 to 49 years of age) living with HIV/AIDS in 1998, using 1997 population numbers.

aim must be effective prevention for young women so that they can avoid becoming infected in the first place. Unfortunately, when it comes to HIV infection, women appear to be head-

The entire text of the AIDS Epidemic Update, including regional overviews and information on factors fuelling the epidemic today, is available from UNAIDS at http://www.unaids.org

ing for an unwelcome equality with men. While they accounted for 41 percent of infected adults worldwide in 1997, women now represent 43 percent of all people over age 15 living with HIV and AIDS. There are no indications that this equalizing trend will reverse.

Since the start of the epidemic around two decades ago, HIV has infected more than 47 million people. And though it is a slow-acting virus that can take a decade or more to cause severe illness and death, HIV has already cost the lives of nearly 14 million adults and children. An estimated 2.5 million of these deaths occurred during 1998, more than ever before in a single year.

Chapter 6 The UN Response to AIDS

Meeting the complex long-term challenge of HIV/AIDS calls for an expanded response. Direct health interventions and action to influence AIDS prevention and care must be pursued and intensified, while innovative action must address the broader context of the epidemic, including its socio-economic causes and consequences.

The Joint United Nations Programme on HIV/AIDS (UNAIDS) was established in January 1996 for this purpose. UNAIDS is a cosponsored programme that brings

together the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP), the United Nations Population Fund (UNFPA), the United Nations International Drug Control Programme (UNDCP), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO) and the World Bank in a common effort against the epidemic.

The UNAIDS Cosponsors bring to this effort complementary mandates and multisectoral expertise, ranging from education and socio-economic development to women's reproductive health. They **The UNAIDS Mission**

As the main advocate for global action on HIV/AIDS, UNAIDS leads, strengthens and supports an expanded response aimed at preventing the transmission of HIV, providing care and support, reducing the vulnerability of individuals and communities to HIV/AIDS, and alleviating the impact of the epidemic.

are committed to joint planning and action, giving UNAIDS a "cooperative advantage". Benefits include more effective advocacy, more effective use of UN system resources through the sharing of costs, and greater coherence in United Nations support to national AIDS programmes.

Guiding principles

- Strengthening of countries' capacity for long-term action ranging from prevention and care to impact alleviation.
- Identification and use of technically-sound policies, strategies and tools.
- Societal and structural changes to reduce the vulnerability of women, young people, migrants, drug users, sexual and ethnic minorities, and other population groups.
- Supportive social, political and legal environments that allow individuals to exercise their responsibility to protect themselves and others from HIV infection.
- Entitlement to all human rights without discrimination, including discrimination

based on HIV infection status. These include the right to health, travel and privacy, the right to freedom from sexual violence and coercion, and the right to the information and means to prevent infection.

- Participation and partnership.
- National responsibility to design, implement and coordinate the response to HIV/AIDS at the country level. The role of external partners, including UNAIDS, is to support and build on national action.
- Complementarity. Rather than undertaking itself what can be or is already being done by others, UNAIDS attempts to facilitate these efforts and to fill gaps in action and research.

Global and local impact

At the global level, UNAIDS is the AIDS programme of the seven Cosponsors and is responsible for policy development and research, technical support, advocacy and coordination. At the same time, the seven cosponsoring organizations integrate HIV/AIDS-related issues and UNAIDS policies and strategies into their ongoing work.

At the country level, UNAIDS can best be seen as the sum of AIDS-related activities carried out by its Cosponsors with the backing of UNAIDS technical guidance and resources. In countries where some or all of the Cosponsors are present, their representatives meet regularly in a special UN Theme Group to jointly plan, implement and evaluate AIDS-related activities. UN staff who are HIV-positive are encouraged to participate in these Theme Groups for they lend both technical expertise and personal perspective to issues surrounding HIV infection. These staff also help educate their colleagues about the stigma and discrimination that infected individuals face in the workplace.

In addition, UNAIDS staff known as Country Programme Advisers are posted in selected countries to support the UN Theme Groups on HIV/AIDS, to strengthen cooperation with national partners and to provide technical support.

Important partners in national AIDS activities include governments (through both political leadership and the relevant ministries); community-based organizations; nongovernmental organizations (NGOs); the private sector; academic and research institutes; religious and other social and cultural institutions; and people living with HIV/AIDS.

The programme also supports research to develop new tools and innovative approaches for slowing the spread of HIV and improving the quality of life of people living with HIV/AIDS. Examples are vaccine development, vaginal microbicides for women, methods of reducing mother-to-child transmission of HIV, and improved methods for preventing and treating the common opportunistic infections in HIV-infected individuals.

Chapter 7 Staying Informed and Getting Help

The resources in this chapter and throughout the manual are included for information purposes only. Their inclusion does not imply any endorsement by the United Nations or UNAIDS. This is not a comprehensive list. Check your local area for additional resources and sources of support.

Resources on the Internet (United Nations)

UNAIDS — Joint United Nations Programme on HIV/AIDS http://www.unaids.org

United Nations Children's Fund http://www.unicef.org

United Nations Development Programme http://www.undp.org/hiv

United Nations Population Fund http://www.unfpa.org

United Nations International Drug Control Programme http://www.undcp.org

United Nations Educational, Scientific and Cultural Organization http://www.unesco.org

World Health Organization http://www.who.org

World Bank http://www.worldbank.org

Resources on the Internet (USA and UK)

AIDS Action League http://www.aidsactionleague.org

AIDS Survival Project http://www.atl.mindspring.com/~asp

AIDS Treatment News http://galen.library.ucsf.edu/sc/ahp/atn.html

AIDS Vaccine Advocacy Coalition http://www.avac.org AIDS Virtual Library http://planetq.com/aidsvl/index.html

American Foundation for AIDS Research (AmFAR) http://www.amfar.com

The Body — AIDS and HIV Information Resource http://www.thebody.com

Body Positive — Living Positively with HIV http://www.bodypositive.org.uk

Center for AIDS Prevention Studies http://www.caps.ucsf.edu

Centers for Disease Control and Prevention Division of HIV/AIDS Prevention http://www.cdc.gov/nchstp/hiv_aids

Clinical Care Options for HIV http://www.healthcg.com/hiv

Harvard AIDS Institute http://www.hsph.harvard.edu/organizations/hai

HIV/AIDS Treatment Information Service http://www.hivatis.org

HIV Coalition http://www.hivco.org

The Johns Hopkins University AIDS Service http://www.hopkins-aids.edu

Journal of the American Medical Association HIV Information Center http://www.ama-assn.org/special/hiv/hivhome.htm

International Association of Physicians in AIDS Care http://www.iapac.org

Managing Desire (information on safe sex, testing and counselling, etc.) http://www.managingdesire.org

Mother's Voices: United to End AIDS http://www.mvoices.org

National Association of People with AIDS http://www.napwa.org

National Institutes of Health Division on AIDS http://www.niaid.nih.gov/research/daids.htm National Minority AIDS Council http://www.nmac.org

Nevada AIDS Hotline Forum on Safe Sex http://www.thebody.com/cgi/safeans.html

POZ Magazine (information on living with HIV) http://www.thebody.com/poz/pozix.html

The Terrence Higgins Trust (London-based NGO to support people with HIV/AIDS) http://www.tht.org.uk

Treatment Action Group (advocates for research for a cure for AIDS) http://www.aidsnyc.org/tag

UC San Francisco AIDS Research Institute http://hivinsite.ucsf.edu/ari/ev.html

Resources on the Internet (International)

ABIA-Brazil http://www.alternex.com.br/~abia

Action for AIDS Singapore http://www.afa.org.sg/afa.htm

AIDES Federation National http://www.aides.org

AIDS Di Indonesia http://www.rad.net.id/aids

AIDS Infoshare Russia http://solar.rtd.utk.edu/ccsi/nisorgs/russwest/moscow/aidsinfo.htm

AIDS Net Austria http://www.aidshilfe.or.at

AIDS Organization of Iceland http://www.centrum.is/aids

Albergues de México I.A.P. — Private Institution for the Assistance of AIDS-HIV Patients http://www.agora.stm.it/albergues/alber_en.htm

Brazilian AIDS and STD Programme http://www.aids.gov.br

Coalition des organismes communautaires québécois de lutte contre le Sida http://pages.infinit.net/cocqsida Denmark AIDS Information System http://www.aids-info.dk

Deutsche AIDS-Hilfe (Germany: AIDS Information) http://www.aidshilfe.de (see also e.g. www.muenster.org/Aids-Hilfe)

HIV/AIDS in Zambia http://www.zamnet.zm/zamnet/health/aids/aidszam.htm

HIV-Nieuws-Amsterdam http://www.xs4all.nl/~tjerk

International Council of AIDS Service Organizations http://www.web.net/~icaso/icaso.html

Mexican Government Page on AIDS http://cenids.ssa.gob.mx

New Zealand AIDS Foundation http://nz.com/NZ/Queer/NZAF

SEA-AIDS in Thailand http://www.inet.co.th/org/unaids

SIDA en México http://jeff.dca.udg.mx/sida/sida.html

SIDAnet http://www.sidanet.asso.fr/home2.htm

Straight Talk in Uganda http://www.swiftuganda.com/~strtalk

UNAIDS in China http://www.unchina.org/unaids

UNAIDS in Namibia http://www.un.na/unaids

UNAPRO http://www.redkbs.com/unapro

Union Positiva http://www.unionpositiva.org

University of Zambia Medical Library http://www.medguide.org.zm

Resources by Phone

USA National

CDC National AIDS Hotline — 1 (800) 342-AIDS CDC AIDS Hotline in Spanish — 1 (800) 344-SIDA AIDS Action Council — 1 (202) 986-1300 American Foundation for AIDS Research (AmFAR) — 1 (212) 682-7440 National AIDS Clearinghouse — 1 (800) 458-5231 National Association for Children with AIDS — 1 (202) 639-5170 National Association of People with AIDS — 1 (800) 673-8538 National Minority AIDS Council — 1 (202) 544-1076 National Pediatric HIV Resource Center — 1 (800) 362-0071

United Kingdom

National AIDS Helpline — 0800 567123

Glossary

AIDS (acquired immunodeficiency syndrome) — The last and most severe stage of the clinical spectrum of HIV-related disease.

Antibodies — Immunoglobulin molecules in the blood produced by the body's immune system and directed against specific agents, such as "alien" viruses or bacteria. In HIV infection, the antibodies produced against the virus for some reason fail to protect against it.

Asymptomatic — Without symptoms.

Autologous transfusion — Transfusion of a person's own blood that has been donated and stored prior to need, or salvaged during or after an operation and reused.

Bacteria — Microbes composed of single cells that reproduce by division. Bacteria are responsible for a large number of diseases. Bacteria can live independently, in contrast with viruses, which can only survive within the living cells that they infect.

Bisexual — A person who is sexually attracted to both males and females.

Condom — One type of prophylactic that can prevent sexually transmitted diseases and AIDS.

DNA (deoxyribonucleic acid) — A nucleic acid that carries genetic information in all organisms except certain viruses, the RNA viruses, which include HIV.

ELISA — Enzyme-linked immunosorbent assay. A laboratory test to determine the presence of antibodies to HIV in the blood. A positive ELISA result generally is confirmed by the Western blot test.

False-negative HIV antibody test — A negative test result that suggests a person is not HIV-infected when, in fact, he or she is infected.

False-positive HIV antibody test — A positive test result that suggests a person is HIV-infected when, in fact, he or she is not infected.

Heterosexual — A person sexually attracted to persons of the opposite sex. The word "straight" has become synonymous with heterosexual.

High-risk behaviour — Activities that put an individual at greater risk of developing a particular disease. High-risk activities associated with AIDS include unprotected sexual intercourse and sharing of needles and syringes.

HIV (human immunodeficiency virus) — The retrovirus that causes AIDS in humans.

HIV-1 — The retrovirus that is the principal worldwide cause of AIDS.

HIV-2 — A retrovirus closely related to HIV-1 that also causes AIDS in humans, found principally in West Africa.

HIV-antibody-negative — Containing no antibodies to HIV.

HIV-antibody-positive — Containing antibodies to HIV.

Homosexual — A person sexually attracted to persons of the same sex. Homosexuals include males (gays) and females (lesbians).

IDU — Injecting drug user

Immune system — All of the mechanisms that act to defend the body against external agents, particularly microbes (viruses, bacteria, fungi and parasites).

Incubation period — The period of time between entry of the infecting pathogen into the body and the first symptoms of the disease.

Kaposi's sarcoma — A cancer or tumour of the walls of the blood vessels or the lymphatic vessels.

Lymphadenopathy — Swelling of the lymph nodes. Persistent and generalized lymphadenopathy is one of the early clinical signs of HIV infection.

Maternal antibodies — In an infant, these are antibodies that have been passively acquired from the mother *in utero*. Because maternal antibodies to HIV continue to circulate in the infant's blood up to the age of 15-18 months, it is difficult to determine whether the infant is infected.

MSM —Men who have sex with men.

Opportunistic infection — An infection with a micro-organism that does not ordinarily cause disease, but that becomes pathogenic in a person whose immune system is impaired, as by HIV infection.

Pathogen — An agent such as a virus or bacteria that causes disease.

Plasma — The fluid portion of the blood.

Retrovirus — An RNA-containing virus that can transcribe its genetic material into the DNA of its host's cells by the action of an enzyme called reverse transcriptase. This is the reverse of the usual, or DNA-to-RNA, transcription.

RNA (ribonucleic acid) — A nucleic acid associated with the control of chemical activities inside a cell. Some viruses, including HIV, carry RNA instead of the more usual DNA.

Semen — Fluid produced by the seminal vesicles and the prostate that contains the spermatozoa. Semen can contain cells infected with the AIDS virus and is consequently able to transmit the infection to sexual partners.

Seroconversion — The development of antibodies in response to an antigen. With HIV, seroconversion usually occurs 4-12 weeks after infection is acquired, but in a very few cases, it has been delayed for six months or more.

Serological testing — Testing of a sample of blood serum.

Seronegative — Showing negative results in a serological test.

Seropositive — Showing positive results in a serological test. A person who is seropositive for HIV antibody is considered HIV-infected.

Seroprevalence — The proportion of a given population with a particular marker in the blood, such as antibody to HIV, at a specific time.

Serosurvey — Systematic testing of sera from a group of persons to determine the frequency of a particular marker, such as antibody to HIV, in that population.

STD — Sexually transmitted disease(s). These are diseases that can be transmitted by means of sexual relations. AIDS is essentially a sexually transmitted disease. STDs are increasingly being referred to as sexually transmitted infections.

Symptomatic — With symptoms.

Viraemia — The presence of virus in the blood, which implies active viral replication.

Virus — Infectious agent (microbe) responsible for numerous diseases in all living beings. They are extremely small particles, and in contrast with bacteria, can only survive and multiply within a living cell at the expense of that cell.

White blood cells — Blood cells responsible for the defence of the body against foreign disease agents and microbes. HIV targets two groups of white blood cells called CD4+ lymphocytes and monocytes/macrophages.

References

- 1. Resolution WHA40.26. Global strategy for the prevention and control of AIDS. In: *Handbook of resolutions and decisions of the World Health Assembly and the Executive Board*. Vol. 3, 1985-1989. 2nd ed. Geneva, WHO, 1987.
- 2. UNAIDS. AIDS epidemic update, December 1998. Geneva, UNAIDS, 1998.
- 3. UNAIDS. *The public health approach to STD control*. UNAIDS Technical Update, May 1998. Geneva, UNAIDS, 1998.
- 4. UNAIDS. *Blood safety and AIDS*. UNAIDS Point of View, October 1997. Geneva, UNAIDS, 1997.
- WHO. Consensus statement on accelerated strategies to reduce the risk of transmission of HIV by blood transfusion. Unpublished (but available) WHO document WHO/GPA/INF/89.13. Geneva, WHO, 1989.
- 6. Safe blood and blood products. (Distance Learning Materials) WHO/GPA/CNP/93.2A-E. Geneva, WHO, 1993.
- 7. UNAIDS, UNICEF and WHO. *HIV and infant feeding: a review of HIV transmission through breastfeeding.* Geneva, UNAIDS, UNICEF and WHO, 1998.
- 8. UNAIDS. *Mother-to-child transmission of HIV*. UNAIDS Technical Update, October 1998. Geneva, UNAIDS, 1998.
- WHO. Guidelines on AIDS and first aid in the workplace. WHO AIDS Series No. 7. Geneva, WHO, 1990.
- 10. CDC. Should I be concerned about getting infected with HIV while playing sports? Internet site http://www.cdc.gov/nchstp/hiv_aids, November 1998.
- 11. WHO. Prevention of sexual transmission of human immunodeficiency virus. WHO AIDS Series No. 6. Geneva, WHO, 1990.
- 12. Montagnier L, ed. *AIDS facts and hopes*, 8th ed. Paris, MED-EDITION and The Pasteur Institute.
- 13. UNAIDS. *Microbicides for HIV prevention*. UNAIDS Technical Update, April 1998. Geneva, UNAIDS, 1998.
- WHO. Report of a WHO consultation on the prevention of human immunodeficiency virus and hepatitis B virus transmission in the health care setting. Unpublished (but available) WHO document WHO/GPA/DIR/91.5. Geneva, WHO, 1991.

- 15. WHO/GPA. *AIDS information for travellers* (brochure). Geneva, WHO Global Programme on AIDS, 1987.
- 16. Blood transfusion guidelines for international travellers. Unpublished (but available) WHO document WHO/GPA/INF/88.4. Geneva, WHO, 1988.
- Guidelines on sterilization and disinfection methods effective against human immunodeficiency virus (HIV), 2nd ed. WHO AIDS Series No. 2. Geneva, WHO, 1989.
- WHO. Statement from the consultation on AIDS and the workplace. Unpublished (but available) WHO document WHO/GPA/INF/88.7 (rev.1). Geneva, WHO, 1988.
- 19. Centers for Disease Control and Prevention. *Living with HIV/AIDS*. Atlanta, GA, CDC, 1998.
- UNAIDS, UNICEF, WHO. HIV and infant feeding: guidelines for healthcare managers and supervisors. Geneva, UNAIDS, UNICEF, WHO, 1998.
- 21. Joint WHO/UNICEF statement on early immunization for HIV-infected children. Weekly epidemiological record, 1989, **64**:48-52.

Further Reading from UNAIDS

See also http://www.unaids.org for a full listing of UNAIDS publications

Access to drugs. UNAIDS Best Practice Collection Technical Update, Geneva, UNAIDS, 1998 (available in English, French and Spanish)

AIDS and men who have sex with men. UNAIDS Best Practice Collection Point of View, Geneva, UNAIDS, 1998 (available in English, French and Spanish)

AIDS epidemic update: December 1999, Geneva, UNAIDS, 1999 (available in English, French, Spanish and Russian)

Blood safety and AIDS. UNAIDS Best Practice Collection Point of View, Geneva, UNAIDS, 1997 (available in English, French and Spanish)

Blood safety and HIV. UNAIDS Best Practice Collection Technical Update, Geneva, UNAIDS, 1997 (available in English, French and Spanish)

Counselling and HIV/AIDS. UNAIDS Best Practice Collection Technical Update, Geneva, UNAIDS, 1997 (available in English, French and Spanish)

Counselling and voluntary HIV testing for pregnant women in high HIV prevalence countries: Elements and issues, UNAIDS Best Practice Collection Key Material, Geneva, UNAIDS, 1999 (available in English, French and Spanish)

From Principle to Practice: Greater Involvement of People Living with or Affected by HIV/AIDS (GIPA), UNAIDS Best Practice Collection Key Material, Geneva, UNAIDS, 1999 (available in English, French and Spanish)

Gender and HIV/AIDS. UNAIDS Best Practice Collection Technical Update, Geneva, UNAIDS, 1998 (available in English, French and Spanish)

Knowledge is power: voluntary HIV counselling and testing in Uganda. UNAIDS Best Practice Collection Case Study, Geneva, UNAIDS, 1999 (available in English and French)

Mother-to-child transmission. UNAIDS Best Practice Collection Technical Update, Geneva, UNAIDS, 1998 (available in English, French and Spanish)

Prevention of HIV transmission from mother to child – Strategic options, UNAIDS Best Practice Collection Key Material, Geneva, UNAIDS, 1999 (available in English, French and Spanish)

The UNAIDS Report, Geneva, UNAIDS, 1999 (available in English, French and Spanish)

UNAIDS & WHO. *Report on the global HIV/AIDS epidemic*. Geneva, UNAIDS & WHO, 1998 (available in English, French and Spanish)

Women and AIDS. UNAIDS Best Practice Collection Point of View, Geneva, UNAIDS, 1997 (available in English, French and Spanish)

Notes

Credits

Writer/Editor and Designer: Mandy Mikulencak Illustrator: Estelle Carol

The Joint United Nations Programme on HIV/AIDS (UNAIDS) is the leading advocate for global action on HIV/AIDS. It brings together seven UN agencies in a common effort to fight the epidemic: the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP), the United Nations Population Fund (UNFPA), the United Nations International Drug Control Programme (UNDCP), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO) and the World Bank.

UNAIDS both mobilizes the responses to the epidemic of its seven cosponsoring organizations and supplements these efforts with special initiatives. Its purpose is to lead and assist an expansion of the international response to HIV on all fronts: medical, public health, social, economic, cultural, political and human rights. UNAIDS works with a broad range of partners—governmental and NGO, business, scientific and lay to share knowledge, skills and best practice across boundaries.





UNAIDS 20 avenue Appia 1211 Geneva 27, Switzerland Tel: (+41 22) 791 46 51 Fax: (+41 22) 791 41 65 E-mail: unaids@unaids.org Internet: http://www.unaids.org

UNAIDS Best Practice Collection **Key Material**