

Dear Home Study Participant:

You are about to learn about the nature of HIV and how it is affecting women in this course, AIDS : Women in Danger. You will also earn 3 clock hours of continuing education. The course work itself should take no more than 3 hours to complete. In order to receive full credit, please read the following directions carefully:

- *Should you need to read part of the course material and come back later to finish, you can reenter the site by simply going to the ABOUT US page. Scroll half way down the page to the picture of the book covers and click on the sentence under the picture. ("If you are returning to take an online course, click here.")*
- *Please enter your credit card information and pay for the course by using the standard ordering process at <http://www.medicalupdate.com>. You may prefer to do this at the end of the course. This is your choice. We will send you a certificate once your charge has been approved and you pass the exam.*
- *Read the material contained in this document. Study the designated web links..*
- *Take the pre and post-tests and click on the submit button to send it to us. NAB requires that you score 70% or better on the test in order to pass the course and earn your 3 hours of credit. 70% means you need to answer 14 out of the 20 questions correctly. If you fail the test, you may retake it for a fee of \$25.00. We will grade your test within one business day of its receipt. If you are facing a due date, please call us at 1-888-359-9600 and tell us. We will grade it as soon as possible.*
- *Once the test is received and passed, a certificate stating you have earned 3 hours of CEU's will be emailed to you immediately.*
- *You will receive an evaluation form in addition to your certificate. Your rating of the course will help us with the writing of other courses. We do appreciate your specific comments. We especially want to know if this testing method worked for you.*

We hope you enjoy learning at home studying: AIDS : Women in Danger

*Sincerely,
Genie Hamlet
CEO*

AIDS : Women in Danger

Today, women account for more than one quarter of all new HIV/AIDS diagnoses. The most recent statistics available from 2006 are from the CDC (Center for Disease Control). The CDC reports that 26% of newly diagnosed HIV/AIDS cases were females and 74% were males during 2006. HIV is the 5th leading cause of death among all women (black and white) aged 35-44 years old. It is the 4th leading cause of death for black women aged 45-54 years old. The only disease causing more deaths of women is cancer and heart disease. (2) CDC Surveillance Report May 2006

Women who are this young will seem out of place in nursing homes. We will explore the reasons why this epidemic, which used to primarily affect gay men, is now affecting women.

Case Study

Sarah Ann was a woman who had been happily married for twenty-four years. She met her husband in college, and they got married the day after he graduated from law school. They raised two children, began planning for retirement, and then suddenly he left her for a younger woman. She was devastated.

After the divorce, Sarah Ann began dating an old friend she reconnected with at her 30th high school reunion. Eventually, they became lovers. Sarah Ann wasn't worried about getting pregnant and didn't even think about using condoms. At age 53, when she had her annual mammogram and gynecological checkup, she was shocked to discover that her blood tested positive for HIV.

George, her lover, was as surprised as Sarah Ann was. He honestly had not known he was infected with the HIV virus, but confessed to having "sown some wild oats" after his divorce five years earlier. He had multiple partners, including men, during this time and said he must have contracted the virus from one of them.

George and Sarah Ann no longer see each other, but both will spend the rest of their lives worrying whether the HIV virus will develop into life threatening AIDS. At age 55, they feel they have no hope for a romantic relationship and no future - they are involved in a losing game, called "waiting for the beginning of the end." If Sarah Ann and George had known that AIDS knows no age limit, they might not have become a statistic.

U.S. verses Worldwide

The numbers can be overwhelming so sometimes an overview can be quite helpful in understanding this epidemic. The annual number of new HIV infections **in the U.S.** has declined in the past three years. In the 1980's, there were more than 150,000 new cases a year, in the 1990's the numbers were in the 45,000 - 49,000 range for new cases a year. In the 2000's the numbers are in the lower 40,000 range of new cases per year. (1) pg. 850-854

Worldwide, the number of women with HIV infections and AIDS has increased steadily. By the end of 2006, according to the World Health Organization, 17.9 million women were infected.

Worldwide, more than 90% of all HIV infections have resulted from heterosexual intercourse. Women are particularly vulnerable to heterosexual transmission of HIV. (6) Fact sheet #32 006
What Are CD4 Cells?

Let's take a moment to discuss CD4 cells. CD4 cells are one of several types of white blood cells that help the body determine what "foreign" material entering the body is harmful. They attack and kill bacteria, viruses, fungi, parasites...any substance the body recognizes as foreign and dangerous to its health. They are invaluable to a healthy immune system. They are what keeps us from falling sick to every allergen, every tiny "bug" that enters our body. So you can imagine why the HIV infected person's body is at such a disadvantage when it tries to fight bacteria and viruses without them. It is fighting without them because the HIV virus actually enters these CD4 cells and takes over their ability to make cells and turns them into its own "virus factory." It forces the person's very own CD4 cells to make HIV virus. And because the virus factory is inside one of the body's own cells, the other types of white blood cells do not recognize the CD4 cell which is infected and occupied as "foreign." It does not know it needs to be destroyed. Therefore the HIV virus can "hide" inside the CD4 cells for years, undetected and dormant. Or it can rapidly produce more and more HIV virus until the immune system is overwhelmed and cannot fight any longer since all CD4 cells are taken over by the invader. Billions of CD4 cells are used as a factory each day and ultimately explode as trillions of HIV virus cells force themselves out into the body. If this story was made into a Star Wars movie, it would convey the horror of alien invaders overtaking a human body leaving it vulnerable to every other foreign invader in the universe. (4 pg. 180-192) (5 pg. 16-80)

Biological Factors Causing Increased Risk for Women

The presence of CD4 cells below the lining of the vagina and other biological factors place women at higher risk for acquiring HIV infection than men. When an HIV-infected man ejaculates during intercourse, the semen he releases is rich in white blood cells. If he is HIV infected, the semen contains both virus free semen and virus-infected lymphocytes and macrophages. This semen encounters the broad surface of mucosal tissue in the vagina and on the cervix. These tissues contain high numbers of CD4 lymphocytes, which can become infected by HIV found in the semen.

There seems to be a connection between women and menopause. This relationship is being studied more intently as it becomes apparent that older women are at a greater risk for acquiring HIV. When women stop having periods and their estrogen and progesterone levels decrease, they enter a transition period called menopause. During and after menopause, some women experience vaginal dryness and thinning of the vaginal wall. This means that menopausal and post-menopausal women are more likely to have small tears and abrasions occur during sex, placing them at a greater risk for HIV.

Slight inflammation is a normal immune response to minor injuries but inflammation attracts large numbers of white blood cells, including HIV-infected cells in a man's semen, increasing the opportunity for infection.

Researchers are also trying to learn which regions of the female reproductive tract are most susceptible to HIV infection. The surface lining of the vagina lacks the CD4 cells so it is not believed that virus particles are capable of binding to the vaginal walls. This is good news if no tiny tears or bruising occur during intercourse. However, immediately below the epithelium, or the first layer of skin in the vagina is a large population of the CD4 receptors. The lymphocytes and macrophages (also known as white blood cells) are ripe for initial infection if bruising or tearing occurs. The irony of all this is that these cells are the body's first line of defense to fight infection. Yet, the HIV virus seeks out the very cells that the immune system produces to fight infection. When semen penetrates the vaginal epithelia, HIV-infected cells from a man's semen lead to the infection of the CD4 lymphocytes in the female. Since sexual intercourse causes vaginal inflammation in all women and especially in the older woman, which in turn alerts the body to send more immune cells (CD4's) to decrease the vagina's swelling, the risk of HIV infection is increased even more. Add insult to injury with a yeast infection or an open sore from another sexually transmitted disease, and the lesions offer gaping entry points to the virus. For all these reasons, women are at an increased risk for HIV. The main problem is they don't know it. (5 pg. 84-114)

Why Don't Women Realize They Are at Risk?

Why don't they know it? HIV and its risks are not talked about in womens' circles. Women know less about HIV than any group, and they do not consider themselves at risk. Older women think that once they can no longer become pregnant, that they do not need to use any protection. Young women are embarrassed to ask their partners to use a condom, or to ask about his sexual or drug history and decide to 'take the chance.' Older women who are separated, divorced, or widowed and just starting to date are at risk because of their exposure to new partners. In their first months and years of re-entering the dating scene, they may become sexually active with more than one partner. Their male partners may have had multiple sexual relationships, or they may have even experimented with drug use or homosexual relationships in their younger years. Consequently, the man may be harboring the HIV virus without even knowing it. Younger women's sexual freedom is part of their lifestyle and they have sex more casually and with more partners.

If a man or woman experiences minor flu like symptoms, they generally don't even consider the possibility that they could be infected with the HIV virus. They think of the flu, mononucleosis, or strep throat, and their doctor may not think to check for the HIV virus. The over-50 adults may attribute their aches and pains, swollen lymph glands, lack of energy, diarrhea, loss of appetite, frequent yeast infections, abdominal cramps, short term memory loss, chronic cough, and headaches to "old age". When caused by AIDS, these are called "retrovirus symptoms." Fifty to ninety percent of the time, these symptoms occur within a two to three week window after the initial exposure to the virus. (4) pg. 220-224

It is actually hard to recognize beginning HIV symptoms. Young or old adults that you may see in your facility may have had the virus for years, but have no idea what is wrong with them. By the time they are diagnosed, the disease may be in its advanced stages, and the patients may still be adjusting to the shock that AIDS is going to be the way their life ends.

More older people are diagnosed with full-blown AIDS, rather than just HIV. HIV diagnoses occur more frequently in younger persons, providing the opportunity for treatment to begin. Most patients who are over 55 when they are diagnosed with AIDS die within a year because their disease is in the advanced stages. They usually lose all social contact, are an embarrassment to their family, and may be the residents you are most likely to see in your facility.

Psychosocial Factors and the Role They Play

Psychosocial factors play a significant role in the course of HIV disease in women:

- In all age groups, HIV and AIDS are still considered diseases of men or gay men. This belief persists even in women who have contracted the disease themselves. This belief delays the mental and emotional acceptance process women have to go through in order to believe that they could actually have the HIV virus and need to see a doctor. Since women are generally diagnosed when they are in a later stage of the disease than men, the start of antiretroviral therapies and the use of prophylaxis for opportunistic infections are postponed. Opportunistic infections, which take advantage of an already weakened immune system, invade the body on all fronts. Women are most prone to urinary tract infections, yeast infections, and other STDs (sexually transmitted diseases). Women are diagnosed and treated later because they (and their doctors) have lower expectations for the possibility of an HIV infection since their way of life typically presents none of the risk factors associated with HIV infection.
- Women have less access than men to routine and state-of-the-art HIV/AIDS care. They are often less mobile than men and have less money to spend on health care, which may interfere with a woman's ability to comply with demanding treatment regimes. Gay men usually have strong support groups and very well organized national organizations that help them navigate the educational, language, cultural, and financial barriers. Women do not have this network and support system yet. Resources are in short supply.
- Older women tend to be the caregivers. They neglect their own healthcare to take care of others. They may devote themselves to the care of an HIV-infected son or the child of an infected daughter. They may end up taking care of a bisexual husband who contracts HIV. They place their own healthcare needs last in these family situations. More and more older women care caring for the infected grandchildren. As sons and daughters become more at risk themselves for STDs with increased sexual activity, so do the children they create out of these possible unions with an infected person. Guess who ends up taking care of this child born with HIV virus? Sexual intercourse is rarely a single occurrence between two members of a sexually active couple. Each instance of unprotected sexual intercourse with an infected female statistically increases the risk that an uninfected male will acquire HIV. (6) pg. 43 and (4) pg. 216) Thus, in the end, the rate of female-to-male HIV transmission becomes similar to the rate of male-to-female transmission. This explains why the prevalence of HIV infection is similar in both men and women in the developing world today. The fact that the older woman's sons and daughters are

more and more at risk for HIV if they are participating in unprotected sex directly affects her as the primary babysitter and caregiver for her grandchildren. She cares for the infected newborns and may come in contact with the HIV virus herself in this way.

- Women have less control over the means to practice low-risk sexual behavior: There is nothing they can do to protect themselves without the knowledge and consent of their male partner. Vaginal shields, sometimes called vaginal condoms, are available but expensive (about \$12 each), and the partner has to cooperate in order to penetrate the woman while keeping it in its proper position. If he refuses to have sex with the shield in place or to wear a condom, she is unable to offer any other methods of protection. If her partner insists or forces sex, she really is at his mercy.
- Although this does not generally apply to us in the United States, it inspires sympathy to note that in many societies and cultures outside of the U.S. women are generally unable to negotiate the frequency and nature of sexual interactions. Sometimes they are not even able to choose who their partner will be. When taking worldwide statistics into account, ninety percent of all HIV-infected women throughout the world have acquired their infection through heterosexual contact. Other important sources of HIV infection for women living in developing countries include transfusions with untested or poorly tested blood, non-sterile medical equipment used during childbirth; and the reuse of non-sterile needles and syringes to inject medications. (4) pg. 40

Socioeconomic Issues

Nearly 1 in 4 African Americans and 1 in 5 Hispanics live in poverty. Problems associated with poverty can lead directly or indirectly to increased HIV risk. It is easy to condemn behaviors leading to HIV infection until you realize these are the very people who are too sick to work but who need money and health care more than most. Socioeconomic problems associated with poverty include: limited access to high quality health care, the exchange of sex for drugs, money or to meet other needs; and high levels of substance use. A study among black women in North Carolina found that women with a diagnosis of HIV infection were more likely to be unemployed, to have had more sex partners, to use crack/cocaine; to exchange sex for money, shelter, or drugs or to receive public assistance. (3) pg. 1-46

Substance Abuse

As hard as it may be to understand drug abuse and to picture sharing injection equipment, it is easy to understand the despair many at risk women must feel. They are faced with financial dependence on male partners who may be abusive; they probably feel vulnerable at the hands of one who they need to be their protector but may introduce them to their 'deathbed'; they may use alcohol to deaden any depression or psych-

hological issues; they may be desperately poor to the point of trading sex for food or shelter; they may be homeless entirely. All these factors may lead to a welcome escape from the despair they constantly live with. Using drugs is one way "out" even for a few hours. Also, both casual and chronic users are more likely to engage in high risk behaviors, such as unprotected sex, when they are under the influence of drugs or alcohol.

Current Research

To confront the growing problem of women's susceptibility to HIV infection, the National Institute of Allergy and Infectious diseases (NIAID) has made women-focused research an important component of the Institute's AIDS research. NIAID is studying the course of HIV/AIDS in women through clinical trials to investigate gender specific differences in disease progression, complications, and treatment.

Topical Treatment

Scientists have developed and are testing a new combination of creams and gels known as microbicides that women apply before intercourse to protect themselves against HIV and other sexually transmitted organism. The chemicals in these creams can be used intravaginally or intrarectally to inactivate HIV and other bacteria, viruses, and fungi which are transmitted through semen. The research goal is to find several combinations of chemicals which are non-irritating, inexpensive, and unobtrusive so that women use them freely. Physical barriers, or course, have been around a long time but women prefer not to use them for oral sex or intercourse complaining they restrict enjoyment and are cumbersome and therefore embarrassing to use. (2) CDC Surveillance Report May 2006

NIAID is one of the organizations conducting clinical research on HIV/AIDS. To clinically evaluate safety of vaginal formulas of 'microbial products,' they are testing 23 combinations of topical microbicides. Because the virus is spread by attaching itself to very specific cells found within the vaginal mucosa, these cells are a big part of the research. The research found that when these cells were protected with a topical microbicide containing a high enough concentration of microbials, the virus could not attach to them, thus preventing transmission. These easy to use microbicides are a milestone in the worldwide fight against HIV/AIDS. (3) pg. 40-47

NIAID brings funding resources and expertise in topical microbicides discoveries. Women's Interagency HIV Study (WIHS) supports these clinical trials with volunteers who are willing to participate in studies. This organization works to investigate differences in HIV progression, complications and treatment as it applies to women only. The organization IPM (International Partnership for Microbicides) entered into

an agreement with NIAID to share information and expertise. IPM brings the ability to manufacture pilot studies and clinical trials to the table.

Further studies are being conducted by all these organizations to determine the exact gender differences which cause women to suffer more from recurrent vaginal yeast infections, severe pelvic inflammatory disease (PID) and an increased risk of pre-cancerous changes in the cervix including increased risk of cervical cancer. WHIS recently increased enrollment to evaluate outcomes of HAART drugs (antiretroviral therapy) which is the main treatment for HIV at this time. This organization is also studying the effect of co-infections which many women with HIV may have. Hepatitis C and the human papillomavirus are 2 viruses which affect many women with HIV. The effects of hormonal factors in women with HIV (including menopause) the impact on aging and HIV, and effects in cognitive and physical impairment are also being studied. (6)

NIAID, WIHS, IPM have websites with the latest information on research being conducted.

Other websites to check for the latest information on HIV and AIDS would be: AIDSinfo which is sponsored by the NIH (National Institute of Health) office of AIDS research. Their website is www.aidsinfo.nih.gov.

The National Library of Medicine, the CDC (Center of Disease Control), Health Resources and Service administration, and Centers of Medicare and Medicaid Services all have new and up to date information. Their website is:

NIAID is a component of the National Institute of Health. NIAID supports basic and applied research to prevent, diagnose, and treat infectious diseases such as HIV/AIDS and other sexually transmitted infections, influenza, tuberculosis, malaria, and illness from potential agents of bioterrorism. NIAID also supports research on basic immunology, transplantation and immune related disorders, including autoimmune diseases, asthma and allergies. Their website is: www.niaid.nih.gov.

The National Institute of Health - the National Medical Research Agency-includes 27 Institutes and Centers and is a component of the U.S.Department of health and human Services. It is the primary federal agency for conducting and supporting basic clinical and translational medical research, and it investigates the causes, treatments and cures for both common and rare diseases. Their website is: www.nih.gov.

The websites for the following organizations are available with up to date information. Please log onto each of these and read the latest statistics. Pay special attention to what is happening in your state. Review any new information and research for treatment.

1. CDC (Center for Disease Control) www.cdc.gov
2. NIH (National Institute of Health/AIDS Research) www.aidsinfo.nih.gov
www.cdc.gov
3. NIH (National Institute of Health) www.nih.gov
4. NIAID (National Institute of Health Office of AIDS Research) www.oar.nih.gov
5. IPM (International Partnership for Microbicides) www.nichd.nih.gov
6. WIHS (Women's Interagency HIV Study) www.ipm-microbicides.org

You will need to take the time to review current statistics and findings before taking the test. This will take about 15 minutes per site.

Bibliography

1. CDC. Current Trends AIDS in Women. 45:845-890 2006
2. CDC. HIV/AIDS Surveillance Reports 2005 and 2006, Atlanta, Georgia
3. Department of Health and Human Services CDC. 1-46 2007, 2008
4. The Amfar AIDS Handbook. The Complete Guide to Understanding HIV and AIDS. Darrell Ward, Norton and Co. 2000, 34-56, 216-278.
5. Medical Management of HIV Infections. 2002, pg 34-56
6. CDC Fact Sheet. Division for HIV/AIDS Prevention National Center for HIV/AIDS
7. Women Living With AIDS. National Center for Health Marketing. 2008

Categories of Illness Affecting HIV/AIDS Patients

Symptoms

Generally Present

Fever, weight loss, fatigue, malaise

Diffuse Pneumonia

Dyspnea, chest pain, hypoxemia, abnormal
Chest x-ray

Gastrointestinal Involvement

Esophagitis (sore throat, dysphagia)

Enteritis (diarrhea, abdominal pain,
Weight lost)

Proctocolitis* (diarrhea, abdominal pain,
Rectal pain)

Proctitis* (pain during defecation, diarrhea,
Itching, perianal ulcerations)

Bacteria/Fungus causing symptoms

Pneumocystis carinii
Cytomegalovirus
Epstein-Barr virus
Mycobacterium avium intracellulare
Candida albicans

Pneumocystis carinii
Cytomegalovirus
Mycobacterium tuberculosis
Mycobacterium avium intracellular
Candida albicans
Cryptococcus neoformans
Toxoplasma gondii

Candida albicans
Herpes simplex
Cytomegalovirus (suspected)
Giardis lamblia
Entamoeba histolytica
Isospora belli
Cryptosporidium
Strongyloides stercoralis
Mycobacterium avium intracellulare
Entamoeba histolytica
Campylobacter
Shigella
Salmonella
Chlamydia trachomatis
Cytomegalovirus
Neisseria gonorrhoea
Herpes simplex
Chlamydia trachomatis
Treponema pallidum

Neurological Involvement

Meningitis, encephalitis, headaches,
Seizures, dementia

Retinitis (diminished vision)

General

Weight loss or fatigue
Fever or night sweats

Dermatological

Skin discoloration, rash, or eruption

Cytomegalovirus
Herpes simplex
Toxoplasma gondii
Cryptococcus neoformans
Papovavirus
Mycobacterium tuberculosis
Cytomegalovirus
Toxoplasma gondii
Candida albicans

AIDS-related wasting syndrome
TB, MAI, lymphoma

Seborrheic dermatitis, Kaposi's,
Sarcoma, herpes zoster or simplex,
Molluscum contagiosum, psoriasis,
cosmophilic postular, folliculitis

**ESTIMATED NUMBER OF AIDS CASES AND RATES
FOR FEMALE ADULTS AND ADOLESCENTS, BY RACE/ETHNICITY**

<u>Race/Ethnicity</u>	<u>Cases</u>	<u>Rate</u> (cases per 100,000 population)
White, not Hispanic	1,747	2.0
Black, not Hispanic	7,093	45.5
Hispanic	1,714	11.2
Asian/Pacific Islander	92	1.6
American Indian/ Alaska Native	45	4.4
<hr/> Total*	<hr/> 10,774	<hr/> 8.6

Note: Data have been adjusted for reporting delays.

***Includes 83 female adults and adolescents of unknown race or multiple races.**

Revised June 2008

**PROPORTION OF AIDS CASES AMONG FEMALE
ADULTS AND ADOLESCENTS, BY TRANSMISSION CATEGORY**

Sex with injection drug user	12%
Injection drug use	27%
Sex with men of other or unspecified risk factor*	59%
High-risk heterosexual contact*	71%
Other/not identified†	2%

Note: Data have been adjusted for reporting delays and cases without risk factor information were proportionally redistributed.

***Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.**

†Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

PROPORTION OF HIV/AIDS CASES AMONG FEMALE ADULTS AND ADOLESCENTS, BY TRANSMISSION CATEGORY AND AGE AT DIAGNOSIS

Transmission category	Age at diagnosis (in years)				
	13-19	20-24	25-34	35-44	≥ 45
	%	%	%	%	%
Injection drug use	14	14	17	21	21
High-risk heterosexual Contact*	85	85	81	78	77
Other/not identified†	1	1	1	1	2

Note: Data include persons with a diagnosis of HIV infection regardless of AODS status at diagnosis. Data from 33 states with confidential names-based HIV infection reporting since at least 2001. Data have been adjusted for reporting delays and cases without risk factor information were proportionally redistributed.

***Heterosexual contact with a person known to have, or to be at high risk for HIV infection.**

†Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.

Revised June 2008

**ESTIMATED NUMBER OF HIV/AIDS CASES AND RATES FOR
FEMALE ADULTS AND ADOLESCENTS, BY RACE/ETHNICITY**

<u>Race/Ethnicity</u>	<u>Cases</u>	<u>Rate</u> (cases per 1000,000 population)
White, not Hispanic	1,682	3.0
Black, not Hispanic	6,389	60.2
Hispanic	1,405	15.8
Asian/Pacific Islander	89	3.8
American Indian/ Alaska Native	57	7.5
<hr/> Total*	<hr/> 9,708	<hr/> 12.2

Note: Data include persons with a diagnosis of HIV infection regardless of AIDS status at diagnosis. Data from 33 states with confidential name-based HIV infection reporting since at least 2001. Data have been adjusted for reporting delays.

***Includes 87 female adults and adolescents of unknown race or multiple races.**

Revised June 2008

**AIDS CASES AMONG FEMALE ADULTS AND ADOLESCENTS
ATTRIBUTED TO INJECTION DRUG USE OR HIGH-RISK
HETEROSEXUAL CONTACT, BY REGION,**

<u>Region</u>	<u>Injection drug use</u>	<u>High-risk heterosexual contact*</u>
Northeast	6,189	10,872
Midwest	1,397	3,258
South	5,986	19,188
West	1,310	2,846

Injection drug use N=14,882

High-risk heterosexual contact* N=36,164

Note: Data have been adjusted for reporting delays and cases without risk factor information were proportionally redistributed.

***Heterosexual contact with a person known to have, or to be at high risk for , HIV infection.**

Revised June 2008

**REPORTED AIDS CASES AMONG FEMALE ADULTS AND
ADOLESCENTS, BY REGION AND RACE/ETHNICITY**

<u>Region</u>	<u>No. of cases</u>	<u>Race/Ethnicity</u>	
Northeast	3,235 *	White, not Hispanic	419
		Black, not Hispanic	1,923
		Hispanic	821
Midwest	1,084*	White, not Hispanic	255
		Black, not Hispanic	723
		Hispanic	88
South	5,378*	White, not Hispanic	827
		Black, not Hispanic	4,005
		Hispanic	482
West	887*	White, not Hispanic	284
		Black, not Hispanic	287
		Hispanic	251

*Region totals include females of unknown race or multiple races.

**FEMALE ADULTS AND ADOLESCENTS 15 TO 44 YEARS OF AGE
REPORTED TO BE LIVING WITH HIV INFECTION (NOT AIDS),
N=47,986***

<u>STATE</u>	<u>NUMBER</u>
NEVADA	363
ARIZONA	528
UTAH	104
IDAHO	45
WYOMING	24
COLORADO	391
NEW MEXICO	88
NORTH DAKOTA	14
SOUTH DAKOTA	47
NEBRASKA	125
KANSAS	169
OKLAHOMA	270
TEXAS	4,315
MINNESOTA	501
IOWA	98
MISSOURI	660
ARKANSAS	474
LOUISIANA	1,940
MISSISSIPPI	1,114
WISCONSIN	346

MICHIGAN	965
INDIANA	549
OHIO	1,247
KENTUCKY	161
TENNESSEE	1,410
ALABAMA	1,246
GEORGIA	1,404
SOUTH CAROLINA	1,520
NORTH CAROLINA	2,688
FLORIDA	8,293
VIRGINIA	1,795
WEST VIRGINIA	142
PENNSYLVANIA	1,338
NEW YORK	7,990
NEW HAMPSHIRE	78
CONNECTICUT	462
NEW JERSEY	3,386
ALASKA	43
AMERICAN SAMOA	1
GUAM	6
NORTHERN MARIANA ISLANDS	0
PUERTO RICO	1,079
VIRGIN ISLANDS, U.S.	83

