AIDS Report Essay, Research Paper

What is AIDS?AIDS is the more evolved, life threatening, form of HIV. AIDS stands for Acquired Immunodeficiency Syndrome. The name comes from the fact that HIV severely damages the immune system, the body?s most important defense against disease.

History of AIDSScientists are not certain how, when, or where the AIDS virus evolved and first infected people. Researchers have shown that HIV-1 and HIV-2 are more closely related to simian immunodeficiency viruses, which infect monkeys, than to each other. Thus, it has been suggested that HIV evolved from viruses that originally infected monkeys in Africa and was somehow transmitted to people.

Scientists believe HIV infection became widespread after significant social changes took place in Africa during the 1960’s and 1970’s. Large numbers of people moved from rural areas to cities, resulting in crowding, unemployment, and prostitution. These conditions brought about an increase in cases of sexually transmitted diseases, including AIDS. HIV may have been introduced into industrialized nations several times before transmission was sustained and became widespread.

AIDS was first identified as a “new” disease by physicians in Los Angeles and New York City in 1980 and 1981. The doctors recognized the condition as something new because all the patients were previously healthy, young homosexual men suffering from otherwise rare forms of cancer and pneumonia. The name AIDS was adopted in 1982. Scientists soon determined that AIDS occurred when the immune system became damaged, and that the agent that caused the damage was spread through sexual contact, shared drug needles, and infected blood transfusions.

After HIV was isolated as the cause of AIDS in 1983 and 1984, researchers developed tests to detect HIV infection. These tests have also been used to analyze stored tissues from several people who died from the late 1950’s and 1970’s. Scientists have concluded that some of these people died from AIDS.

Cases of HIV infection reported worldwide have risen dramatically since the early 1980’s. During the early 1990’s, an estimated 1 million people in the United States and millions more throughout the world had HIV infection or AIDS.

Efforts to control the spread of AIDS have had some success. For example, among homosexual men in the United States, HIV infection is spreading more slowly than it did in the early 1980’s. This is due entirely to education about prevention and the resulting changes in sexual behavior, such as decreased numbers of sexual partners and increased use of condoms. HIV blood tests, which became available in 1985, caused a gradual decline in transfusion-related cases in the late 1980’s. The rate of AIDS in other groups rose, however, during the 1980’s and into the 1990’s. These groups include heterosexual men and women, children born to HIV-infected women, people who inject drugs, and younger homosexual men.

CauseAIDS is caused by the human immunodeficiency virus HIV. By killing or impairing cells of the immune system, HIV progressively destroys the body?s ability to fight infractions and certain cancers. Individuals diagnosed with AIDS are susceptible to life threatening diseases called opportunistic infections, which are caused by microbes that usually do not cause illness in healthy people.

Symptoms/ Incubation periodMany people do not develop any symptoms when they first become infected with HIV. Some people however have a flu like illness within a month or two after being exposed. Other symptoms would include enlarged lymph glands, tiredness, fever, loss of appetite and weight, diarrhea, yet infections of the mouth and vagina, and night sweats. Also often getting many bacterial infections like infections of the intestinal track, lungs, brain, eyes, and other organs. Cancers are also signs of HIV, due to the fact that your immune system is down.

More severe symptoms may not surface for a decade or more after HIV first enters the body in adults, or within two years in children born with HIV. Some people may have symptoms within a few months, where others may be symptom free for more than 10 years.

As the immune system deteriorates, a variety of complications begin to surface. One of the fist highly noticeable symptoms experienced is the large lymph node that may be enlarged for more than three months. Other symptoms often experience months to years before the onset of AIDS

PreventionTo prevent transmission of HIV, sexual conduct with anyone that is infected or might be infected with the virus must be avoided. The most effective preventive strategies are to refrain from all sexually intimacy or restrict sexual intimacy to one uninfected partner. Health authorities recommend that a condom be used every time sexual occurs with a person who is infected with HIV or whose infection is unknown. Drug users should seek help to stop taking drugs and should never share needles, syringes, or other injection equipment. Also, women during pregnancy and labor to their newborn babies should not breast feed their infants.

Treatment/ complicationsTreatments have been developed, but no cures for HIV or AIDS have yet been found. Scientists have worked to understand how HIV infects and damages human cells since AIDS was identified. From this they created a drug called AZT and other similar drugs that block an enzyme called reverse transcripts to reproduce. AZT and other reverse transcript inhibitors produce toxic side effects, including severe anemia that requires blood transfusions. HIV also develops resistance to these drugs when they are given singly. Doctors combine the drugs and vary the order in which they are given to improve their effectiveness.

High-risk groups/ Numbers/ Who gets it?In the United States, 513,486 cases of people with AIDS had been reported to the center of Disease Control and Prevention. Among these individuals, 319,849 had died by the end of 1995. AIDS is now the leading killer of people aged 15 to 44 in this country. World wide and estimated 27.9 million people had become HIV infected through mid 1996 and 7.7 million had developed AIDS. Various projections indicate that by the year 2000 (NOW) between 40 and 110 million people worldwide will be HIV infected. This epidemic is growing more rapidly among minoritypopulations and is a leading killer in African American males. According to the U.S. Centers for Disease Control the prevalence of AIDS is six times higher in African Americans and three times higher among Hispanics than among whites. HIV and AIDS also effect a great deal of homosexual and bisexual men, but is becoming more frequent among heterosexual men and women.