Mode of transmission--Person to person transmission through unprotected (heterosexual or.1 homosexual) intercourse; contact of abraded skin or mucosa with body secretions such as blood, CSF or semen; the use of HIV-contaminated needles and syringes, including sharing by intravenous drug users; transfusion of infected blood or its components; 4 / ACQUIRED IMMUNODEFICIENCY SYNDROME and the transplantation of HIV-infected tissues or organs.The revised African AIDS case definition incorporates HIV serolog- ical testing, if available, and includes a few indicator diseases (tuberculosis, pneumococcal disease and non-typhoid salmonellosis, which are not diseases of high virulence) as diagnostic in seropositive individuals.This interaction has resulted in a parallel pandemic of tuberculosis: in some urban sub-Saharan African populations where 10%-15% of the adult population have dual infections (Mycobacterium tuberculosis and HIV), annual incidence rates for tuberculosis increased 5- to 10-fold during the latter half of the 1990s.Identification--Acquired Immunodeficiency syndrome (AIDS) is a term first used by epidemiologists concerned about the emergence in 1981 of a cluster of diseases associated with loss of cellular immunity in adults who had no obvious reason for presenting such immune deficien- cies.The 1993 definition continues to be generally accepted for clinical use in most industrialized countries; but it is often not used by developing countries, which lack adequate laboratory facilities for CD4 cell counts or for the histological or culture diagnosis of the surrogate indicator diseases.Routine use of prophylactic drugs to prevent Pneumocystis carinii pneumonia and other opportunistic infec- tions in most industrialized countries significantly postponed the develop- ment of AIDS and death seen before effective anti-HIV treatment had become routinely available.The only factor that has been consistently shown to affect progression from ACQUIRED IMMUNODEFICIENCY SYNDROME / 5 HIV infection to the development of AIDS is age at initial infection: adolescent and adults (males and females) who acquire HIV infection at an early age progress to AIDS more slowly than those infected at an older age.The primary determinants of sexual transmission of HIV are patterns and prevalence of sexual risk behaviours such as unprotected intercourse (no condom--a.k.a. unprotected sex) with many concurrent or overlapping sexual partners.Up to mid-1999, the only drug shown to reduce the risk of perinatal HIV transmission was azidothymidine (AZT) when administered orally after the 14th week of pregnancy and continued up to delivery; administered intravenously during the intrapartum period; and administered orally to the newborn for the first 6 weeks of life.Persons with latent tuberculous infection who are also infected with HIV develop clinical tuberculosis at an increased rate, with a lifetime risk of developing tuberculosis that is multiplied by a factor of 6 - 8.More than a dozen opportunistic infections and several cancers were considered to be sufficiently specific indicators of the underlying immu- nodeficiency for inclusion in the initial (1982) case definition of AIDS.The history of WHO AIDS surveillance started with a provisional clinical case definition without serological confirmation and progressed to a revised definition formulated in Bangui, Central African Republic in 1994.The clinical manifestations of HIV infection in infants and young children overlap with failure to thrive, inherited immunodeficiencies and other 1 2 / ACQUIRED IMMUNODEFICIENCY SYNDROME childhood health problems.A nonreactive supplemental test negates an initial reactive EIA test; a positive reaction supports it; an indeterminate result in the Western blot test calls for further evaluation.Other tests to detect HIV infection during the period after infection but prior to seroconversion are available; they

include tests for circulating HIV antigen (p24) and PCR tests to detect viral nucleic acid sequences.Even for infants born of HIV-infected women these tests are of limited diagnostic value--passively transferred maternal anti-HIV antibodies often cause falsely positive anti-HIV EIA tests in these children even up to the age of 15 months.Of the estimated 40 million persons (34 - 46 million) living with HIV infection or AIDS (HIV/AIDS) worldwide in 2003, the largest elements were estimated at 25-28.2 million in sub-Saharan Africa, 4.6 - 8.2 million in south and southeastern Asia, 13-1.9 million in Latin America and 800 000-1 million in North America.In the USA and other industrialized countries, annual HIV incidence decreased shortly before the mid-1980s and has remained relatively low since then in most groups.Other adverse interactions with HIV infection include pneumococcal infection, non-Typhi salmonellosis, falciparum malaria and visceral leishmaniasis.The severity of subsequent HIV-related opportunistic infections or cancers is, in general, directly correlated with the degree of immune system dysfunction.If diagnosed by standard histological and/or culture techniques, these dis- eases were accepted as meeting the surveillance definition of AIDS cases, provided other known causes of immunodeficiency were ruled out.This definition was broadened in 1987 to include additional indicator diseases and to accept some of the indicator diseases as a presumptive diagnosis if laboratory tests showed evidence of HIV infection.In addition, all HIV-infected persons with a CD4 cell count of under 200/mm3 or a CD4 T-lymphocyte percentage of total lymphocytes under 14%, regardless of clinical status, are regarded as AIDS cases.In the absence of effective anti-HIV treatment, the AIDS case-fatality rate is high: survival time in many developing country studies is often under 1 year; in industrialized countries 80%-90% of untreated patients used to die within 3-5 years after diagnosis.For diagnostic purposes a 3-test strategy for asymptomatic persons is recommended in populations with an HIV prevalence rate under 10% and a 2-test strategy in populations with higher rates.The pathogenicity of HIV-2 may be lower than that of HIV-1: they also have genotypic and phenotypic differences, with slower disease progression and lower rates of mother-to-child transmission for HIV-2.Occurrence-- AIDS was first recognized as a distinct clinical entity in 1981; in retrospect, however, isolated cases appear to have occurred during the 1970s and even earlier in several areas (Africa, Europe, Haiti, USA).HIV-1 is the most prevalent HIV type throughout the world; HIV-2 has been found primarily in western Africa, with cases also in countries linked epidemio- logically to western Africa.However, in the most severely affected countries in sub-Saharan Africa, annual HIV incidence has continued almost unabated at high levels.Outside sub-Saharan Africa, high HIV prevalence rates (more than 1%) in the 15-49 year old population have been noted in the Caribbean and in south and southeastern Asia.After direct exposure of health care workers to HIV-infected blood through injury with needles and other sharp objects, the rate of serocon- version is less than 0.5%, much lower than the risk of hepatitis B virus infection after similar exposures (about 25%).The presence of other STIs, especially if ulcerative, increases susceptibility, as may the fact of not being circumcised for males, a factor possibly related to the general level of penile hygiene.2) Theonlyabsolutelysurewaytoavoidinfectionthroughsex is to abstain from sexual intercourse or to engage in mutually monogamous sexual intercourse only with some- one known (preferably through serology) to be uninfected.The proportion of HIV-infected persons who, in the absence of anti-HIV treatment, will ultimately develop AIDS has been estimated at over 90%.Globally,

AIDS caused an estimated 3.1 million deaths in 2003 (2.5–3.5 million); the epidemic has continued growing, with estimates of 5 million new infections (4.2–5.8 million) and 2.5 million children (2.1–2.9 million) living with HIV/AIDS.For example, although the AIDS epidemic in the USA continues to affect primarily men who have sex with men, intravenous drug use (IDU) is the main source of infection in other countries such as the former Soviet Union.Free or cell-associated virus occurs in secretions and hence ulcerative or inflammatory STIs are a risk factor.Incubation period--Variable.Reservoir--.Humans.2.3.4.5.6.7.8.9