

B20-B21-B22-B23-B24 AIDS (Acquired Immuno-Deficiency Syndrome)

RATIONALE FOR SURVEILLANCE

AIDS is a disease targeted for reduced incidence, prevalence and transmission (9GPW, target 6.3). Control measures are based on prevention and care strategies. Surveillance is necessary to assess national needs in education, supplies, and health care and to anticipate spread in the community. Surveillance will provide epidemiological data used for national prevention and care plan and will be essential to evaluate the impact of control activities.

RECOMMENDED CASE DEFINITIONS

Different case definitions are used in different countries, depending on population factors (children, adults, relative occurrence of opportunistic infections) and on the laboratory infrastructure and training available. Current case definitions include:

- | | |
|--------------|---|
| (1) CDC 1987 | (4) WHO for surveillance (formerly Bangui/WHO/clinical) |
| (2) CDC/CD4 | (5) Expanded WHO for surveillance (formerly Abidjan) |
| (3) European | (6) Caracas/PAHO & revised Caracas/PAHO |
- (1-3: for sophisticated laboratory facilities) (4-6: for limited laboratory facilities)

1. Revision of the CDC surveillance case definition for the Acquired Immune Deficiency Syndrome. *Morbidity and Mortality Weekly Record*, August 14, 1987, **36** (suppl.): 1S-15S.
2. Case definitions for infectious conditions under public health surveillance. *Morbidity and Mortality Weekly Record*, May 2, 1987, **36** (RR-10): 5-6.
3. ANCELLE-PARK R. Expanded European AIDS case definition. *Lancet*, 1993; **341**: 441. *AIDS Surveillance in Europe*, Quarterly Report, 1993 (37).
4. BUEHLER JW, DE COCK K, BRUNET J-B. Surveillance definitions for AIDS. *AIDS* 1993, **7**(suppl. 1): S73-S81.
WHO case definitions for AIDS surveillance in adults and adolescents. *Weekly Epidemiological Record*, 1994, **69**(37): 273-275.
5. Grupo de trabajo sobre definición de casos de SIDA. *Boletín epidemiológico de la OPS*, 1989, **10**(4): 9-11 / Working group on AIDS case definition, *PAHO Epidemiological Bulletin*, 1989, **10**(4): 9-11.
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6. BUEHLER JW, DE COCK K, BRUNET J-B. Surveillance definitions for AIDS. *AIDS* 1993, **7**(suppl. 1): S73-S81.

1. 1987 CDC SURVEILLANCE DEFINITION FOR AIDS

1A. Without laboratory evidence of HIV infection (no other causes of immune suppression)

Indicator disease diagnosed definitively

- Candidiasis of the oesophagus, trachea, bronchi, or lungs
- Cryptococcosis, extrapulmonary
- Cryptosporidiosis with diarrhoea persisting >1 month
- Cytomegalovirus diseases of an organ other than liver, spleen, or lymph nodes in patient >1 month of age
- Herpes simplex virus infection causing a mucocutaneous ulcer persisting >1 month; or bronchitis, pneumonitis, or oesophagitis for any duration in a patient >1 month of age
- Kaposi sarcoma in a patient <60 years of age
- Lymphoma of the brain (primary) affecting a patient <60 years of age
- Mycobacterium avium* complex or *M. kansasii* disease, disseminated (site other than/in addition to lungs, skin, cervical or hilar lymph nodes)
- Pneumocystis carinii* pneumonia
- Progressive multifocal leukoencephalopathy

Toxoplasmosis of the brain in a patient >1 month of age
 In children <13: 2 or more bacterial infections within a 2-year period (septicaemia, pneumonia, meningitis, bone or joint infections...) or abscess of an internal organ or body cavity – excluding otitis media or superficial abscesses.

1B. With laboratory evidence of HIV infection

Indicator disease diagnosed definitively

Coccidioidomycosis, disseminated (at a site other than or in addition to lungs or cervical or hilar lymph nodes)

HIV encephalopathy

Histoplasmosis, disseminated (other than or in addition to lungs or cervical or hilar lymph nodes)

Isosporiasis with diarrhoea persisting >1 month

Kaposi sarcoma at any age

Lymphoma of the brain (primary) at any age

Non-Hodgkin's lymphoma

Any mycobacterial disease caused by other than *M. tuberculosis*, disseminated

Disease caused by *M. tuberculosis*, extrapulmonary

Salmonella (non-typhoid) septicaemia, recurrent

HIV wasting syndrome

Indicator disease diagnosed presumptively

Candidiasis of the oesophagus

Cytomegalovirus retinitis with loss of vision

Kaposi sarcoma

Mycobacterial disease, disseminated

Pneumocystis carinii pneumonia

Toxoplasmosis of the brain in patient >1 month of age

In children <13: lymphoid interstitial pneumonia and/or pulmonary lymphoid hyperplasia.

2. CONDITIONS ADDED TO CDC SURVEILLANCE DEFINITION FOR AIDS WITH LABORATORY EVIDENCE OF HIV INFECTION (1B above)

In addition to those in the surveillance definition:

- CD4+ T-lymphocyte count <200 x 10⁶/litre (or a CD4 percentage <14%)
- Pulmonary tuberculosis
- Cervical cancer, invasive
- Recurrent pneumonia (more than one episode within a 12-month period)

3. EUROPEAN AIDS CASE DEFINITION

Same as revised CDC definition (2 above) without CD4+ T-lymphocyte count.

4. WHO CASE DEFINITION FOR AIDS SURVEILLANCE (formerly BANGUI/WHO/CLINICAL)

WHO clinical case definition for AIDS in an adult or adolescents (>12 years of age) when diagnostic resources are limited. For the purposes of AIDS surveillance an adult or adolescent (>12 years of age) is considered to have AIDS if at least 2 of the following major signs are present in combination with at least 1 of the minor signs listed below, and if these signs are not known to be related to a condition unrelated to HIV infection.

Major signs (2 signs or more):

- Weight loss ≥10% of body weight
- Chronic diarrhoea for >1 month
- Prolonged fever for >1 month (intermittent or constant)

- *Minor signs (1 or more):*
- Persistent cough for >1 month
- Generalized pruritic dermatitis
- History of herpes zoster
- Oropharyngeal candidiasis
- Chronic progressive or disseminated herpes virus infection
- Generalized lymphadenopathy

The presence of either generalized Kaposi sarcoma or cryptococcal meningitis is sufficient for the diagnosis of AIDS for surveillance purposes.

5. EXPANDED WHO CASE DEFINITION FOR AIDS SURVEILLANCE (formerly ABIDJAN)

For the purpose of epidemiological surveillance, an adult (>12 years of age) is considered to have AIDS if a test for HIV antibody shows positive results, and one or more of the following are present:

- 10% body weight loss or cachexia, with diarrhoea or fever, or both, intermittent or constant, for at least 1 month, not known to be due to a condition unrelated to HIV infection
- Cryptococcal meningitis
- Pulmonary or extra-pulmonary tuberculosis
- Kaposi sarcoma
- Neurological impairment sufficient to prevent independent daily activities not known to be due to a condition unrelated to HIV infection (for example, trauma or cerebrovascular accident)
- Candidiasis of the oesophagus (which may presumptively be diagnosed based on the presence of oral candidiasis accompanied by dysphagia)
- Clinically diagnosed life-threatening or recurrent episodes of pneumonia, with or without etiological confirmation
- Invasive cervical cancer

6. REVISED CARACAS/PAHO AIDS DEFINITION

A patient is defined as having AIDS when:

- cumulative points assigned for conditions listed hereafter equal or exceed 10, and
- HIV serology is positive

Cases in which the total point score equals or exceeds the required score of 10, but HIV serology is pending are considered "provisional cases". Persons with cancer, or with immunosuppressive therapies, or where the sign / symptoms are attributed to conditions other than HIV infection are excluded.

Symptoms / signs / diagnosis	points assigned
Kaposi sarcoma	10
Disseminated / extrapulmonary / non-cavitary pulmonary tuberculosis	10
Oral candidiasis / hairy leukoplakia	5
Pulmonary tuberculosis with cavitation, or unspecified	5
Herpes zoster ≤60 years age	5
Central nervous system dysfunction	5
Fever(≥38°C) ≥1 month	2
Cachexia or >10% weight loss	2
Asthenia ≥1 month	2
Persistent dermatitis	2
Anaemia, lymphopenia, and/or thrombocytopenia	2
Persistent cough or any pneumonia (except tuberculosis) for ≥1 month	2
Lymphadenopathy ≥1 cm at ≥2 non-inguinal sites	2
Required point score	≥10

Contact regional / National AIDS programmes for the case definition in use in a given country.

Case classification

Depends on the case definition.

Please check with National AIDS programmes.

RECOMMENDED TYPES OF SURVEILLANCE

Routine monthly reporting of aggregated data from periphery to intermediate level.

Routine quarterly reporting of aggregated data from intermediate level to central level.

International: report updates every 12 months in the *Weekly Epidemiological Record*

Other sources of data:

- Hospitals
- Practitioners
- Tuberculosis wards
- Mortality reports and statistics
- Active case finding

RECOMMENDED MINIMUM DATA ELEMENTS

Case-based data for reporting

- Unique identifier, age, sex, geographical area, mode of transmission (e.g., blood transfusion, drug use, other)

Aggregated data for reporting

- Number of cases by age and sex, number of cases, mode of transmission (e.g., blood transfusion, drug use, other)

RECOMMENDED DATA ANALYSES, PRESENTATION, REPORTS

Graphs: Number of cases by age, sex, geographical area, risk factors.

Tables: Number of cases by age, sex, geographical area, risk factors.

Maps: Number of cases by geographical area.

PRINCIPAL USES OF DATA FOR DECISION-MAKING

- Assess the magnitude of the problem
- Identify high risk areas for further intervention
- Plan public health measurements
- Assess impact on clinical services
- Plan health care services and supplies
- Validate HIV surveillance data

SPECIAL ASPECTS

Use of HIV surveillance (see page 56) for forecasting AIDS incidence.

CONTACT

Regional Offices

See Regional Communicable Disease contacts on pages 18-23.

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