

Surveillance & Epidemiology

Commonly used terms

Epidemiology

The study of the distribution & determinants of health and disease in groups of people. Epidemiological data can be used to plan & evaluate strategies to prevent, control & manage disease in populations at risk.

Natural History of Disease

Information about how a particular disease develops in an individual or group of people.

Prevalence

The proportion of individuals in a population having a disease, inclusive of both existing and new cases of the disease at a particular point in time.

The number of cases is the numerator and the population at risk is the denominator.

Incidence

New cases of a disease that occur in a population during a defined period of time, usually one year.

It can be expressed as a proportion (new cases is the numerator and population at risk is the denominator) or it can be expressed as a rate (new cases per unit of person-time at risk e.g. 28 cases per 1,000 person-years).

Notifications

Medical practitioners and diagnostic laboratories have an obligation to notify all cases of some infectious diseases such as hepatitis B and C, to their public health unit. The State and Territory Health Services are required to report the data to the National Notifiable Diseases Surveillance System.

Unspecified Notifications

Notifications of a disease incorporating both newly acquired (where evidence of recent acquisition of disease is available) and newly diagnosed cases of infection (acquired sometime previously).

Incident Notifications

Notifications of newly acquired cases of a disease.

NB. Notifications of newly acquired hepatitis C infections to the National Notifiable Diseases Surveillance System underestimate the true incidence of hepatitis C.

The current Hepatitis C testing technology cannot differentiate between

- a) recent infections and
- b) a recent diagnosis of infection which had been acquired sometime previously (often years previously).

At the time of transmission of the hepatitis C virus, most people do not experience symptoms which would prompt testing for the virus. In addition, those at most risk of acquiring hepatitis C are often infrequently tested. The vast majority of cases of hepatitis C are therefore diagnosed years after the time of infection.

QALY

Quality adjusted life year. Equivalent to a year of healthy life.

DALY

Disability adjusted life year. Equivalent to the loss of one healthy year of life.