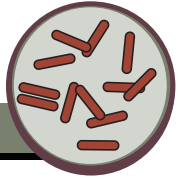


Basic Infectious Disease Concepts in Epidemiology

Glossary



Active immunity: resistance developed in response to an antigen (infecting agent or vaccine) and usually characterized by the presence of antibody produced by the host.

Attack rate: a variant of an incident rate, applied to a narrowly defined population observed for a limited period of time, such as during an epidemic.

Clinical disease: a disease that has been manifested by its symptoms and features.

Descriptive epidemiology: the aspect of epidemiology concerned with gathering, organizing, and summarizing data on “person” (Who is ill?), “time” (When did they become ill?), and “place” (Where could they have been exposed to the illness?).

Determinant: any factor that brings about change in a health condition or in other defined characteristics.

Etiologic agent: relating to the cause of a disease.

Epidemiological triangle: the traditional model of infectious disease causation, which has three components: an external agent, a susceptible host, and an environment that brings the host and agent together so that disease occurs.

Fomites: inanimate objects contaminated with some microorganism. These may be contaminated transfusion products or injections, or contaminated food, water, or air.

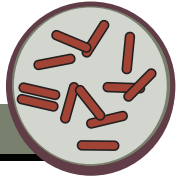
Herd immunity: the resistance of a group to an infectious agent. This group resistance exists because a high proportion of people in the group are immune to the agent. Herd immunity is based on the number of people who are susceptible and the probability that they will come into contact with an infected person. By vaccinating large numbers of people in a population to protect them from smallpox, health officials used herd immunity to control and eradicate the disease.

Incidence rate: a rate that measures the frequency with which a health problem, such as a new injury or case of illness, occurs in a population. In calculating incidence, the numerator is the number of new cases occurring in the population during a given period of time, and the denominator is the total population at risk during that time.



Basic Infectious Disease Concepts in Epidemiology

Glossary



Incubation period: the period following exposure, when pathologic changes are not apparent, and ending with the onset of symptoms of an infectious disease.

Infectivity: the proportion of people who are exposed to an agent and become infected.

Passive immunity: immunity conferred by an antibody produced in another host. This type of immunity can be acquired naturally by an infant from its mother or artificially by administration of an antibody-containing preparation (antiserum or immune globulin).

Pathogenicity: the proportion of people who are infected by an agent and then develop clinical disease.

Portal of entry: a pathway into the host that gives an agent access to tissue that will allow it to multiply or act.

Portal of exit: a pathway by which an agent can leave its source.

Prevalence rate: the proportion of people in a population who have a particular disease, chronic condition, injury, or attribute at a specified point in time or over a specified period of time.

Shifting antigenicity: when the antibody-producing characteristics of a pathogen changes greatly, immunity to the infection decreases significantly.

Subclinical disease: when the disease is not noticeable but pathological changes are occurring.

Superspreader: an individual who is much more infective than most other people with the disease.

Virulence: the measure of severity of a disease, expressed as the proportion of people with the disease who become extremely ill or die.

