

GERMS 201: MICROBES VS. MAN

DEFINITIONS

ADJUVANT: a substance that enhances or increases the body's response to an antigen. The substance is added to vaccines to increase their effectiveness

ANTIGEN: any substance, usually a protein or protein-containing chemical, that is capable of inducing an immune response in the body, especially the production of antibodies

ANTIBIOTIC: a naturally -occurring compound that kills or inhibits bacteria from growing

ANTIMICROBIAL: a compound, either naturally-occurring or synthesized by man, that kills or inhibits bacteria from growing

BACTERIUM: a one-celled organism that has a cell wall and an organized nucleus. Most bacteria are harmless to man, others can cause disease in other animals only, and still others cause

DEFINITIVE HOST: the host (organism) in which a parasite spends its final development stage and reaches full maturity

ENDEMIC: a disease or condition regularly found among particular people in a certain area

EPIDEMIC: a widespread occurrence of an infectious disease in a community at a particular time

HERD IMMUNITY: (also called herd effect, community immunity, population immunity or social immunity) a form of indirect protection from any infectious disease that occurs when a large percentage of the population has become immune to a given disease, thereby providing a degree of protection to those in the group who are not immune. The greater the proportion of individuals in the population who are immune, the smaller the probability that those who are not immune will come into contact with an infectious individual. This may occur naturally, by enough individuals surviving commonly, or through vaccination. It is estimated that at least 95% of individuals need to be immune to establish it

IMMUNITY: *natural immunity*—immunity possessed by a group of individuals that is present in them at birth; *acquired immunity*— immunity acquired either by recovering from a given disease (active immunity), or by receiving immunization with a vaccine (passive immunity)

INCUBATION PERIOD: the period between exposure to an infection and the appearance of the first symptoms. In many cases, even though the person is asymptomatic, he/she may still be able to pass the disease to others

INDEX CASE: the first documented case in the onset of an epidemiological investigation of an epidemic, usually, but not always, the source of the outbreak of a given disease

INTERMEDIATE HOST: the host harboring a parasite that grows, but not to the point of ultimate maturity. It may act as a vector to reach its definitive host

PANDEMIC: a widespread occurrence of an infectious disease in a large community at a particular time

PROTOZOAN: a one-celled microscopic organism that is capable of movement and being a predator. Protozoa have more complex life cycles than bacteria

RESERVOIR: any organism that is chronically infested or infected with the causative agent of a disease and can act as a source of further infection in others. Examples: birds and swine (influenza), rats (plague), cattle (brucellosis)

VACCINE: a substance used to stimulate the production of antibodies and provide immunity against one of several diseases, prepared from the causative agent of the disease, its products, or a synthetic substitute, treated to act as an antigen without causing the disease.

VECTOR: any organism, typically a biting insect or tick, that transmits a disease or parasite from one organism to another. (The vector may or may not have the disease). Examples: mosquito (malaria and yellow fever), flea (plague)

ZOONOSIS: any infectious disease of animals, usually vertebrates that can be or has been naturally transmitted to humans. Examples: AIDS, brucellosis, malaria, smallpox, influenza, leprosy