



Key Terms

Zoonoses

Zoonotic Infectious Diseases (ZIDs)

Diseases that spread between animals and humans, with causal agents being pathogenic microorganisms such as viruses, bacteria, fungi, or parasites.

Anthropogenic

Caused by humans or their activities.⁷⁵

Communicable Disease

A communicable disease is an illness contracted through direct contact with an infected person or animal, exposure to their bodily fluids, or interaction with contaminated objects containing infectious agents. Infected individuals subsequently become sources of transmission to others.

While all communicable diseases are classified as infectious, not all infectious diseases are communicable.^{76 77}

Endemic

An endemic disease is one that is consistently present throughout a specific region or population. The prevalence of the disease remains stable and its spread is fairly predictable over time.⁷⁸

Epidemic

An epidemic occurs when a disease, specific health-related behavior, or other health-related event spreads unexpectedly or quickly across a specific geographical area or population. It can occur if an endemic disease suddenly becomes more prevalent, or if a new disease begins to affect a region or specific population.

Epidemiology

Epidemiology is the study of the distribution and determinants of health and disease in populations.⁷⁹

Epizootic

Epizootic disease is a disease event in an animal population similar to an epidemic in humans. It generally refers to outbreaks of disease which cause serious economic or public health issues and are of major importance in the international trade of animals and animal products.⁸⁰

Emerging and re-emerging Infectious Disease

A disease that appears in a population for the first time, or has previously existed and spreads to new areas, or shows a rapid increase in cases.⁸¹

Host

A living organism that a pathogen may infect.⁸²

Human-animal-environment interface

The human-animal-environment interface refers to the dynamic and interconnected relationships among people, domestic and wild animals, and their shared environments.⁸³

Incidence

The number of new disease cases occurring within a population over a specified period.^{84 85}

Infectious Diseases

Illnesses caused by pathogenic microorganisms. These diseases can be spread to humans and animals through direct contact, by insects or other vectors, or exposure to contaminated air, water, food, soil or fomites.^{86 87}

One Health (Quadripartite definition)

One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.

It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent.⁸⁸

Outbreak

An increased number of cases of a disease, compared with the expected number in a given place or among specific groups of people or animals over a particular period of time.⁸⁹

For some diseases, one case may be considered an outbreak and may be country-specific (e.g., Foot and Mouth Disease (FMD) case or an Ebola disease case in Canada).

Pandemic

A pandemic occurs when a disease spreads across countries or continents at a fast rate with new cases appearing every day. Pandemics have become more likely in recent years due to increased international travel. Increased urbanization also means that many people live in densely populated towns and cities, which can increase rapid transmission of viruses and disease.⁹⁰

Panzootic

Widespread outbreak of infectious disease that affects animal populations across a vast geographic area, often spanning multiple continents, and pose significant risks to biodiversity, food security, and human health.⁹¹

Pathogen

A pathogen, also referred to as an infectious agent, is a microorganism that causes disease.⁹²

Among the wide range of microorganisms (viruses, bacteria, fungi, and parasites), only a small portion is known to be associated with disease.⁹³

Prevalence

Refers to the number of cases present in a population at a specific point in time.⁹⁴

Reservoir

Habitat where an infectious agent can live, grow and multiply. A reservoir is not necessarily the source of transmission to a host. Humans, animals and the environment can be reservoirs.⁹⁵

Spillback

A specific form of spillover in which microbes are transmitted from a novel host species back to the original host species.⁹⁶

Spillover

Transmission of a microbe from one species, typically the reservoir or occasionally an amplifying or bridge host, to a novel susceptible species, resulting in infection of the new host.

Spillover does not always result in a large-scale outbreak and may lead to only a single infection in a human or animal.⁹⁷

Zoonosis

(pl. Zoonoses)

Disease that spread between animals and humans, with the causal agent being a pathogenic microorganism such as viruses, bacteria, fungi, or parasites.