

## APPENDIX C. Epidemiology Glossary

This glossary of epidemiology terms was created to provide the media with accurate, straightforward definitions of epidemiology terms as they relate to terrorism. The glossary is adapted from several authoritative sources—including the U.S. Department of Health and Human Services' Centers for Disease Control and Prevention. Experts from state and federal health agencies have also provided assistance in simplifying these definitions to meet the needs of journalists.

## **EPIDEMIOLOGY TERMS**

**Agent:** A germ, chemical, or type of radiation that can cause disease or damage to the human body.

Attack rate: Also known as case rate, is the proportion of the population who developed a disease or injury out of a particular group of people during a limited time period. The secondary attack rate is the proportion of the population who were around the initially affected people and who also ended up getting sick.

**Case:** A person in the population identified as having a particular disease, health disorder, or condition under investigation.

**Case definition:** A set of standard criteria, usually based on symptoms, timing, and laboratory results, used for deciding whether a person should be counted as having a particular disease or health-related condition.

**Contraindications:** Any physical or medical reason why a medicine or vaccine should not be given to an individual.

**Epidemic:** The occurrence of more cases of a disease than expected in a given area or among a specific group of people over a particular period of time.

**Epidemic curve:** A histogram (chart) that shows the course of a disease outbreak or epidemic by plotting the number of cases by time of onset.

**Exposure:** Contact with an agent by swallowing, breathing, or touching the skin or eyes. Exposure may be short-term (acute exposure), of intermediate duration, or long-term (chronic exposure).

False negative: When, due to a negative test result, a person who actually has the disease or condition in question is not counted as a case.

False positive: When, due to a positive test result, a person who does not have the disease or condition in question is counted as a case.

**Host:** Any person or other living thing that can be infected by an agent that causes disease.

**Incidence:** The number of new cases of a disease in a defined population over a specific time period.

**Incubation period:** The time period from when a person gets infected to when the first signs or symptoms of the disease occur.

**Index case:** The first case that is known to investigators or researchers. Determining the index case can be helpful in tracing the origins of a disease outbreak.

**Infection:** Invasion and multiplication of living agents (bacteria, fungi, viruses) that cause disease in body tissues. Infection does not necessarily lead to illness.

**Infectiousness:** How easy it is for an infection to spread to another living thing.

Immunization: The process of introducing weakened or killed germs or toxins into the body to induce the immune system to produce protective antibodies that will destroy the disease causing agent if it enters the body at a later date. Immunization is also known as vaccination.

Morbidity: Illness.

Mortality: Death. Usually the cause (a specific disease, a condition, or an injury) is stated.

Pandemic: An epidemic occurring over a very wide area (usually multicountry) and usually affecting a large proportion of the population.



Pathogen: An organism capable of causing disease.

**Prevalence:** The number of cases of a given disease or other condition in a given population at a designated time.

**Screening:** The use of tests or examinations to identify unrecognized disease. Positive screening tests may require further examination and/or testing to confirm disease.

**Sensitivity:** The ability of a test to detect the proportion of people with the disease who have a true positive test result. The higher the sensitivity, the greater the detection rate and the lower the false negative rate.

**Specificity:** The ability of a test to detect the proportion of people without the disease who have a true negative test result. The higher the specificity, the lower the false positive rate and the lower the proportion of people who have the disease who will be unnecessarily worried or exposed to unneeded treatment.

**Surveillance:** Collecting information on cases of disease or other conditions in a standard way to detect increases or decreases in disease over time and differences between various geographic areas. Public health officials use the information to detect outbreaks and to plan programs to help prevent and control disease.

Vaccination: See immunization.

## **ADDITIONAL RESOURCES**

Agency for Toxic Substances Disease Registry. ATSDR Glossary of Terms: http://www.atsdr.cdc.gov/glossary.html.

Centers for Disease Control and Prevention. "Crisis and Emergency Risk Communication," September 2002.

Centers for Disease Control and Prevention. Glossary of Epidemiology Terms: http://www.cdc.gov/reproductivehealth/EpiGlossary/glossary.htm.

University of Toronto, Centre for Evidence-Based Medicine, University Health Network. http://www.cebm.utoronto.ca/glossary/.