

## Glossary

**acute:** severe, intense, but typically short-lived

**aggregated data:** data combined over time or space; for instance, we could aggregate annual data on the occurrence of homicide in the UK over a decade, or include UK homicide data in an aggregated pool of data from all countries in the European Union

**case-control study:** an observational study that compares the exposures of individuals with a particular disease or outcome (cases) with the outcomes of similar individuals without the disease or outcome (controls)

**chronic:** persisting or recurring over a long period of time

**cohort study:** an observational study that compares the disease outcomes of an exposed and unexposed group

**confounding factor:** a variable that is correlated with both the independent and dependent variables, potentially changing the association observed in a genuine causative relationship or making a causative association appear where none exists

**control group:** a group that is not exposed to the risk factor of interest but is otherwise similar to the treatment group; the control group acts as a comparison group for determining the effects of the experimental condition

**cross-sectional study:** an observational study that considers the relationship between health outcomes and exposure for a “cross-section” of the population that is assumed to be representative of that population; provides a snapshot of a population’s health at a particular moment in time

**ecological fallacy:** the assumption that an association observed from aggregated data will necessarily apply at finer scales or to individuals

**ecological study:** a study that examines the health of populations using aggregated data

**[disease] elimination:** the removal of a disease from a specific region

**endocrine disruptor:** a substance that can interfere with the normal hormonal functioning of the body

**environmental justice:** the idea that populations with less power (especially poor and minority groups) experience greater exposure to unhealthy environments; **environmental racism** links such inequalities specifically with race

**epidemiology:** the study of factors that affect the health of populations

**[disease] eradication:** the complete removal of a disease from all human and animal populations

**experimental study:** a study in which the exposures or conditions of different groups are manipulated by the researcher in order to observe differences in their effects

**geogen:** an inanimate object or substance that can cause disease

**observational study:** studies in which the researcher does not alter existing conditions; the researcher instead relies on observing existing phenomena

**pollution:** substances found in the environment at higher concentrations than would naturally occur, with negative health or environmental impacts; **primary pollutants** are caused directly by human activities, **secondary pollutants** are those that have undergone chemical transformation after their initial release

**positivism:** a philosophical approach that emphasizes measuring, counting, and observing physical phenomena as a means of generating knowledge—the basis of the scientific method; critics argue that not all important phenomena can be observed or measured in this way

**quantitative approaches:** methods of inquiry based on counting, measuring, and other techniques rooted in empirical observation

**risk analysis:** a field of inquiry that assesses the relative risk associated with a particular exposure or policy

**synthetic:** human-made