

Case Control Study

A case-control study is an observational study in which two groups with different outcomes are compared on a basis of a causal attribute or event. In a medical setting, patients with a disease can be compared to an otherwise similar patient without disease to look for factors contributing to disease.



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Observational

Observatory

Case-control studies are observational and draws inferences from factors which are not controlled by the researcher.

Retrospective

Retro-person looking back in time

Case-control studies are retrospective, and look back at causative factors leading to a patient with disease now.

Compares those with disease to those without

Person with Case weighed against person with Controller

Patients with a disease (the case) are compared to otherwise similar patients without disease (the control).

(Asks) "What happened?"

Confused researcher asks "What happened?"

By looking at inciting factors or causal attributes from the past, the researcher is asking, "What happened?," leading to this disease.

Measurement

Odds Ratio

Person with Case has higher Odds than person with Controller

From a case-control study, researchers are able to calculate an odds ratio. It tells us how strongly the presence or absence of a property (green toxin exposure) is associated with another property (turning green).