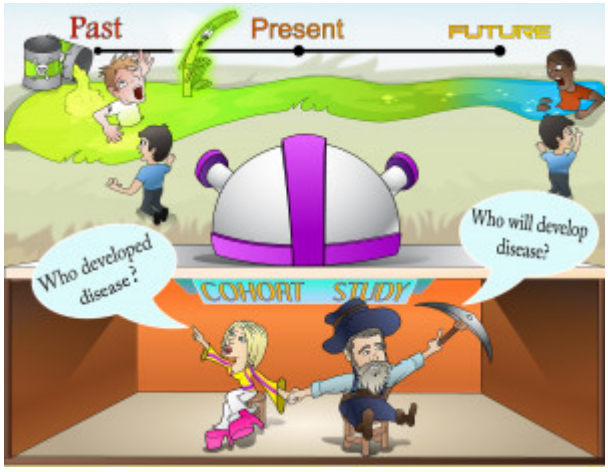
Cohort Study

A cohort study is a longitudinal observational study, which compares a group with exposure to a factor or risk to one without. The researcher then compares these groups to see if exposure increases the likelihood of disease. Cohort studies can be prospective or retrospective, and eventually help calculate a relative risk.



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Observational
Observatory
This study is observational, as the researcher has no influence on variables or the outcome of the study.

Longitudinal
Long-timeline
A cohort study is a longitudinal study, as it involves repeated observations of the same variables over long periods of time.

Studies risk from exposure
Risk from exposure to chemicals and radioactive materials
A cohort study is used to study risk of developing a disease from exposure or risk factor. An example of this would be finding out if COPD will or did develop in patients who have had exposure to smoking vs. those without exposure.

Retrospective
Retro-person looking back in time
A cohort study can be retrospective, where the researcher looks back in time to see who developed the disease, comparing those exposed to those unexposed.

(Asks) "Who developed disease?"
Asking "Who developed disease?"
By doing a retrospective cohort study, the observer is able to ask, "who developed the disease?" in terms of patients who were exposed and non-exposed.

Prospective
Prospector looking forward in time
This is a longitudinal observation of individuals through time. A prospective cohort study can look forward to compare exposed and non-exposed groups to observe who will develop disease. These studies help to identify risk factor and attribute causality to contracting disease.

(Asks) "Who will develop disease?"
Asking "Who will develop disease?"
By comparing individuals long term who are exposed vs. non-exposed, the researcher is able to ask, "who will develop the disease?"