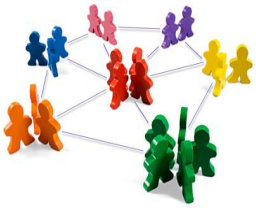
# Types of Observational Studies

Observational Studies use existing information or new information by watching without interfering.

## Cohort Study

**Studies** and **compares a "cohort"** of people *(a group of people who share a defining characteristic)*— **over an extended period of time**.

For example, observes and may compare those who have one behavior (or exposure) like smoking to those who don't have the behavior/exposure. Or those who have quit smoking to those who have not.



***Can answer questions like:*** *How does that "blank" change a person's risk of getting a disease or living longer if they have the disease? For example, does smoking affect health? Does quitting smoking affect outcomes or diseases?*

## Cross-Sectional Study

Uses a **survey/interview to gather facts** (and sometimes opinions) from a selected group of people for a specific topic and usually for a limited time period.

***Can answer questions like:*** *Do people with COPD think that quitting smoking will help improve their COPD symptoms—early in disease, later in disease?*

## Case-Control Study

**Looks backwards to determine what might be associated with a certain result**. Compares individuals with the result (or disease) to those without—looking for reasons, behaviors, situations that caused the one group to have the result or disease. May use interviews or a review of medical records to identify cases and controls.


***Can answer questions like:*** *Do women have more rapid decline in lung function than men who smoked the same amount?*

## Epidemiology Studies

An epidemiology study **uses new observations or existing information** like what is in medical records to better define a condition and who is likely to have that condition in a population of people.

***Can answers questions like:*** *What is the frequency of COPD in men and women, in Asian, Black, White or Native American populations, in those younger or older than 60 years of age.*