




# *Tools for Epidemiological Studies*

**Dr. Jo White**




# Types of Epidemiological Studies

- Cross-sectional study
  - Cohort Studies
  - Ecological study
- 



# Cross-sectional study

- Observational study that analyzes data collected from a population, or a representative subset, at a specific point in time
  - Differ from case-control studies in that they provide data on the entire population under study, whereas case-control studies typically include only individuals with a specific characteristic
- 



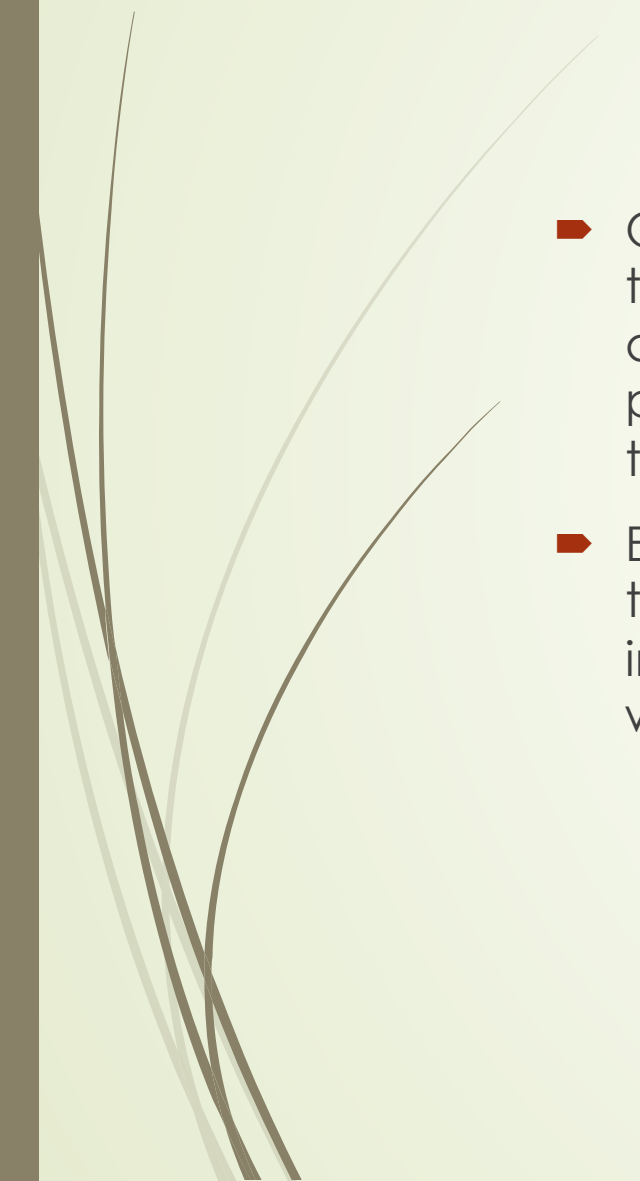
# Cohort Study



- ▶ Longitudinal study that sample a cohort ( a group of people who share a defining characteristic) at intervals through time
- ▶ A cohort share a common characteristic or experience within a defined period, e.g. are exposed to a vaccine
- ▶ Outcomes compared between the groups



# Ecological Study

- ▶ Observational study defined by the level at which data are analysed, namely at the population or group level, rather than individual level
  - ▶ Ecological studies are often used to measure prevalence and incidence of disease, particularly when the disease is rare
- 



# Resources



- ▶ South-East Asia Regional Body - set up by WHO (Bangladesh, Bhutan, N. Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, Timor-Leste. Web link: <http://www.searo.who.int/mediacentre/releases/2016/1643/en>
- ▶ *Center for Disease Control.* Web Link: [cdc.gov](http://cdc.gov)
- ▶ *Coalition for Epidemic Preparedness Innovations (CEPI)* Web link: [cepi.net](http://cepi.net)