

COHORT

- An aggregate of individuals having in common a significant event in their life histories, such as year of birth (birth cohort) or year of marriage (marriage cohort).
- The term cohort originated from latin word “Cohors” meaning 10 divisions of a Roman army who move together as one unit.
- **Types of Cohort:**
 - Closed/ Fixed Cohort: The group of people experiencing a onetime event. Eg. Birth Cohort, Death Cohort, Hiroshima Bombing Cohort.
 - Open/ Dynamic Cohort: groups of individual, maybe dynamic enrolled or experience any exposure which can change over time. Eg. Marriage Cohort, Employment Cohort.
 - Prospective Cohort: Cohort that looks foreword of forming a cohort. Any event which can happen in future among people. Eg. People dying in 2021.
 - Retrospective Cohort: also known as Historical Cohort. Cohort with respect to any occurrence happened earlier. Eg. People died in 2018
 - Birth Cohort: Group of children born in the same year.
 - Death Cohort: Group of people dying in the same year.
 - Occupational Cohort: Population working in one particular industry.
 - Clinical Cohort: Patients with a particular diagnosis. Eg. People having HIV+
 - Inception Cohort: People gathering who have same disorder since birth. Eg. Hearing Impaired Cohort
 - Exposure Cohort: Individuals assembled as a group who have same uncommon exposure. Eg. Atom Bomb survivors.

Importance of Cohort:

- In Demographic studies: to understand the pattern of demographic events occurring in any area.
- In Clinical Science: to study the occurrence of symptoms of any disease and seek the cause for it.
- In Statistics: to calculate the demographic occurrences and predict future population science.

Advantages of Cohort:

- Clarity of Temporal Sequence
- Allow calculation of risk factor
- Facilitate Study of Rare Exposures
- No biasness at enrollment

Disadvantages of Cohort Studies

- Lengthy.
- Expensive
- Not good for rare cases.
- Often data is absent especially in case of retrospective cohort.