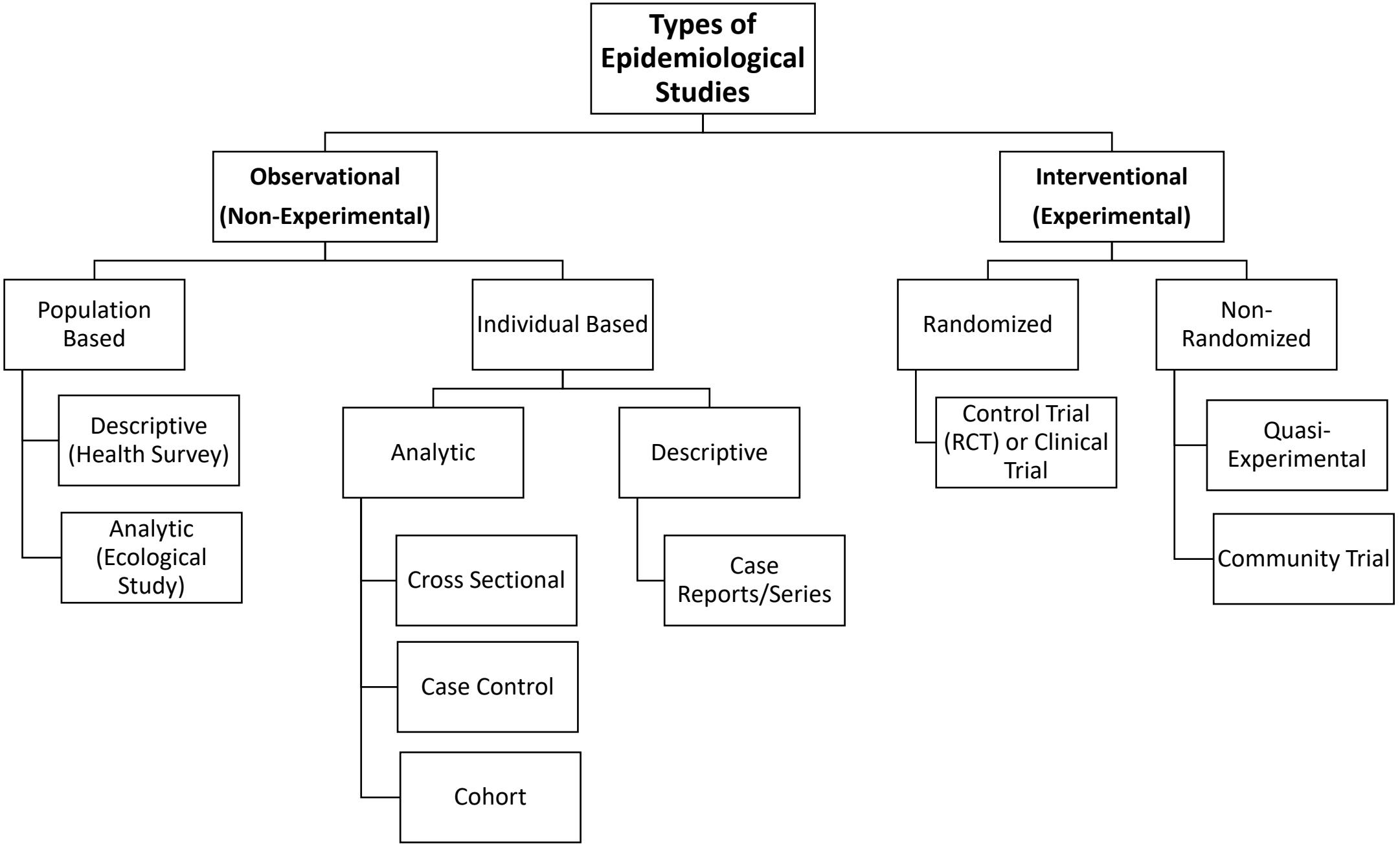
Study Design Comparison

Study Design	Characteristics	Intervention	Temporal Sequence	Sampling	Strengths
RCT/Intervention	Randomization of subjects to intervention or control based on chance	Present	Intervene, then measure outcome	Randomized	Establish causal effect
Cohort (Prospective & Retrospective*)	Cohort free of outcome is followed & compared based on exposure	Absent	Risk factor/exposure first, then outcome	Possibly	Rare exposures; can study multiple exposures & outcomes
Case Control**	Cases are compared with controls with respect to exposure, retrospectively	Absent	Outcome first, then risk factor (retrospectively)	Matching	Rare outcomes & multiple exposures
Cross Sectional	Subjects with & without outcome are compared	Absent	Risk factor/exposure & outcome at the same time	Yes	Inexpensive & fast Describe prevalence of disease
Case Report/Series	Detailed description of case(s) without control group	One or a few subjects	N/A	N/A	Fast form of publication Inexpensive

* **Retrospective cohort studies** try to compare the population or individual's risk of developing a disease to their already known exposure factors
** **Case-control studies** determine the possible exposure factors after a known disease status


Types of Epidemiological Studies
Observational (Non-Experimental)
Interventional (Experimental)
Population Based
Individual Based
Randomized
Non-Randomized
Descriptive (Health Survey)
Analytic (Ecological Study)
Analytic
Descriptive
Control Trial (RCT) or Clinical Trial
Quasi-Experimental
Community Trial
Cross Sectional
Case Control
Cohort
Case Reports/Series