**Intervention and Comparison**

**Theory**

- Intervention goals:
  - Reduction of lead in drinking water
  - Reduction of lead in consumer products
  - Health improvement

**Intervention Design**

**Components:**

- Regulatory interventions:
  - Product bans (e.g., lead-contaminated toys)
  - Product regulations (e.g., COMMISSION REGULATION (EU) No 836/2012)
  - Testing requirements (e.g., Consumer Product Safety Improvement Act, USA)
  - Lead standards
  - Drinking water regulations

- Environmental interventions:
  - Drinking water supply (e.g., removal, additives)
  - Drinking water use (e.g., filter)

- Educational interventions:
  - Education (e.g., preparation of formula feeds)
  - Information regarding lead in consumer products (e.g., health warnings)

**Execution:**

- Duration:
  - Long-term (e.g., regulations)
  - Short-term (e.g., health campaigns)

- Intensity/dose:
  - Intensity of training/information distribution
  - Degree of incentives/disincentives

**Intervention Delivery**

- Delivery agent:
  - Engineer vs. health worker vs. regulator

- Delivery mechanisms:
  - Guideline vs. leaflet vs. community event vs enforcement measures

- Setting:
  - Home vs. outside of home

**Outcomes**

**Intermediate Outcomes**

- Process Outcomes: implementation fidelity, population reach, dose delivered and received, contamination of comparison group
- Behaviour Outcomes: compliance with educational interventions and regulations
- Surrogate Outcome: blood lead levels

**Health Outcomes**

- Acute lead poisoning
- Cognitive and neurobehavioural development
- Cardiovascular outcomes
- Renal outcomes
- Pregnancy outcomes

**Non-Health Outcomes**

- Lead levels in drinking water and consumer products

**Implementation and Context**

**Implementation:**

- Policy (e.g., presence of national policy, international collaborations)
- Finance (e.g., public vs private sources)
- Organisation and structure (e.g., government, non-governmental organisations, private sector, health, water, consumer protection sector)

**Context:**

- Geographical (e.g., natural lead exposure in volcanic areas)
- Locational (e.g., lead mining, low-income neighbourhood, vicinity to motorways)
- Epidemiological (e.g., background incidence/prevalence of various outcomes)
- Socio-economic (e.g., educational characteristics, income classes)
- Socio-cultural (e.g., ethnicity, religion, use of traditional/aryuvedic medicine)
- Legal (e.g., environmental legislation, international guidelines and regulations)
- Political (e.g., priority setting)
- Ethical (e.g., discrimination of low-income neighbourhoods, disenfranchised communities, gender)