ATSDR's Perspective

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Informing Decision Making

ATSDR 101:

An Overview of ATSDR's Work in Communities

APHA
AMERICAN PUBLIC HEALTH ASSOCIATION
For science. For action. For health.

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

CERCLA Legislation—aka Superfund Law

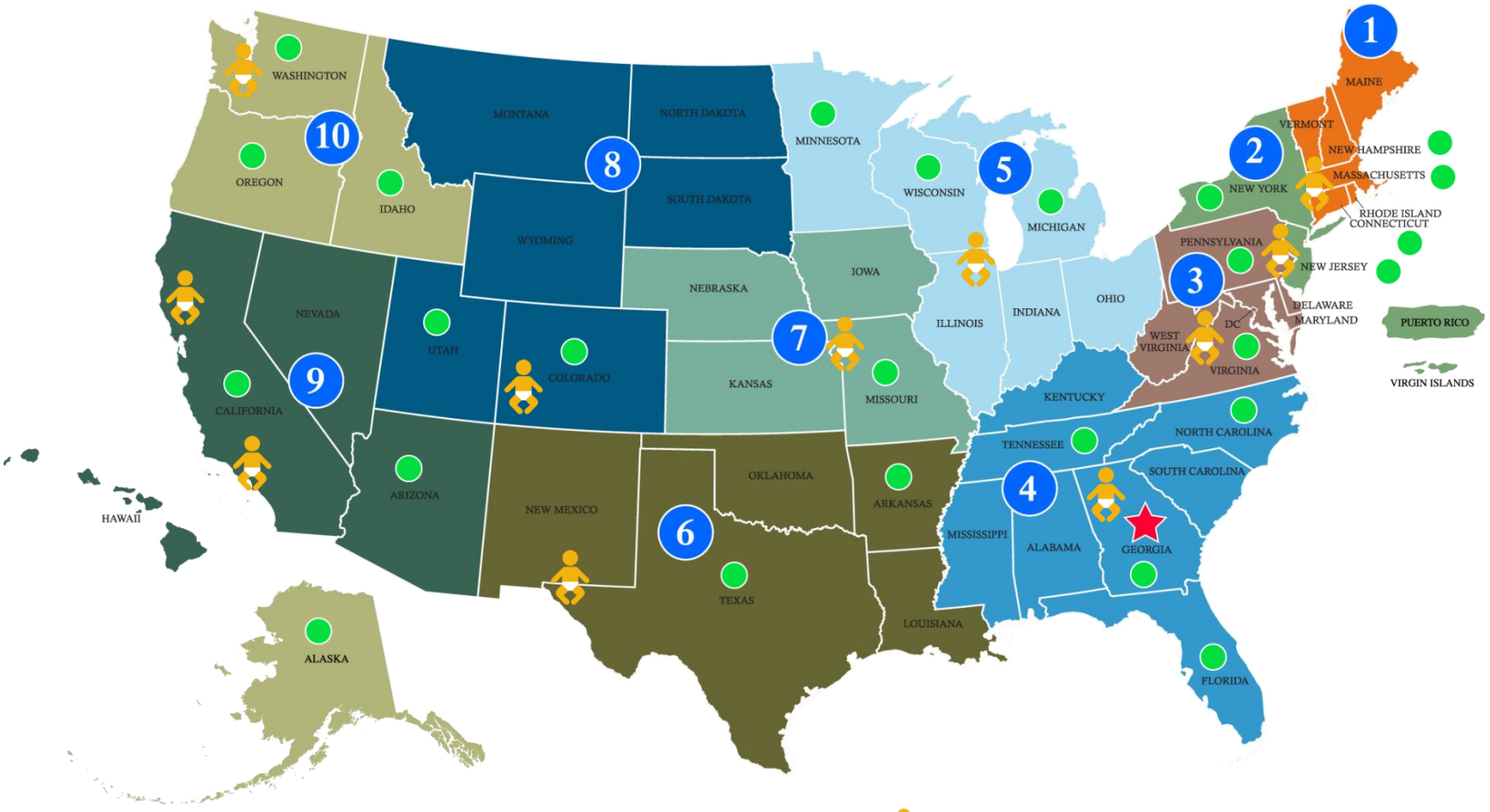
Comprehensive Environmental Response, Compensation, and Liability Act

Gave EPA responsibility for identifying, investigating and cleaning up hazardous waste sites

Created the Agency for Toxic Substances and Disease Registry (ATSDR) to:

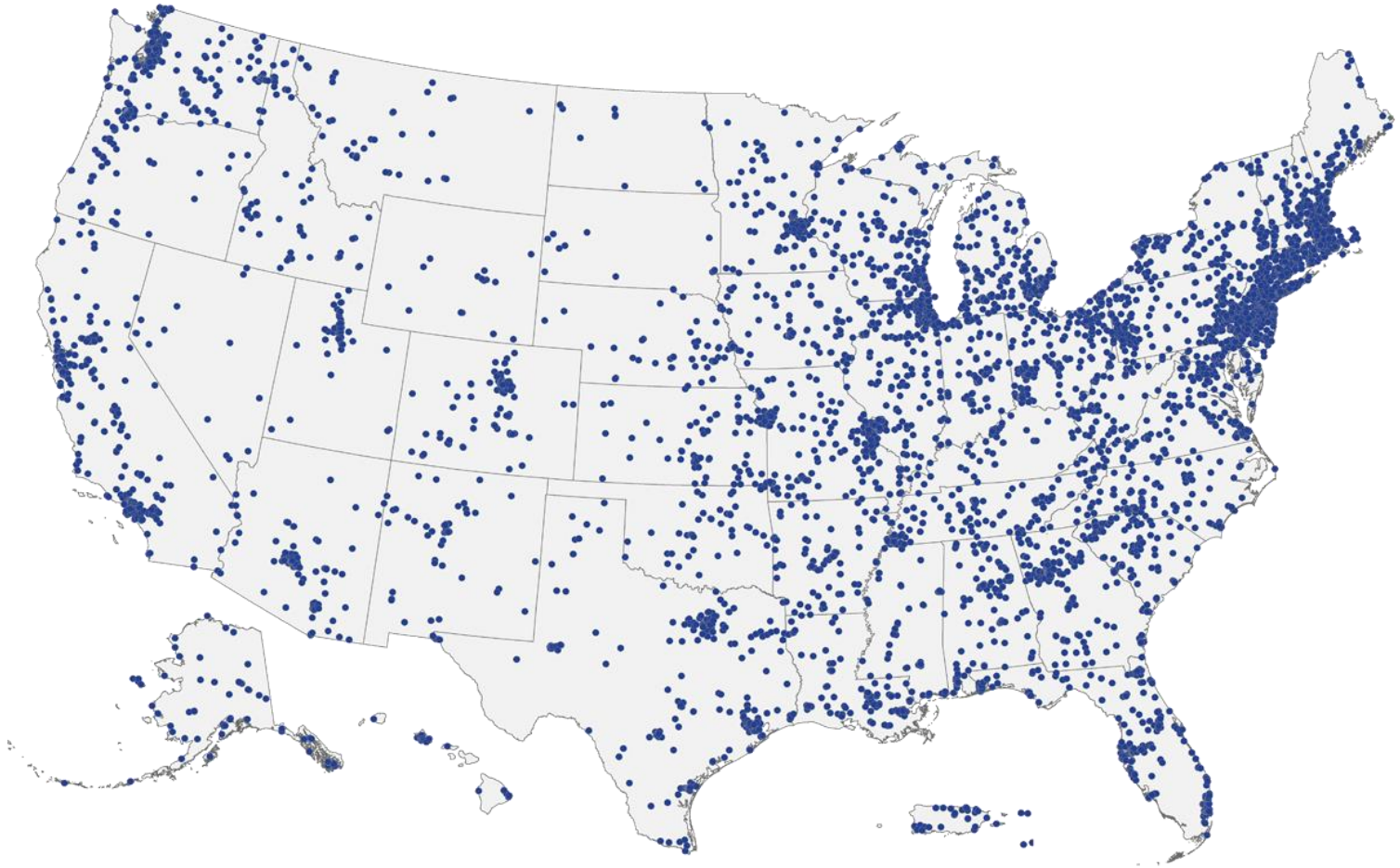
- Perform public health assessments at hazardous waste sites
- Develop toxicological profiles on harmful substances
- Conduct epidemiological health studies
- Maintain health registries and conduct medical surveillance

Protecting Communities: What it takes



ATSDR Regional Offices States Funded by Cooperative Agreement Pediatric Environmental Health Specialty Units (PEHSUs)

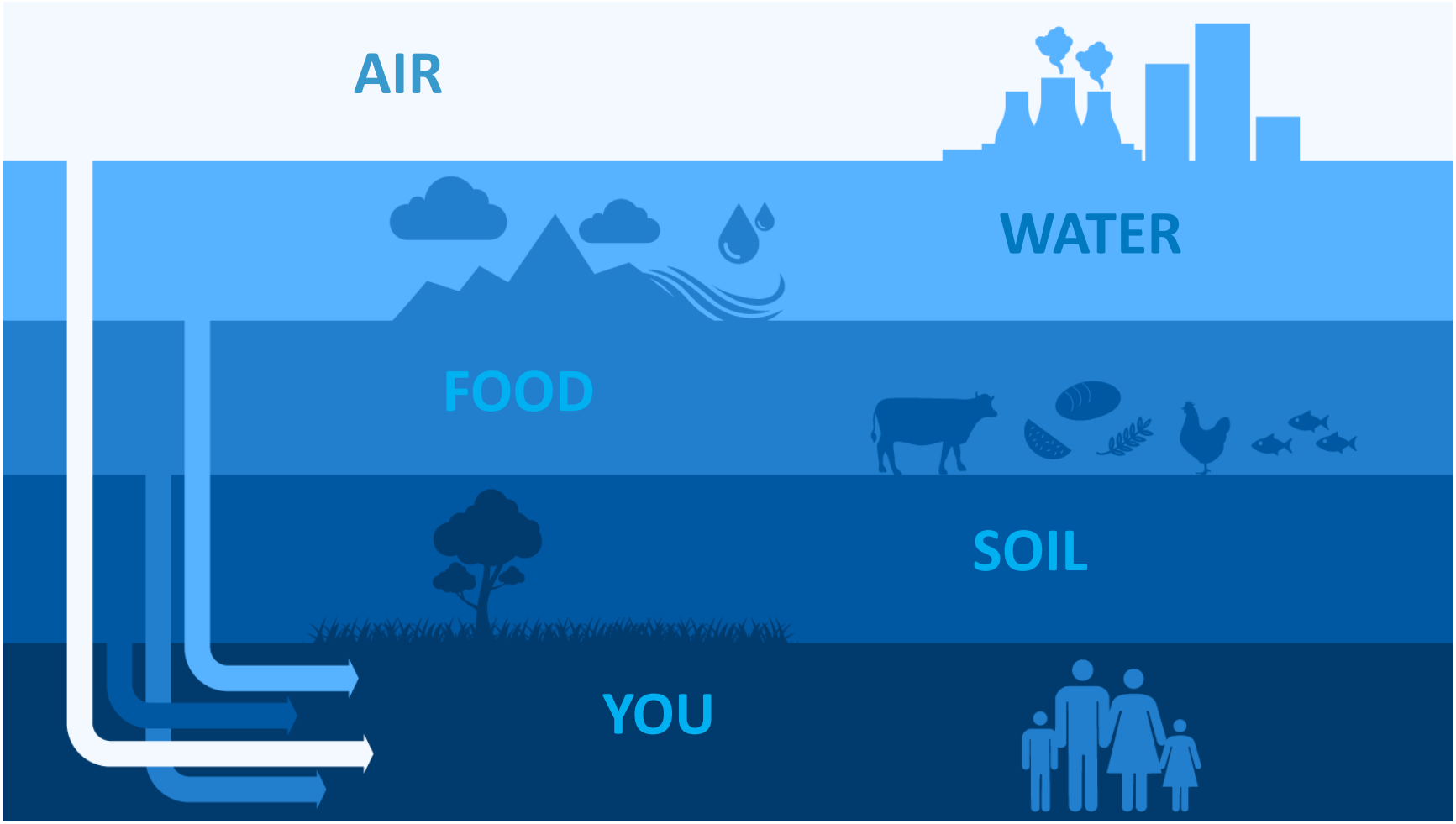
Serving Americans, Community by Community
ATSDR's 30 Year History



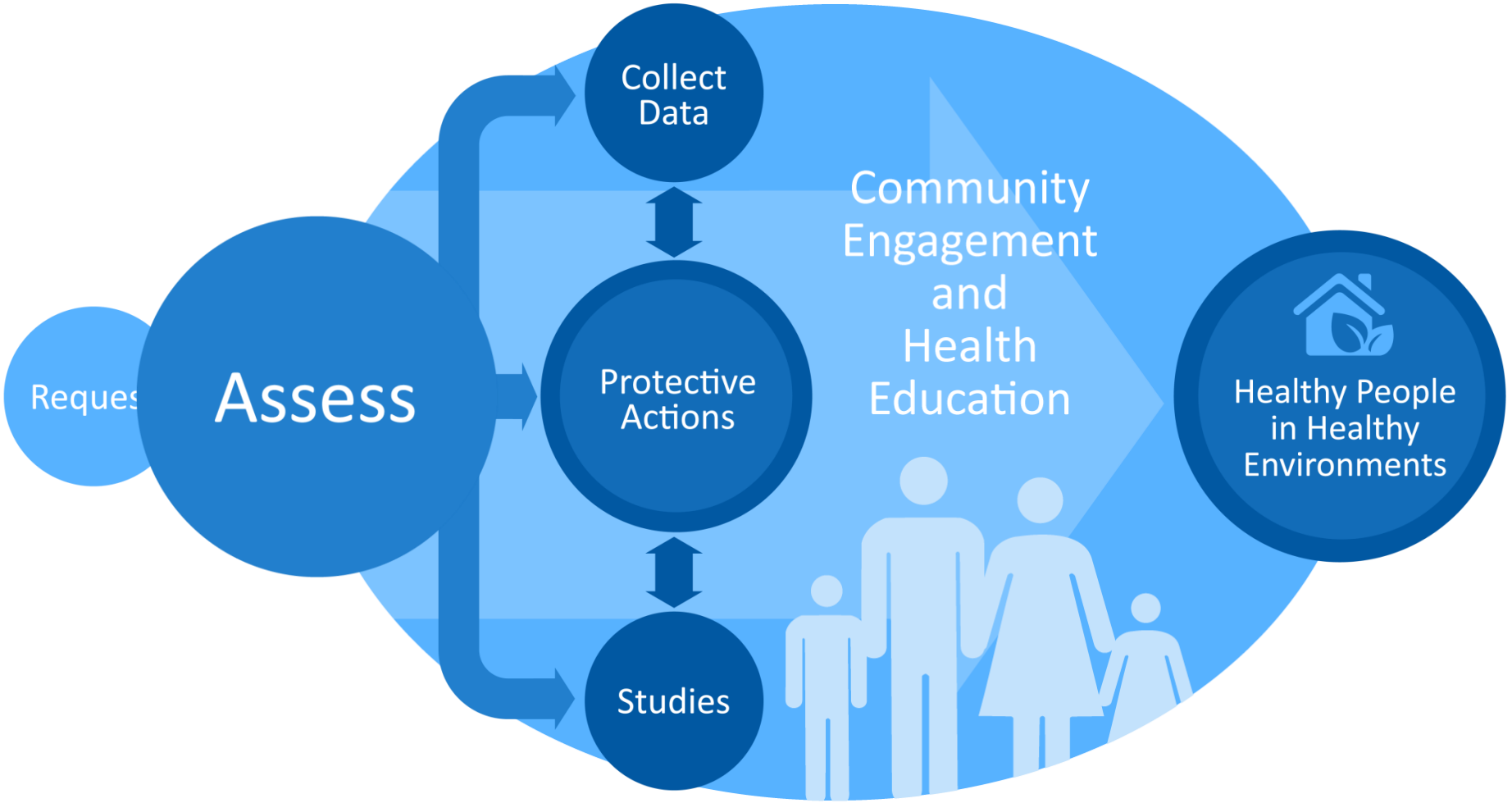
Enabling Data-Driven Decision Making

ATSDR's Health Assessment Process

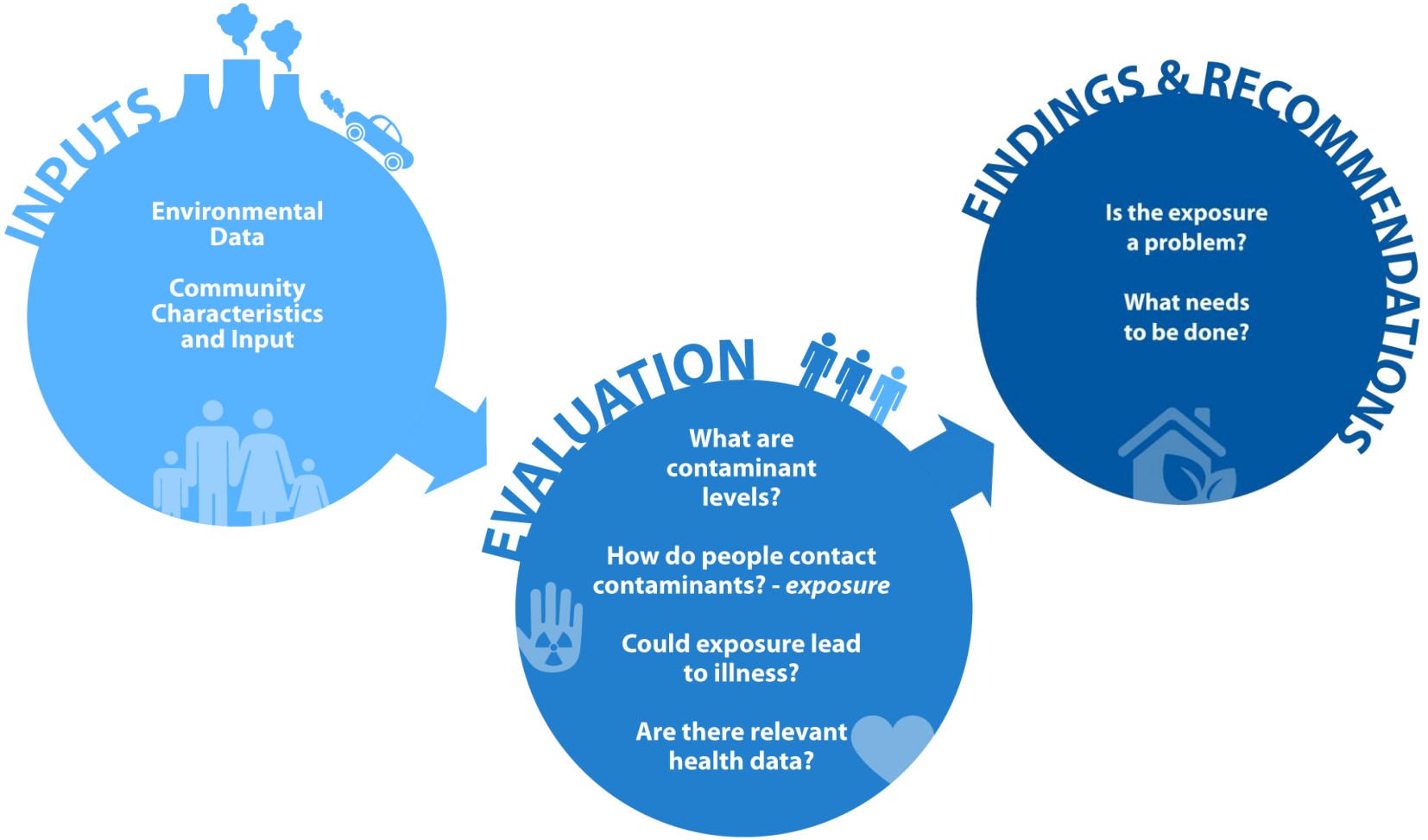
ATSDR's Core Work in Communities: Understanding Exposures



Protecting Communities



Public Health Assessment Process



Inputs: Environmental Data

Data collected by regulatory agencies

- Soil, air, water, and/or food concentration data collected through site investigation
- Releases reported by operating companies to regulatory agencies – TRI, permits, NPDES

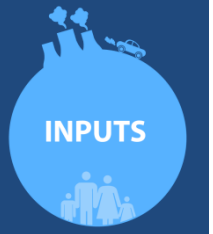
Data collected by others

- Data from company records or reports
- Sample results from individuals, community groups, or other stakeholders

ATSDR assesses quality of data received and discusses data with appropriate caveats.

Inputs: Community Characteristics and Insights

- Gathered throughout our involvement
- E-mail, telephone, public availability sessions, or public meetings
- Why?
  - Learn community health concerns
  - Address community concerns
  - Understand potential exposure pathway and perceptions of exposure
  - Develop relationships, build trust



Evaluation: Screening Steps

Screen contaminants using ATSDR Comparison Values (CVs)

- Use highest values detected for each contaminant
- Use cancer and non-cancer CVs

SCREEN

Calculate estimated dose using conservative exposure assumptions

- Dose: Amount of a substance a person is exposed to per day

ESTIMATE

Screen dose using Health Guidelines (Minimal Risk Levels)

COMPARE

Evaluation: Exposure Assessment and Toxicological Evaluation

Refine dose to reflect site-specific exposure

- Information from community on exposure frequency, duration
- Knowledge of site demographics
- Account for site-specific environmental characteristics and previous actions taken

Examine toxicological literature to determine potential for harm

- Harmful effect levels in animal or human health studies
- Target organs, sensitive populations, etc.
- Potential mixture effects