Working with ATSDR

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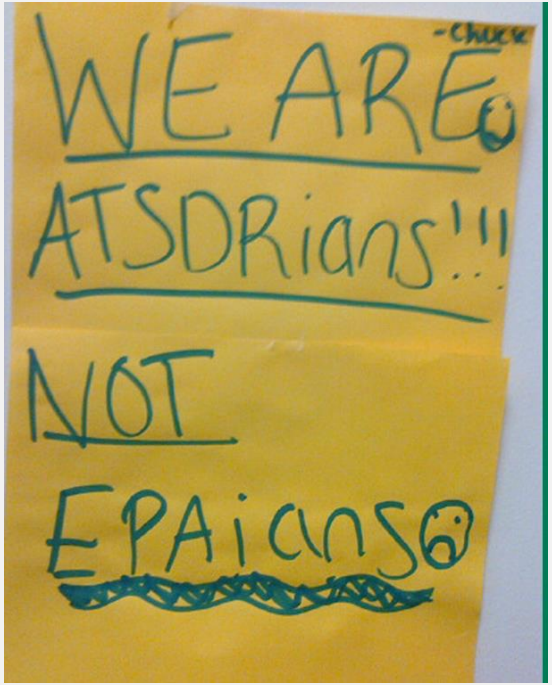
Presentation Outline

- **Agency background**
- **ATSDR's public health assessment process**
- **Typical ATSDR public health activities**
- **How we evaluate air concerns**
  - Pathways include indoor air (including vapor intrusion), outdoor air
  - Range of data sources include fence line, ambient air, citizen collected data, odor complaints, modeling
- **Summary**

Where did ATSDR come from??

- 1980 – created under CERCLA
  – so we are as old as Superfund

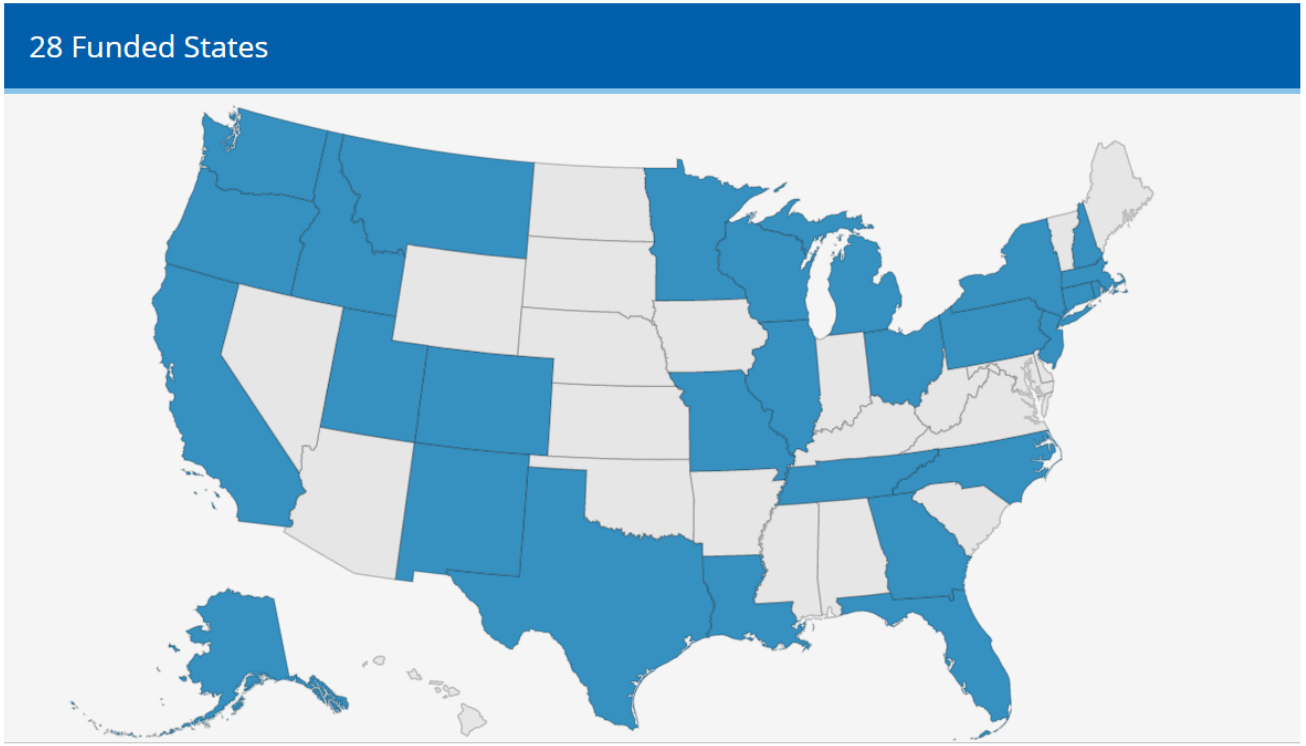
- 1984 – amendments to RCRA authorized us to conduct PHAs at request of EPA, states, or individuals



- 1986 – SARA/Superfund amendments broadened our responsibilities in public health assessments, toxicologic databases, information dissemination, and medical education.

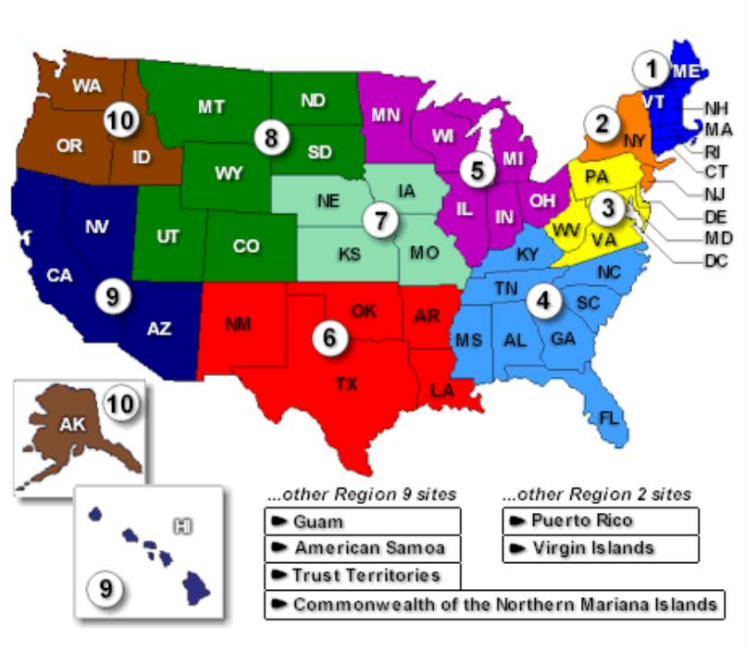
Funded State Partners

APPLETREE Map



Is ATSDR Part of CDC? Or EPA?

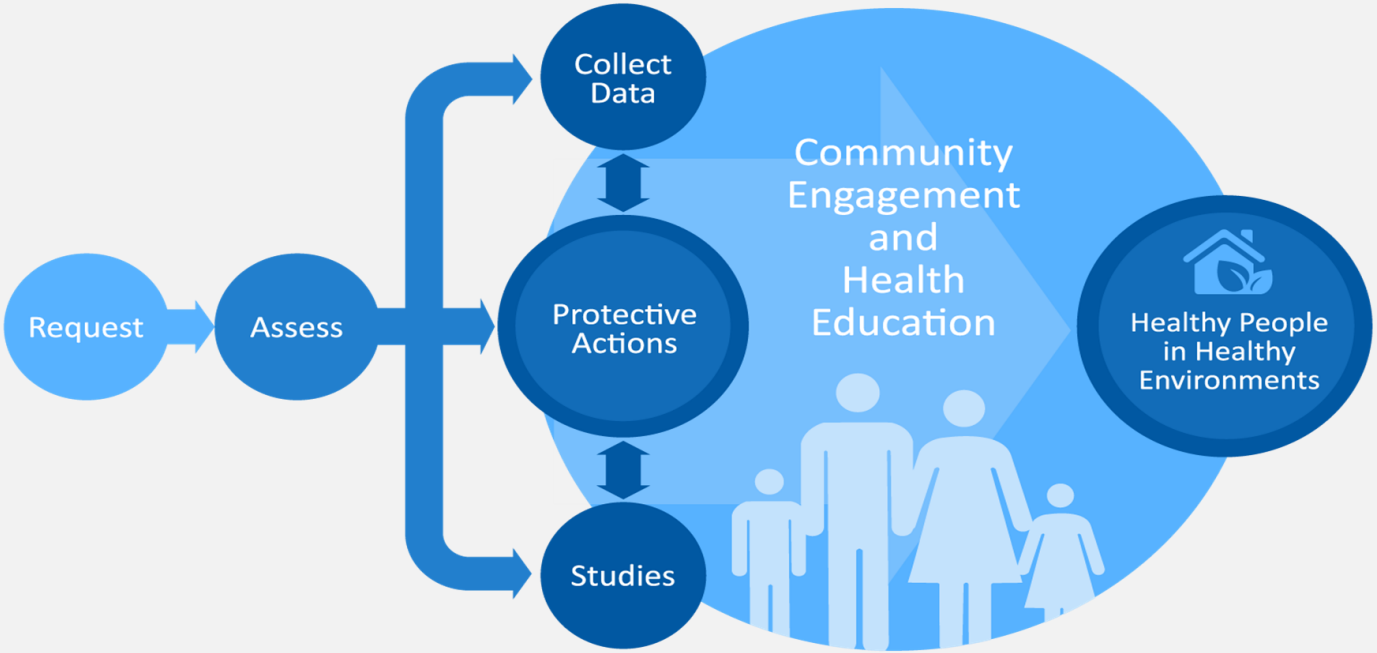
- **ATSDR has joint director's office with CDC National Center for Environmental Health in Atlanta**
  - ATSDR has staff embedded in each of EPA 10 regional offices and EPA HQ in DC
- **Most field staff are certified and trained for entry at contaminated sites**



How ATSDR gets involved

- **U.S. EPA, states, and local governments can request ATSDR's help to evaluate chemical exposure concerns/questions**
- **A site is on or proposed for the U.S. EPA's Superfund National Priorities List (NPL)**
- **Someone petitions ATSDR to evaluate a chemical exposure concern**
  - All petitions are evaluated against specific criteria to determine if ATSDR can support

ATSDR's Role


Request
Assess
Collect Data
Protective Actions
Studies
Community Engagement and Health Education
Healthy People in Healthy Environments

Superfund Risk & ATSDR Health Assessments of Environmental Hazards

Risk Assessments

- What is the risk?
- Should it be remediated?
- How clean is clean?

Protecting Public Health

Health Assessments

- What are the health concerns?
- Is there an exposure?
- Is there a health impact?
- What are the appropriate actions?

The Public Health Assessment (PHA) Process

- **Method to evaluate the public health implications of exposures to environmental contamination**

- **Are exposures occurring and, if so, are they likely to result in adverse health effects under site-specific conditions?**

- **Our public health assessment guidance manual is online: https://www.atsdr.cdc.gov/hac/phamanual/ch1.html**

Typical ATSDR Public Health Activities

- Coordinate activities with other agency stakeholders
- Open and maintain dialogue with the affected community
- Connect community with medical expertise

Typical ATSDR Public Health Activities

- Gather environmental data from exposure pathways and conduct public health evaluations
- Conduct site visits/observe onsite conditions and meet community members
- Provide health education information to the affected community and health professionals via our health reports or verbally

ATSDR/CDC Products and Activities

- Public health assessments, health consultations and letter health consultations
- Technical assistance
- Exposure investigations
- Health education outreach for community/health professionals
- Community Assessment for Public Health Emergency Response (CASPER)
- Epi-Aids and field investigations

ATSDR Public Health Assessment Process

- Meet with requestor, open community/stakeholder dialogue
- Screen exposure data, identify people who are exposed, determine data gaps, identify contaminants of concern
- Develop site-specific exposure scenarios (continuous, intermittent, seasonal, recreational/trespasser, indoor air, occupational)
- Compare site-specific exposure to toxicological/ epidemiological literature
- Draw conclusions and make recommendations

Examples of Air Data ATSDR May be Asked to Review

- Indoor air/vapor intrusion monitoring
- Facility emissions
- Fenceline monitoring
- Ambient air monitoring onsite and offsite during hazardous waste site cleanup and emergency events
- Citizen-collected air monitoring
- Odors

Are Environmental Odors Toxic?

In general, most substances that cause odors in the outdoor air (environmental odors) are not at levels that can harm your health.

Even if environmental odors aren't at levels that can harm your health, they can still affect your quality of life.

An odor is caused by a substance in the air that you can smell. Odors, or smells, can be either pleasant or unpleasant. In general, most substances that cause odors in the outdoor air are not at levels that can cause serious injury, long-term health effects, or death. However, odors may affect your quality of life and sense of well-being. Sometimes environmental odors can affect entire communities.

You may have signs and symptoms when exposed to environmental odors, but the symptoms usually go

Environmental odors can also cause stress; you may feel anxious, helpless, discouraged, sad, or depressed.

The following conditions may trigger symptoms when odors are below irritation levels:

- **If the odor has a very unpleasant smell**
- **If you've had a previous bad experience with the odor**
- **If you believe the odor is harmful**
- **If you feel stressed by the odor**

ATSDR Air Public Health Activities Examples

- **Exposure Investigation/Heath Consultations**
  - Natural Gas Ambient Air Monitoring Initiative (with EPA), PA; Mirant Potomac River Generating Station VA
- **Health Consultations**
  - Brooklyn Compressor Station PA– Citizen-collected PM and EPA PM sampling; Hunting Point Residential Asbestos VA; Roda VA residential PM, Chillum PCE site MD
- **Public Health Assessments**
  - River Terrace Ambient Air, DC; BoRit Asbestos NPL, PA, Hemphill Road TCE NC
- **Technical Assistance**
  - Concrete Recycling facilities in PA, Allegheny County Sheraton Asbestos PA, Croda DE, Paden City VOCS, WV, Weirton BOP, WV
- **Emergency Response & CASPER**
  - PES refinery PA, Hg spills everywhere, Paulsboro NJ Train Derailment
- **Air Modeling**
  - Palmerton Lead PA, Carter Impoundment/ALOHA Modeling Pigging Operations, PA

ATSDR/CDC Resources

- **ATSDR's Website** (www.atsdr.cdc.gov)
  - Case Studies in Environmental Medicine
  - Environmental Odors webpage and resources (https://www.atsdr.cdc.gov/odors/)
  - 300+ Toxicological Profiles
- **CDC Info Telephone Line**
  - 800-CDC-INFO (800-232-4636); TTY 888-232-6348, 8 am-8 pm Monday-Friday
  - E-mail cdcinfo@cdc.gov

Summary

- Your friendly ATSDR regional office is available to you for environmental public health support https://www.atsdr.cdc.gov/dro/dro_org.html
- In collaboration with state and local health partners, we can
  - Partner with you in evaluating air quality concerns
  - Assess air quality data and the implications for public health
  - Engage community members and health professionals and share health education information

Thank you!

For more information, contact NCEH/ATSDR
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.atsdr.cdc.gov www.cdc.gov
Follow us on Twitter @CDCEnvironment

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