

# Assessment of Chemical Exposures

## What is ACE?

When a large scale toxic substance release occurs, the Assessment of Chemical Exposures program (ACE) provides experts to help gather information. ACE is part of the National Toxic Substance Incidents Program (NTSIP), a federal program that gathers information about harmful spills so that it can be used to help prevent or reduce the harm caused by toxic substance incidents.



State and local authorities can request help with:

- Recording the contact information of people who may have been exposed to a toxic substance,
- Interviewing these people to get detailed information on their exposure, health effects, and needs resulting from the spill, and
- Collecting and testing samples that will measure the level of the toxic substance in people and the environment.

## How does ACE provide assistance?

Within 48 hours of receiving a request, the Agency for Toxic Substances and Disease Registry (ATSDR) can send an ACE team as an EPI-AID. An EPI-AID is a way that ATSDR and the Centers for Disease Control and Prevention (CDC) provide technical assistance. The state epidemiologist must issue or approve the request. Typically, EPI-AIDs are 1–3 week assignments, but they can be extended to 4 weeks if needed. After leaving the field, the team continues working with the state to analyze the data and prepare reports.

A toxic substance release qualifies for ACE assistance when two conditions are met:

- 100 people or more may have been exposed, and
- Exposure levels are high enough to cause acute health effects.

## What does ACE provide?

The ACE team supplements local resources with:

- Computers and GPS units to support the investigation,
- Data management system,
- GIS support,
- Laboratory support,
- Materials to collect biological samples, if needed,
- Multidisciplinary team (i.e. epidemiologists, GIS specialists, toxicologists), and
- Questionnaires tailored to the toxic substance that was released.

ATSDR can also provide technical assistance after smaller releases by sharing ACE questionnaires and consent forms with state and local health authorities.



## What are the parts of an ACE investigation?

The first step in an ACE investigation may be the Rapid Response Registry (RRR). This quick screening tool can be used to record contact information for people who may have been exposed. Local authorities can begin using RRR before the ACE team arrives. Learn more about RRR at <https://www.rapidresponseregistry.org>.

The ACE team can work with health officials to interview people who may have been exposed. The survey will collect detailed information on:

- Exposure history,
- Symptoms experienced,
- Health services use,
- Needs as a result of the exposure,
- Medical history,
- Other potential exposures to chemicals,
- How people received information about the release, and
- Health impact on pets.

If a laboratory test exists to assess clinical samples to determine exposure to the toxic substance, the ACE team can assist in collecting and facilitating analysis of samples. Results of testing done through ACE will be given to participants to share with their physicians.

ACE team members will work to obtain results of environmental testing from responding agencies. To more fully describe exposures, these data will be analyzed with the data collected during the ACE investigation. Under some circumstances, ACE will assist in collection and testing of environmental samples.

## Why do an ACE investigation?

State and local health departments can use information obtained from rapid assessments to:

- Assess the impact of the release on the community,
- Direct the public health response, and
- Plan hospital, local, and state emergency response.

ATSDR will review data from multiple incidents to make recommendations to minimize future casualties and health effects from chemical releases. The information can be used for education and training to prepare for future incidents. A cohort may also be identified to follow to understand whether longer term health effects result from the exposure.

## How do we request ACE assistance or learn more about ACE?

To request information or assistance, call the ACE program at **404-567-3256** or e-mail [ATSDRACE@cdc.gov](mailto:ATSDRACE@cdc.gov). You can also contact the CDC Emergency Operations Center 24/7 at **770-488-7100**.

