

## Does the Uranium Released From the Y-12 Plant Affect the Health of People Living Nearby?

### Highlights from ATSDR's evaluation of potential health effects

People living near the Oak Ridge Reservation want to know if their health could be affected by uranium releases from the Y-12 plant. The Agency for Toxic Substances and Disease Registry (ATSDR) conducted a public health assessment to evaluate whether the releases could be harmful to people who live in communities near the reservation. ATSDR is working with the Oak Ridge Reservation Health Effects Subcommittee (ORRHES) to ensure that the public health questions of people living in the Oak Ridge Reservation area are answered.

The Oak Ridge Reservation Health Effects Subcommittee was formed in 1999 under the guidelines of the Federal Advisory Committee Act to serve as an advisory group to ATSDR and the Centers for Disease Control and Prevention (CDC) on matters related to public health activities and research at the Oak Ridge Reservation. Members of the Subcommittee represent diverse interests, expertise, backgrounds, and communities. The Subcommittee provides an opportunity for all people to comment on issues discussed and helps prioritize issues evaluated by ATSDR.



The 825-acre Y-12 plant is located 2 miles south of downtown Oak Ridge and is separated from the main residential areas of Oak Ridge by Pine Ridge.

### What conclusion did ATSDR reach about health effects related to Y-12 uranium releases?

ATSDR's extensive public health assessment concludes that residents living near the Oak Ridge Reservation were exposed to uranium from the Y-12 plant. However, the amount of exposure was too low to be a public health hazard. ATSDR categorizes the Y-12 uranium releases as being no apparent health hazard. This means that people were exposed to uranium but the level of exposure is not expected to result in adverse health effects.

**Uranium released from the Y-12 plant is not a public health hazard for people living near the Oak Ridge Reservation.**

### Where can I get more information?

You can get more detailed information from the ATSDR public health assessment *Y-12 Uranium Releases* and *A Summary of ATSDR's Evaluation of Y-12 Uranium Releases—Oak Ridge Reservation*. Both are available on the ORRHES Web site at <http://www.atsdr.cdc.gov/HAC/oakridge/index.html> and on ATSDR's Web site at <http://www.atsdr.cdc.gov/>. You may also contact ATSDR's Oak Ridge Field Office at 865-220-0295 or contact ATSDR headquarters toll free at 1-888-42ATSDR (1-888-422-8737).

# CITY OF OAK RIDGE








## Key Issues and Concerns Evaluated

- Breathing dust or particles containing uranium
- Playing in the East Fork Poplar Creek floodplain soil and water
- Contacting the soil and water in the Scarboro community area
- Eating vegetables grown in the area surrounding the Y-12 plant
- Eating fish from East Fork Poplar Creek
- Eating beef or drinking milk from cows raised near the Y-12 area

# Y-12 Uranium Releases

## Summary of Public Health Implications From Off-Site Exposures to Y-12 Uranium Releases

Timeframe for Exposure	Issues and Concerns Evaluated	Conclusions
<p><b>PAST</b> 1944–1995</p>	<ul style="list-style-type: none"> <li>❖ Breathing dust or particles containing uranium</li> <li>❖ Eating vegetables grown in the area surrounding the Y-12 plant</li> </ul>  <ul style="list-style-type: none"> <li>❖ Playing in the East Fork Poplar Creek floodplain soil and water</li> <li>❖ Contacting the soil in the Scarboro community area</li> <li>❖ Eating fish from East Fork Poplar Creek</li> </ul>  <ul style="list-style-type: none"> <li>❖ Eating beef or drinking milk from cows raised near the Y-12 area</li> </ul> 	<p>The level of uranium that people living near the Y-12 plant received in the past is <b>NOT</b> a public health hazard.</p> <p>ATSDR does not expect kidney problems, cancer, developmental effects, or any other harmful health effects to result from exposure to uranium released from the Y-12 plant.</p>
<p><b>CURRENT</b> 1995–2002</p>	<ul style="list-style-type: none"> <li>❖ Breathing dust or particles containing uranium</li> </ul>  <ul style="list-style-type: none"> <li>❖ Eating vegetables grown in the Y-12 area</li> <li>❖ Playing in the East Fork Poplar Creek water</li> </ul>  <ul style="list-style-type: none"> <li>❖ Contacting the soil and water in the Scarboro community area</li> </ul>	<p>The level of uranium that people living near the Y-12 plant are receiving today is <b>NOT</b> a public health hazard.</p> <p>ATSDR does not expect kidney problems, cancer, developmental effects, or any other harmful health effects to result from exposure to uranium released from the Y-12 plant.</p>

**Please note:** ATSDR and ORRHES *do not* address public health issues related to workplace exposure or risk. Information specific to workers can be found on the Internet at <http://cedr.lbl.gov>. This site provides information about epidemiologic studies of U.S. Department of Energy workers, including studies of Oak Ridge Reservation workers at the Y-12, X-10, and K-25 sites.

### Why is ATSDR at the Oak Ridge Reservation?

ATSDR is the principal federal public health agency charged with evaluating the human health effects of exposure to hazardous substances in the environment. Congress created ATSDR to implement the health-related sections of the 1980 Superfund law and other laws that protect the public from hazardous waste and environmental spills of hazardous substances. The Oak Ridge Reservation is on the U.S. Environmental Protection Agency's National Priorities List for Uncontrolled Hazardous Waste Sites.

### What is ATSDR doing at the Oak Ridge Reservation?

ATSDR is using the public health assessment process to evaluate previous studies and environmental data to determine whether releases of hazardous substances from the Oak Ridge Reservation could have affected the health of people in communities near the reservation. The public health assessment is the primary public health process ATSDR uses to

- ❖ **Identify** populations off the site who could have been exposed to hazardous substances
- ❖ **Determine** potential health effects of exposure
- ❖ **Address** the health concerns of people in the community
- ❖ **Recommend** any needed follow-up public health actions to address exposure

In addition to the public health assessment on uranium releases from the Y-12 plant, ATSDR scientists are conducting public health assessments on the following Oak Ridge Reservation issues:

- ❖ Mercury
- ❖ Radionuclides from White Oak Creek
- ❖ Polychlorinated biphenyls
- ❖ Uranium and fluoride releases from the K-25 site
- ❖ TSCA incinerator
- ❖ Off-site groundwater
- ❖ Screening for current chemical exposures
- ❖ Iodine 131

### Who can I contact for more information?

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### What is ATSDR's mission?

ATSDR's mission is to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and diseases related to toxic substances.

### What is ORRHES's mission?

ORRHES's mission is to provide ATSDR and CDC with advice regarding public health studies and activities relating to people who may have been exposed to radioactive and chemical emissions from the Oak Ridge Reservation.