At a Glance

The EPA laboratory in Cincinnati, OH is a major federal facility that includes a large Office of Research and Development (ORD) presence. Scientists in Cincinnati conduct a wide range of environmental and public health research. ORD activities have significant impacts on the Greater Cincinnati region—which includes southwest Ohio, northern Kentucky and southeastern Indiana—by advancing science, positively impacting the economy, and contributing to the local community.

Science: ORD is a world-class research organization, and the research conducted by scientists in Cincinnati has broad impacts at local, regional, and national levels. Among many different areas of study, ORD scientists develop methods, models, and tools that help states and communities assess environmental risks and, ultimately, make decisions to manage chemical risks, clean up hazardous waste sites, and safeguard water quality, public water systems, and public health.

Community Engagement: ORD scientists are developing water quality monitoring, modeling and management practices in partnership with the East Fork Watershed Cooperative, a multi-agency group focused on improving water quality in this local, mixed-use watershed. EPA is also a technical anchor for Confluence, the Water Technology Innovation Cluster for the Ohio River Valley Region, which helps draw companies to the region to collaborate on water technology.

Economic Impacts: The EPA Cincinnati facility has a total federal payroll of over $58 million. The 980 people working there provide a total of $88.6 million dollars that are injected into the local economy where workers buy goods and services in the community, supporting additional jobs and spending and increasing overall economic output for the community. EPA also works with outside innovators seeking to collaborate on R&D or to license an EPA-patented technology for research or commercialization. These collaborations provide commercial and job creating opportunities for the private sector.

Cincinnati Laboratory Impacts by the Numbers

Greater Cincinnati, OH Area		
980 Total jobs at the laboratory	**$88.6 million** Annual payroll, on-site contracts, and grant dollars supported by lab	**537** Federal jobs on-site
21 Active cooperative research and development agreements	**78** Post-doctoral, student, and visiting researchers on-site	**86** Patents held by the lab along with 14 license agreements
	15 Counties In OH, KY, and IN where Cincinnati lab employees live	

Did you know?

- A mock Boeing 737 aircraft water system is used to study microbial contamination and real world disinfection and flushing procedures.
- Cincinnati researchers provided critical science to protect citizens from harmful algal toxins in Toledo, OH, and elevated lead levels in the drinking water of Flint, MI and Sebring, OH.
- EPA's homeland security research center is headquartered in Cincinnati.

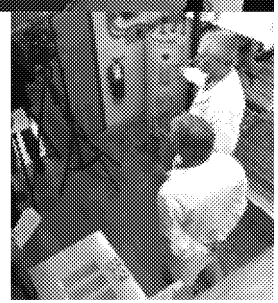
Turn over for more science!

EPA research provides decision makers—from the first responder to other government agencies—the information needed to make sound decisions quickly and effectively to protect health and the environment. A few examples of the research conducted at EPA in Cincinnati are summarized below:

Water Quality Research

Water is one of our Nation's most precious resources, yet a host of challenges threaten the safety and sustainability of our water resources, including biological and chemical contaminants, aging water-system infrastructure, natural disasters, and homeland security threats.

EPA **drinking water** researchers in Cincinnati work alongside many local organizations, sharing expertize and advancing the science needed to protect consumers. Studies in ORD's state-of-the-art solids and surface analysis lab are advancing our understanding of pipe corrosion and its control. This research, combined with Drinking Water Pilot Plant studies on treatment and distribution, provides the science needed to respond to elevated lead levels in communities like Flint, MI and Sebring, OH. It also complements research to develop reliable and accurate analytical methods to measure contaminants in drinking water. These include methods to non-invasively assess human exposures to pathogens and link health effects with drinking water exposures.

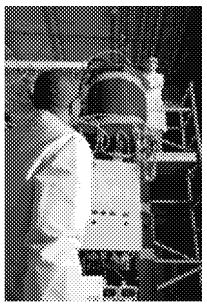


EPA plays a critical role in **homeland security** by conducting research that helps water utility managers detect, respond to and become more resilient to natural and man-made disasters. Studies at EPA's Test and Evaluation Facility in Cincinnati include the development and evaluation of real-time sensors and software for detecting intentional contamination, and pilot tests to examine contaminant persistence and decontamination in sewer systems. Methods to detect bioagents in water and soils developed in ORD's Biocontainment Suite are used by a nationwide network of laboratories to provide data that inform cleanups following an attack.

Healthy **watersheds** provide critical economic and social benefits. EPA Cincinnati researchers conduct simulated stream studies at the Experimental Stream Facility (Miford, OH) to test the effects of contaminants, such as salts and nutrients, on stream ecosystems. Scientists investigate microbial source tracking for identifying and managing fecal and other contamination sources that threaten drinking water supplies and lead to beach closures.

Land and Waste Research

EPA research in Cincinnati provides advancements that minimize risks from contaminated sites and reduce the chance of future contamination by considering material impacts across their entire lifecycle. Landfill management research at the Center Hill Research Facility in Cincinnati improves landfill fire detection, prevention and control, and informs 30-year post-closure care guidance for hazardous waste landfills permitted under the Resource Conservation and Recovery Act (RCRA). Risk assessment researchers also develop chemical-specific Provisional Peer-Reviewed Toxicity Values used during Superfund site cleanups. Researchers are studying the behavior, fate, and effects of oil and spill agents (e.g., dispersants) to help state and federal emergency responders during oil spills.



Technical Support to Communities

EPA Cincinnati researchers provide technical support to address environmental problems in communities. Through a network of EPA technical support centers, ORD researchers assist EPA decision makers, states, tribes, municipalities, and others responsible for assessing and remediating contamination at sites. On an annual basis, the three centers headquartered in Cincinnati—Engineering Technical Support Center, Superfund Human Health Risk Technical Support Center, and Ecological Risk Assessment Support Center—respond to approximately 400 requests for support from all 10 regions in the United States. Drinking water researchers are routinely called on by states and public water systems to diagnose problems and provide solutions.

For more information, please visit: https://www.epa.gov/aboutepa/about-office-research-and-development-ord