

The EQUATION

Who Benefits from Dismantling EPA Science?

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Over the past few months, we have witnessed a massive dismantling of science and scientific processes in the federal government, and especially at the U.S. Environmental Protection Agency (EPA). Staff have been threatened and fired, with targeted cuts to the agency's environmental justice office, federal spending was frozen, and EPA Administrator Zeldin announced a massive deregulatory plan to undertake 31 actions to weaken key environmental protections. Altogether, these efforts threaten our nation's public health.

Then last week, the Trump administration <u>indicated</u> that it plans to slash the staff at EPA's Office of Research and Development (ORD), effectively eliminating the office altogether. ORD serves as the hub of scientific research at the agency, where scientists and researchers conduct critical research about the impacts of pollution on health. UCS President Gretchen Goldman started her career at ORD and writes about the importance of the office here.

Unfortunately, we are also seeing similar threats in the U.S. Congress. Earlier this year, lawmakers introduced bills in both the U.S. Senate and House of Representatives that would further dismantle the life-saving scientific research at EPA. The so-called "No IRIS Act" (H.R. 1415 and S. 623) would prohibit EPA from relying on any scientific assessment produced by the Integrated Risk Information

regulations and higher rates of cancer, birth defects, learning disabilities, and other devastating health consequences, especially for children.

What is the Integrated Risk Information System (IRIS)?

Despite its vague name, the IRIS program, which is situated within ORD, plays an extremely critical role in safeguarding Americans from everyday exposure to pollution and toxic chemicals. IRIS scientists conduct independent rigorous assessments that evaluate the body of evidence linking certain pollutants or chemicals like <u>formaldehyde</u> or ethylene oxide to certain health effects, such as cancer.

These reviews provide a scientific basis for many of the protective standards set by U.S. laws, including: the Clean Air Act; the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) also known as Superfund; the Clean Water Act; the Resource Conservation and Recovery Act (RCRA); the Toxic Substances Control Act (TSCA); and the Safe Water Drinking Act. IRIS assessments are used by federal, state, local, and even international agencies.

Blocking EPA from relying on these assessments when setting health protective standards is like kicking the chair

pollutants, and may open additional pathways for undue industry influence.

Industry lobbyists' efforts to eliminate IRIS

The bills in Congress are backed by industry lobbyists including those from trade associations like the American Chemistry Council (ACC)—many of whom have now been appointed to leadership positions within EPA. For years, IRIS assessments have helped shield EPA regulations from the chemical and fossil fuel industries' efforts to strip our nation of environmental protections. Under the first Trump administration, we documented several attacks on the IRIS program, including directives to delay IRIS assessments, interference with the review process, and efforts to downplay the findings of reviews.

While there is always room for improvement, the ACC and industry groups have fabricated problems with the IRIS program to serve their agenda. For example, the ACC has complained that the program is subject to "fraud, waste, abuse, and mismanagement" because it is listed in the U.S. Government Accountability Office's (GAO) High-Risk Series. This is a mischaracterization of the challenges faced by IRIS.

According to GAO's 2025 High-Risk Series, challenges in the

unable to increase the number of assessments in development..." and that "IRIS Program staff reported they need 26 additional staff across various scientific specialties to meet current demand for chemical assessments." Stifling the program would not remedy these challenges and would be in direct opposition to the recommendations made by GAO.

Furthermore, GAO's latest report found that since February 2023, the program made significant progress on completing chemical assessments, having published four final assessments and seven toxicity value assessments. Complaining about a problem that you helped create does not solve the problem.

Despite industry interference, IRIS assessments remain the gold standard

Despite ACC's opposition to the conclusions of several IRIS assessments, these reviews have long been affirmed as the gold standard in toxicity reviews. Independent government bodies such the GAO have <u>acknowledged</u> the integrity and importance of IRIS, and the National Academies of Sciences, Engineering, and Medicine (NASEM) has repeatedly affirmed the use of IRIS values.

To illustrate the threats to these reviews, take ethylene oxide

In 2016, IRIS published a risk assessment linking ethylene oxide exposure to cancer, concluding that this toxic chemical is much more dangerous than previously thought.

Completing this review involved a decade-long process to systematically review and assess toxicological and epidemiological evidence about the health risks of ethylene oxide. This process included a robust peer review process involving EPA scientists, independent scientists from the agency's Science Advisory Board, and the public. The IRIS assessment classified ethylene oxide as a carcinogen, which aligned with conclusions by the National Institutes of Health's National Toxicology Program and the International Agency for Research on Cancer.

In 2021, EPA's Office of the Inspector General—the agency's internal watchdog—recommended that EPA review regulations for facilities that emit ethylene oxide, since rules had not been updated in accordance with the Clean Air Act. Over the following years, EPA strengthened several of these regulations, including for chemical manufacturing facilities and sterilization facilities. UCS sued EPA and engaged in yearslong advocacy to help secure these wins, which would significantly reduce cancer risks, especially for workers at these facilities and nearby communities. Our research shows that ethylene oxide emissions disproportionately impact communities of color and Spanish-speaking communities. The 2016 IRIS risk assessment for ethylene oxide is the

However, at every turn, the industry sought to <u>undermine</u> and block EPA's use of the IRIS assessment in these updated regulations. For years, they have pushed EPA to instead use a <u>risk assessment</u> developed by the <u>industry-friendly</u> Texas Commission on Environmental Quality (TCEQ).

TCEQ's own review cherry-picked the data on ethylene oxide, eliminating consideration of cancer risks to women, and did not consider new data. As a result, TCEQ landed on a cancer risk value that is 2,000-fold less protective than EPA's. Using this value in regulatory decisions would result in higher EtO emissions, and greater cancer risks to the public, especially for children.

Under the Biden Administration, EPA affirmed its reliance on the 2016 IRIS assessment, but the new regulations for chemical manufacturing and sterilization facilities are now on the chopping block. Furthermore, the Trump administration nominated Aaron Szabo to serve as assistant administrator of EPA's Office of Air and Radiation. Most recently, Szabo was a lobbyist for the medical device industry, which sought to weaken the proposed sterilizer rule.

Despite these politically motivated threats, the science remains clear and consistent. Last year, TCEQ commissioned an independent review of its EtO assessment by NASEM.

women, and new evidence, and made inappropriate decisions in the dose-response assessment that skewed the results. In fact, NASEM urged TCEQ to follow the systematic review process outlined in ORD's handbook for developing IRIS assessments. Once again, the scientific review process affirmed the value and rigor of IRIS assessments.

What you can do to protect IRIS and ORD

With this administration resisting court orders and illegally consolidating executive power, it can be hard to know who will hold those in positions of power accountable. But legislators are accountable to their constituents. Last week, we sent a letter signed by 123 organizations to members of the U.S. Congress asking lawmakers oppose these bills as well as broader efforts to eliminate ORD.

You can also support this effort by joining this letter from scientists, healthcare professionals, and public health advocates to protect EPA's scientific research arm, including the IRIS program. You can also call your members of Congress to ask them to oppose the No IRIS Act. Join us today to protect the science that upholds our nation's environmental and public health safeguards.

The Trump **Administration**

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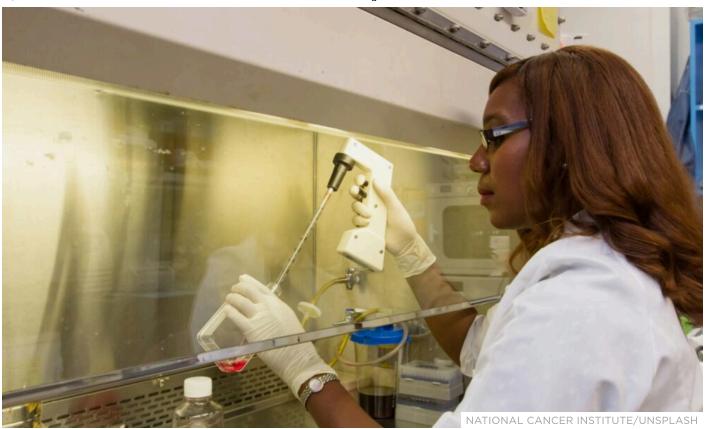


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