

FACT SHEET

THE STATE OF SCIENCE IN THE TRUMP ERA

HIGHLIGHTS

Throughout its first two years, the Trump administration has sidelined science in its handling of critical public health and environmental decisionmaking. Now, the 116th Congress can add an urgently needed check on administration actions. Congress can join with scientists and their supporters to stop the Trump administration's anti-science actions. Today's attacks on science can and will have substantial consequences for public health and the environment for decades to follow. We must continue to push back when science is sidelined. The current and future health and safety of our families our communities, and our nation depend on it.

Scientific Integrity Losses and Lessons for the 116th Congress

Pushing Back Against the Trump Administration's Attacks On Science

Throughout its first two years, the Trump administration has sidelined science in its handling of critical public health and environmental decisionmaking. The Union of Concerned Scientists (UCS) has investigated the level of political interference in science by agency and issue, and has fought back—both in the courts and through sustained advocacy from scientists and allies—to prevent or restrain some of the worst abuses.

Now, the 116th Congress can add an urgently needed check on administration actions that harm our health and environment. Congress has the power to investigate attacks on science in agencies, defend the vital role of science in federal decisionmaking, and mandate increased protections for the use of science in agencies. By holding agencies accountable, Congress can impact the conduct of agency leaders and improve conditions so that federal scientists can once again effectively use their knowledge to protect the public.

How Congress Can Push Back

We must seize the opportunity to support Congress to investigate the public health, safety, and environmental harms caused by the administration's anti-science actions and make the case for proactive policy solutions to strengthen the role of science in decisions affecting our public health, safety, and environment. Congressmembers have critical oversight tactics at their disposal. For example, they can:

- develop proactive legislative solutions;
- make appointments for science leadership in agencies;
- submit requests for investigations into agencies through the Governmental Accountability Office (GAO);
- leverage legislative committees to demand access to records for investigation;
 and
- host public hearings for agency figures, technical experts, and experts from affected communities to speak to the impacts of an agency's actions.

Opportunities for Oversight

The Trump administration's attacks on science have been pervasive. Public health and safety as well as our environment have suffered, and our democracy has been eroded. The following examples represent six vital public safety issues being affected by the Trump administration's actions, the real-world harms that these attacks will have, and how we, and Congress, can push back against these attacks. For more details on these attacks on science as well as others and the harms they present to American people, visit www.ucsusa.org/ScienceUnderTrump.

DERAILING AIR POLLUTION POLICY

Refusing to consider science when making decisions that affect the amount of pollutants in the air we breathe puts millions of people nationwide at greater risk for severe respiratory and cardiovascular problems.

The Trump administration has repeatedly attacked the science underpinnings of air pollution policies that keep our air clean. For example, leaders at the Environmental Protection Agency (EPA) have dismissed scientific advisory panels on toxic pollutants found in our homes and environment, such as ozone and particulate matter. The EPA is also no longer requiring major polluters to use the best available technologies to reduce toxic pollutants from entering our air. These pollutants can cause nonfatal heart attacks, asthma attacks, and premature death in people with heart or lung disease. EPA leadership is also suppressing the release of a report on the dangers of formaldehyde to public health, which include, in the short-term, burning sensations in the respiratory system, nausea, and skin irritation. Exposure to formaldehyde over the long term may increase the risk of cancer.

To push back against sidelining science on air pollution protections, members of Congress should:

- request that the GAO investigate the ways in which the EPA's recent anti-science actions conflict with their legal responsibilities as authorized by the Clean Air Act, the Chemical Safety Act, and other public safety laws and rules;
- conduct public hearings and briefings to educate policymakers and the public about the public health, safety, and environmental harms caused by the EPA's recent antiscience actions; and
- strengthen the Clean Air Act by codifying the use of expert pollutant review panels (e.g., the EPA's particulate matter and ozone review panels).

CENSORING SCIENTISTS AND CREATING A CHILLING ENVIRONMENT

The Trump administration has censored the voices of federal scientific experts in many ways that will prevent information from reaching the public and avert the development of science-informed policies that protect public health and safety and the environment, especially around the causes and impacts of climate change. For example, the Department of Energy (DOE) has asked its scientists to refrain from using the phrases "climate change," "emissions reductions," and "Paris Agreement," despite the need to consider climate change impacts and causes when making energy policy.

Federal scientists also have been restricted in some cases in sharing critical knowledge with the media, leaving the public without important information on important science issues. Communicating about climate change has led to punishments for federal land managers, such as the superintendent of Joshua Tree National Park. In addition to direct censorship, the Trump administration has also created a chilling environment for research, for example by restricting scientists funded by the National Institutes of Health from using fetal tissue for critical, life-saving research on human diseases such as HIV, Alzheimer's, and Parkinson's.

To push back against the censorship of scientists, Congress should:

- investigate how censorship threatens federal scientists and the functioning of federal agencies critical to health and the environment;
- hold hearings that demonstrate the public value of science-based programs and policies that develop when scientists are freely able to conduct and share their research with the public, legislators, and rulemakers on critical safety issues, from chemical exposure to climate change resilience;
- further protect the rights of federal employees to speak out about waste, fraud, and abuse by expanding the 2012 Whistleblower Protection Enhancement Act; and
- explore ways to strengthen the use and quality of independent science advice Congress receives through structures such as the Congressional Research Service, the GAO, or through the restoration of the Office of Technology Assessment.

Congress can use a range of oversight tactics to push back against attacks on science.

CUTTING OUT SCIENTIFIC ADVICE

Advisory committees provide critical independent advice that helps policymakers determine the best responses to complex challenges, such as air pollutants that threaten health of vulnerable populations. Neglecting, skewing, and dismissing these committees reduces the government's ability to rely on robust, professional scientific advice, leading to major policy consequences for public health and the environment.

Removing a role for outside experts to provide federal agencies with independent scientific advice will likely diminish the effectiveness of policies intended to protect public health and safety and our environment. For example, in October 2018, the EPA announced that it would not convene an expert panel on the health effects of ozone. Ozone is an air pollutant that can inflame and damage airways, increase the frequency of asthma attacks, and cause shortness of breath especially in children, older adults, outdoor workers, and those that already have lung disease. The EPA also disbanded an expert panel on particulate matter, an air pollutant that can cause non-fatal heart attacks, asthma, and premature death in those with existing heart and lung disease.

To push back against the administration's sidelining of independent science advice, Congress should:

- hold hearings related to dwindling agency science advice through changes to science advisory committees, including the dismissal of independent committee members, freezes and delays in committee activity, the dismantling of committees and panels, and other issues;
- strengthen the Federal Advisory Committee Act (FACA) to include clearer guidelines for science advisory committies on operations, member recruitment, conflict of interest, and information accessibility; and
- strengthen the input of Clean Air Scientific Advisory
 Committee subpanels by codifying the use of pollutant
 review panels to assess data and offer advice on air pollution standards.

UNDERMINING SCIENCE-BASED SAFEGUARDS THROUGH PROCESS CHANGES

Most proposals touted as "regulatory reform" are intended to hamstring the ability of the federal government to issue science-based public health, safety, consumer, and environmental protections. Under the Trump administration, many proposals weakening the ability of federal agencies to implement science-based safeguards have moved forward, with harmful consequences for public health and the environment. These proposals may mean that less scientific evidence is used in policies that should prevent communities from being exposed to carcinogenic material, protect our children from developing asthma, or protect critical species from going extinct.

For example, Executive Order 13771 requires agencies to repeal two rules for each new rule proposed. Such restrictions force government experts to choose between which public health and safety threats to prevent and which to allow to cause harm. In another example, the EPA proposed a

rule entitled "Strengthening Transparency in Regulatory Science," which restricts the agency from using studies to craft public health safeguards when the studies' raw data are not publicly available. This includes vital medical and public health information that cannot legally be made public.

To push back against these harmful reform proposals, Congress should:

- request investigations into threats to the process and functioning of federal agencies;
- use its power to legislatively overturn President Trump's
 executive orders that sideline science in agency decisionmaking, such as Executive Order 13771, which requires
 agencies to repeal two rules for each new rule proposed,
 and Executive Order 13777, which requires agencies to
 establish regulatory reform task forces; and
- investigate the review of agency rules by Office of Information and Regulatory Affairs (OIRA) and create greater transparency around placing and enforcing time limits on review turnaround and making any drafts or changes publicly accessible.

HALTING, SUPPRESSING AND ALTERING SCIENTIFIC STUDIES

The Trump administration has been halting, suppressing, and altering scientific analyses that are used to make evidence-based decisions, provide vital information to the private sector and the broader public, and help ensure that public health, safety, and environmental protection are prioritized.

For example, in 2017 the Trump administration halted a National Academies of Science, Engineering, and Medicine (NASEM) study on the health effects of mountaintop removal coal mining in Appalachia. Stopping this study was egregious given the scientific evidence of a causal link between mountaintop coal mining and higher rates of birth defects, cancer, and cardiovascular and respiratory diseases in communities nearby where mountaintop removal coal mining occurs. The Trump administration also barred Treasury economists from conducting analyses on the long-term economic impact of the Tax Cuts and Jobs Act (TCJA), leaving Congress without needed information to make an informed vote. The result of the passing of the TCJA thus far has been an increase in the US deficit, and most economists expect a decrease in household income for low-to-middle income families over the long term.

To push back against the halting, suppressing, and alteration of scientific studies, Congress should:

 help establish and foster a culture of scientific integrity through legislation that strengthens scientific integrity at federal agencies and deters future political interference in government science;

- pass legislation to prevent the obstruction of reports in production at NASEM;
- request a GAO report on the effectiveness of agency scientific integrity policies across the government, including recommendations for enhancement or strengthening of policies and practices; and
- hold hearings that educate and share information on the adverse impacts and costs of halting or suppressing agency reports and analyses on public health, safety, land management, and the environment.

COMPROMISING SCIENTIFIC INTEGRITY AT FEDERAL **AGENCIES**

In these ways and many more, the Trump administration has been carrying out actions that clearly violate the scientific integrity policies at federal agencies. This harmful and pervasive pattern of hostility to science prevents the development and communication of vital scientific evidence to the public, changes the rules by which science informs policymaking, and is eroding public health, safety, and environmental safeguards.

These attacks on scientific integrity will affect the health, safety, and sometimes finances of people in the US. For example, the Trump administration attempted to strong-arm the Agency for Toxic Substances and Disease Registry (ATSDR) into suppressing the release of a report on PFAS (per- and polyfluoroalkyl substances). PFAS are a group of man-made chemicals found in many everyday products (such as non-stick cookware and water-repellent clothing) as well as in firefighting foam used by the military, and has been linked to cancer, thyroid disease, and immunological effects. In another example, political appointees at the Department of Labor (DOL) ordered career staff to alter an analysis and later bury a study about tip-pooling in order to push through a rule that would have taken hard-earned tip money from workers and placed it into the hands of the companies they work for.

To push back against scientific integrity violations, Congress

- support robust scientific integrity policies, such as the Scientific Integrity Act, to promote a culture that deters future political interference and strengthens scientific integrity at federal agencies;
- demonstrate the public value of science-based programs and policies through investigations and hearings via legislative committees or the GAO, especially on scientific integrity policies and infrastructure across agencies; and
- use confirmation hearings for agencies' political leaders and budget hearings as opportunities to obtain commitments to strong standards of scientific integrity and transparency.

How to Take Action

Scientists and science advocates have blunted numerous attacks on science, pushing back through Congress and the courts and taking their case directly to the American people. The scientific community and its allies have defeated the appointment of federal agency officials with conflicts of interest, defended critical science-based public protections, and prevented the administration from reducing important data-

collection efforts. For more information on how scientists are fighting back, visit https://blog.ucsusa.org/michael-halpern/thegame-is-changing-how-two-years-of-trump-has-energized-thescience-community.

Now we must continue the fight by letting our elected officials know that we care about what's at stake when it comes to science-based policymaking, and by pushing them to step up their efforts to shine a light on bad actors and conduct investigations to hold agencies accountable.

UCS has many resources on how to effectively engage with your policymakers. These resources include guidance on how you can schedule an in-person meeting, craft a pitch on a specific issue, and what to say on a call with your policymaker's office. To access these resources and more, please visit www.ucsusa. org/watchdog.

Union of Concerned Scientists

FIND THIS DOCUMENT ONLINE: www.ucsusa.org/ScienceUnderTrump

The Union of Concerned Scientists puts rigorous, independent science to work to solve our planet's most pressing problems. Joining with people across the country, we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future.

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