

# Voices of Federal Scientific Integrity

## *Centers for Disease Control and Prevention*

### HIGHLIGHTS

*Scientists conduct work vital to fulfilling the science-based missions of federal agencies charged with protecting Americans' health and safety, yet some federal officials are sidelining science from the policymaking process, endangering the nation's health, economy, environment, and world leadership. How do scientists working for the federal government experience the state of science in their own agencies? A 2018 survey at the Centers for Disease Control and Prevention (CDC) highlights several issues regarding the agency's science-based decisionmaking processes, including evidence of improper influence from political leadership, constraints resulting from workforce reductions, and challenges to communicating scientific research to the public and the media. However, scientists also report that the CDC adheres to the agency's scientific integrity policy and that training related to the policy has improved.*

Our nation relies on government science and scientists to protect public health, public safety, and the environment. However, political, ideological, and financial interests often undermine the use of science in federal decisionmaking, harming the public good in the process. While all modern presidents have politicized science to some extent, the Trump administration has escalated the challenge in many areas in both scope and severity.

In February and March 2018, the Union of Concerned Scientists (UCS) and the Center for Survey Statistics and Methodology at Iowa State University surveyed more than 63,000 federal scientists in 16 government agencies, including the Centers for Disease Control and Prevention (CDC). The goal was to gain insight one year into the Trump administration about the state of scientific integrity in the federal government, as well as agency effectiveness and the working environment for its scientists. At the CDC, 10,531 scientists and scientific experts were sent a survey; 605 responded, yielding an overall response rate of 6 percent. Across survey items, the total number of respondents varied.

The results shed light on the level of politicization of science at the CDC, as well as the impact on the agency's effectiveness and its federal workforce. While the CDC has a strong scientific integrity policy, respondents report interference from Congress and the White House as well as unnecessarily burdensome clearance or approval processes for the external communication of scientific information.

This study follows and builds on surveys conducted by UCS since 2005 during the administrations of President George W. Bush and President Barack Obama. Detailed methodology and results from all surveys can be found at [www.ucsusa.org/surveys](http://www.ucsusa.org/surveys).



Cleopatra Adejiji/CDC

*In early 2018, scientists from the CDC were surveyed on issues of scientific integrity, funding and resources, censorship, top barriers to science-based decisionmaking, and more.*

## Scientific Integrity at the Centers for Disease Control and Prevention

The CDC is essential to personal and societal decisions around keeping Americans safe. Instilling a strong culture of scientific integrity at the CDC is vital for its scientists to fulfill the agency's mission "to protect America from health, safety, and security threats, both foreign and in the US."

The CDC's scientific integrity policy establishes strong protections for scientists to speak to the public and the media, and it provides clear procedures for reporting individual allegations of inappropriate interference. On a positive note, respondents in 2018 were more likely than those in 2015 to say they are adequately trained on these policies. Unfortunately, CDC scientists also noted significant issues with communicating their work to the public and news media.

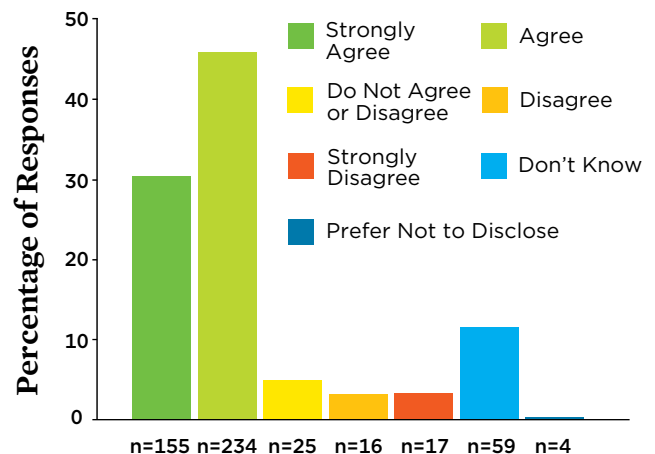
Further, respondents in 2018 reported that actions outside the scope of the scientific integrity policy are compromising science. These actions include workforce reductions, excessive influence of commercial interests, and interference from Congress and the White House. "My work has not been directly affected, but there are numerous examples in my center and the agency in general of commercial, political, and non-governmental entities improperly influencing scientific integrity," said a CDC scientist. "The influences have caused the global standing of CDC to diminish dramatically. Without scientific integrity, the word of CDC cannot be fully trusted."

### CDC scientists report that the agency's scientific integrity agency policy is working:

- 76 percent (389 respondents) agreed that the CDC adheres to its scientific integrity policy (Figure 1).
- 79 percent (439 respondents) felt the agency always or frequently collects the scientific and monitoring information needed to meet its mission effectively.
- Nearly three-fourths (342 respondents) felt they have received adequate training on their whistleblower rights and protections.
- 50 percent (319 respondents) reported they would be willing to come forward if they experienced or witnessed a scientific integrity issue. However, 28 percent (89 respondents) said they do not trust the agency to fairly assess and address an issue brought to its attention.
- A majority of respondents felt they have adequate training on the agency's scientific integrity policy, similar to the 2015 UCS survey of CDC scientists. However, there were significantly more positive opinions in 2018.

FIGURE 1. Adherence to Scientific Integrity Policy at the CDC

### My agency adheres to its scientific integrity policy (or statement of commitment to scientific integrity).



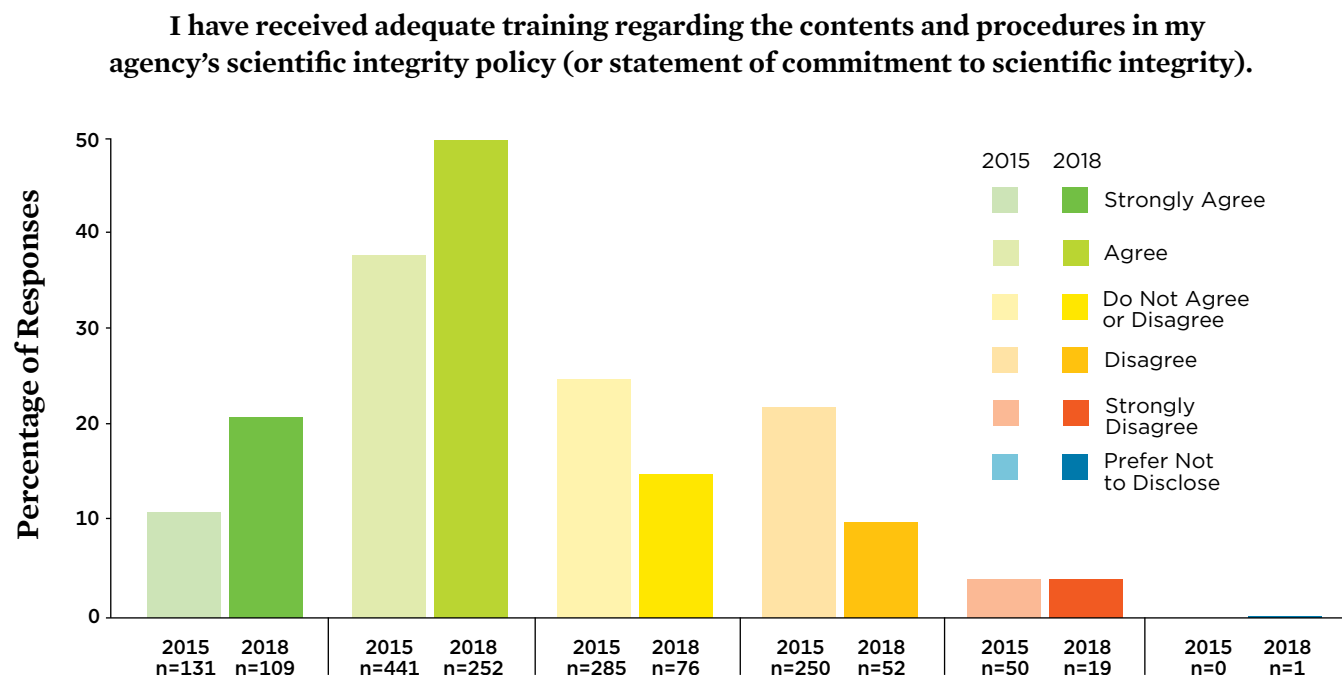
The majority of CDC scientists responded that their agency adheres to its scientific integrity policy.

## Scientists Speak Out

Anonymous survey respondents from the CDC cited political interference and lack of funding among their concerns. Here are some examples of what they had to say:

- "We all just want to do our jobs to the best of our abilities, using the best evidence-based methods. But even those who have spent 30+ years at CDC are concerned that, for the first time, politics are being put above science. This ruins scientific integrity, and everything that we stand for."
- "Controversial topics are not being publicly highlighted for concern that drawing attention to them will result in cuts to the program. So, important content and findings (e.g., around transgender health) are not being publicly highlighted and thus our ability to inform and educate the public is limited."
- "Reduced funding for particular activities has led to reduced programs, job uncertainty, staff turnover, hiring freezes. These factors have delayed program implementation or led to their cancellation."

FIGURE 2. Scientific Integrity Policy Training at the CDC



Compared with 2015, CDC scientists felt better trained on the contents and procedures of the CDC's scientific integrity policy. A chi-square test between survey results found that these results were significantly different at a 95-percent level ( $p < 0.0001$ ). A Mantel-Haenszel chi-square test found that results skewed significantly more positive (agree/strongly agree) in 2018 responses ( $p < 0.0001$ ).

In 2018, 71 percent (361 respondents) reported agreeing (50 percent) or strongly agreeing (21 percent) that they had received an appropriate level of training regarding the CDC's scientific integrity policy, compared with a total of 49 percent (572 respondents) agreeing (38 percent) or strongly agreeing (11 percent) in 2015 (Figure 2).

#### CDC scientists report challenges to communicating their research to the public and news media:

- 40 percent (222 respondents) did not believe they are allowed to speak to the public and the news media about their scientific research findings, regardless of the topic's level of political contentiousness; 37 percent (203 respondents) did not express a firm opinion.
- 74 percent (445 respondents) said they must obtain agency preapproval before communicating with journalists, although nearly 50 percent (291 respondents) felt this does not affect their ability to communicate their science externally.

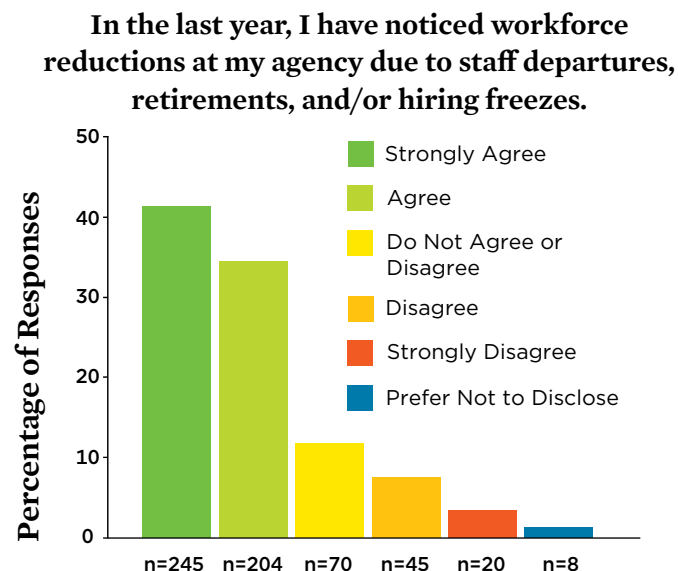
#### CDC scientists report workforce reductions that affect the agency's ability to fulfill its science-based mission:

- 76 percent (449 respondents) reported observing workforce reductions at the CDC during the last year due to staff departures, retirements, or hiring freezes (Figure 3, p. 4).
- Of the respondents who reported workforce reduction, 88 percent (395 respondents) said that such reductions have made it more difficult for the CDC to fulfill its science-based mission.
- 25 percent (150 respondents) cited limited staff capacity as one of the greatest barriers to making science-based decisions.

#### CDC scientists report that external influences inhibit timely science-based decisionmaking:

- 48 percent (255 respondents) reported that the consideration of political interests at the agency hinders science-based decisionmaking (Figure 4, p. 4).

FIGURE 3. Workforce Reductions at the CDC



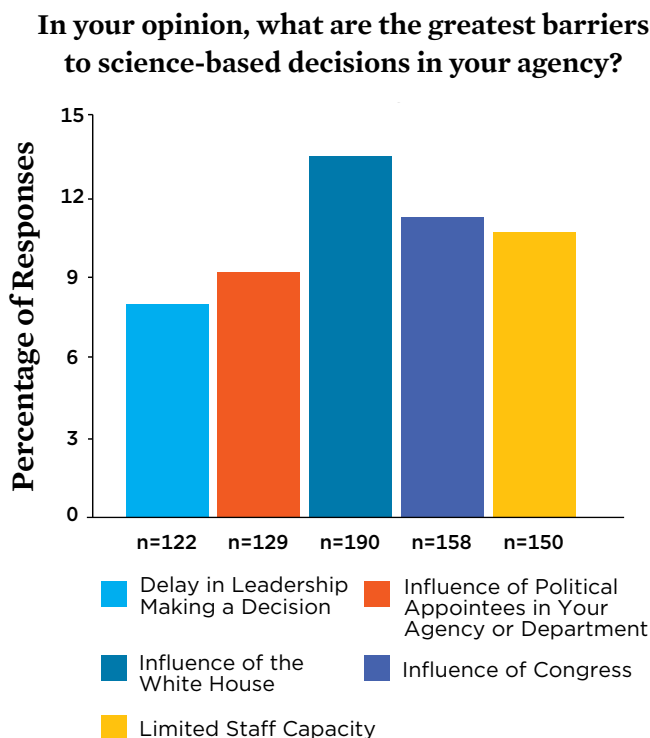
Overall, respondents agreed that they have noticed workforce reductions at CDC.

- More than 13 percent (190 respondents) cited the influence of the White House when answering a multiple-response question about factors that most hinder science-based decisionmaking (Figure 4).
- 26 percent (158 respondents) cited the influence of Congress.

## Recommendations

With respondents noting some interference from Congress and the White House, agency leaders could best improve scientific integrity at the CDC by reaffirming that its scientists have the freedom to pursue and communicate openly about their scientific work without asking for permission, regardless of whether the work is politically contentious. Moreover, managers at all

FIGURE 4. Top Barriers to Science-Based Decisionmaking at the CDC



CDC scientists cited the influence of the White House and Congress, as well as limited staff capacity, as top barriers to science-based decisionmaking. Survey respondents could choose up to three barriers out of 14 options. This figure reflects the top five barriers identified by survey respondents.

levels should discourage self-censorship by clearly informing scientists about guidelines for communicating about their work internally and externally. In addition, removing unnecessarily burdensome clearance or approval processes would improve the timeliness and content of communications of scientific information to the public and the media.

## Union of Concerned Scientists

FIND THIS DOCUMENT ONLINE: [www.ucsusa.org/2018survey](http://www.ucsusa.org/2018survey)

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