FACT SHEET

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 the scientists working for the federal government experience the state of science in their own agencies? A 2018 survey on the state of science inside the US Food and Drug Administration (FDA) highlights several issues regarding the agency’s science-based decisionmaking processes, including evidence of the improper influence of political leadership, constraints resulting from workforce reductions, and limited resources for professional development. However, FDA scientists also report that the FDA is adhering to the agency’s scientific integrity policy and that agency leadership supports their work, even if the work is viewed as politically contentious.

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 US Food and Drug Administration (FDA). 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 FDA, 9,378 scientists and scientific experts were sent a survey; 354 responded, yielding an overall response rate of 3.8 percent. Across survey items, the total number of respondents varied.

The results shed light on the level of politicization of science at the FDA, as well as its impact on agency effectiveness and the federal workforce. While respondents generally feel that the FDA adheres to its scientific integrity policies, they also feel it could better insulate scientists from undue influence from political and business interests.

The survey 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.

In early 2018, scientists from the FDA were surveyed on issues of scientific integrity, funding and resources, censorship, top barriers to science-based decisionmaking, and more.
**Scientific Integrity at the US Food and Drug Administration**

The FDA is essential to personal and societal decisions around keeping Americans safe. Instilling a strong culture of scientific integrity is vital for scientists to fulfill the FDA's mission to ensure the safety of human drugs, veterinary drugs, biological products, medical devices, cosmetics, tobacco, and food. The FDA's scientific integrity policy establishes protections for scientists who experience political interference in their work and sets out clear procedures for investigating allegations of inappropriate interference in science.

Scientists at the FDA reported that they were faring better than their colleagues at most of the 16 federal agencies surveyed. Also in contrast to other agencies, scientists generally expressed faith in FDA leadership, including the FDA commissioner.

As in previous UCS surveys, FDA scientists called attention to efforts by the agency to protect scientific integrity, with some responses indicating a strong sense of trust in supervisors and leadership. In 2018, most FDA scientists reported no change in personal job satisfaction or perception of office effectiveness; some respondents noted increased job satisfaction during the past year.

However, FDA scientists reported some issues related to inappropriate outside influence on science-based decisions. In addition, respondents reported workforce reductions at the agency and said these lessened their ability to fulfill the FDA's science-based mission. Many FDA scientists also reported that the agency did not afford staff with adequate time or resources to pursue professional development opportunities, such as presenting at scientific conferences.

Some FDA scientists feel that leaders who come from regulated industries inappropriately influence science-based decisions:

- 22 percent (70 respondents) felt that the presence of senior decisionmakers from regulated industries or with financial interest in regulatory outcomes inappropriately influences FDA decisionmaking.
- 32 percent (101 respondents) cited the consideration of political interests as a barrier to science-based decisionmaking.
- 36 percent (114 respondents) felt that the influence of business interests hinders the ability of the agency to make science-based decisions.

FDA scientists report workforce reductions that affect their ability to do critical scientific work:

- 49 percent (174 respondents) reported observing workforce reductions at the FDA during the last year due to staff departures, retirements, or hiring freezes (Figure 1, p. 3).
- Of respondents who noted workforce reductions, 80 percent (139 respondents) reported that such reductions make it difficult for the FDA to fulfill its science-based mission.
- 25 percent (90 respondents) cited limited staff capacity as one of the greatest barriers to making science-based decisions at the FDA.

Many FDA scientists say the agency does not afford them with adequate resources for professional development:

- 36 percent (120 respondents) said that they do not have enough time or resources for professional development activities, such as time to attend scientific conferences (Figure 2, p. 3).
- 33 percent (110 respondents) said that the number of scientific conferences attended over the past year is not similar to the number attended three years ago.

FDA scientists feel that the agency is effective:

- 25 percent (87 respondents) said that the effectiveness of their division or office has increased compared with one year ago; 48 percent (170 respondents) reported no change.
Overall, respondents agreed that they have noticed workforce reductions at the FDA.

In the last year, I have noticed workforce reductions at my agency due to staff departures, retirements, and/or hiring freezes.

I am provided adequate time and resources to keep up with advances in my profession, such as attending conferences and trainings, and participation in scientific or professional societies.

Most FDA scientists responded that their agency adhered to its scientific integrity policy.

- 48 percent (149 respondents) agreed, and 19 percent (60 respondents) strongly agreed, that the FDA adheres to its science integrity policy (Figure 3).
- 50 percent (167 respondents) felt the agency frequently collects the scientific and monitoring information needed to effectively meet its mission; 19 percent (64 respondents) believed FDA always collects sufficient information, representing a significant improvement over previous surveys (Figure 4, p. 4).
- 53 percent (69 respondents) reported not knowing if their agencies would allow them to publish work in peer-reviewed journals regardless of the topic's level of controversy.

FDA scientists feel positive about leadership:
- 65 percent (222 respondents) felt that their direct supervisors consistently stand behind scientists who put forth scientifically defensible positions that may be politically contentious.
The FDA collects the scientific and monitoring information needed to effectively meet its mission.

In 2018, the majority of respondents felt that the agency frequently collected the information needed to meet its mission. When compared with past surveys, the most significant differences were found between the 2015 and 2018 surveys (p<0.0001).

Recommendations

With respondents noting some interference from business interests, the FDA could best improve scientific integrity if agency leaders reaffirm that the agency's 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, agency leadership should ensure scientists have adequate time and resources to pursue professional development opportunities and encourage them to do so. These steps would enable FDA scientists to better conduct the important scientific work that informs policies to protect American's health and safety.