PREFACE

Restoring Scientific Integrity Is Essential for Beating COVID-19

The COVID-19 pandemic has demonstrated in stark life-and-death terms how essential it is for government decisionmakers to heed and prioritize science. The United States quickly surpassed other nations in COVID-19 infections, and has suffered catastrophic losses. However, our nation is still home to a wealth of scientific skills and expertise, and if we swiftly rectify the White House's dangerous patterns we can save lives and position ourselves to rebuild promptly.

To respond effectively to the COVID-19 pandemic, state and local governments, first responders, health-care systems, and the public need timely and accurate information based on the best science and expertise we have available. Once the immediate crisis has passed, public health experts must be involved in a critical review of the US response, to generate lessons learned and recommendations to improve preparedness. Protecting public health in an era of pandemic diseases requires strengthening the federal infrastructure that governs how agencies use, produce, and communicate science.

Although the recommendations below existed well before this coronavirus was identified, each is essential for ensuring an effective COVID-19 response:

- Protect government science from political manipulation. Government leaders need to make decisions about requiring public health measures such as physical distancing, approving therapies and vaccines, and determining whether and how people can return safely to work that cannot be done remotely, such as manufacturing. To make these decisions, they must have access to accurate information presented without political interference. The administration should ensure agencies' scientific independence by restoring the voices of experts in policymaking, directing agencies to strengthen scientific integrity policies and infrastructure, and protecting government scientists. (See the memo "Agency Scientific Independence.")
- Ensure public access to data collected by the federal government. Results from government-sponsored research into COVID-19 testing, treatments, vaccines, and disease course, as well as information about the fed-

eral response, must be accessible so researchers can conduct additional analyses and leaders of organizations and state and local governments can make informed decisions. The administration should reverse a recent trend toward restricting data and denying Freedom of Information Act (FOIA) requests, and institute new safeguards that will ensure the continued collection, dissemination, and preservation of data and protect against its improper removal. (See the memo "Data Collection and Dissemination.")

- Restore the role of independent expert advice in government. Federal Advisory Committees (FACs) have long been a valuable source of independent information for the federal government on a wide range of issues, including vaccines, diseases, and how populations are disparately affected by diseases and inequities. However, a recent executive order capping the total number of FACs and requiring that the current number be slashed calls into question the extent to which federal agencies will be able to rely on FACs to address COVID-19. The administration should rescind damaging directives that restrict committee membership and activity, and should instruct agencies to improve transparency and conflict-of-interest management. (See the memo "Federal Advisory Committees.")
- Ensure government leaders are qualified, ethical, and accountable. Trust in federal officials is particularly important when educating the public about pandemics and related health behaviors, but appointing senior officials with conflicts of interest and insufficient scientific credentials can compromise that trust. To demonstrate its commitment to qualified and accountable public servants, the administration should commit to reforms of personnel practices and ethics rules. (See the memo "Federal Personnel Policy.")
- Restore the role of independent science in the regulatory process. As COVID-19 creates a new reality for our health-care system and economy, regulatory

- changes will be needed for topics ranging from telehealth to worker protections. The administration should remove unnecessary steps in its review of proposed public protections, reassess the role of cost-benefit analysis, increase transparency in rulemaking, and decrease barriers to participation in the notice-and-comment process. (See the memo "Regulatory Reform and Science.")
- Ensure federal agencies that use and produce science can perform effectively. Now more than ever, we need the Centers for Disease Control and Prevention, Food and Drug Administration, National Institutes of Health, Occupational Safety and Health Administration, and other public health agencies to have the staffing, leadership, and resources they need to conduct effective disease surveillance and support the development, testing, approval, and distribution of lifesaving therapies and vaccines. The administration must fill open positions quickly, undo recent actions that have harmed recruitment and retention, and create robust budgets. (See the memo "Restoring Strength to Scientific Agencies.")
- Ensure public and policymaker access to independent science. Local leaders and the public need access to scientific expertise in order to make informed decisions about the public health measures they adopt as COVID-19 knowledge and circumstances evolve. Agency policies that require scientists to receive approval before speaking with journalists or the public can delay action, distort findings, and reduce trust in federal scientists' communications. The administration should affirm that the era of government censorship of scientists and scientific information is over, require agencies to develop media policies that allow scientists to share their expertise without political vetting, and advance other initiatives to improve scientific communication. (See the memo "Scientific Communications.")
- Help civil servants and contractors feel safe when reporting agency shortcomings. Under the many pressures that a pandemic creates, agency missteps are inevitable. Responding to those missteps with transparency and good-faith efforts to improve, rather than with punitive efforts to silence and discredit whistleblowers who raise serious concerns, can strengthen both agency functioning and public trust. The administration should increase protections for whistleblowers by strengthening policies, training, and the infrastructure for handling whistleblower complaints. (See the memo "Whistleblower Protection.")