

Science, politics, and public health

There is an idea on the part of scientists that politics is dirty, and a companion idea on the part of politicians that science, by its continual qualifications and revisions, is, if not irrelevant, then at least out of touch with the constraints of a democracy: What seems optimal from the perspective of science may be impossible to implement in the political arena.

The events of the past several months regarding the coronavirus disease 2019 (COVID-19) pandemic make it apparent that for public health to continue to improve the lives of everyone, we must find ways to overcome this mutual distrust.

When I was director of the U.S. Centers for Disease Control and Prevention (CDC) from 1990 to mid-1993—an appointee of the George H. W. Bush administration—the nation and the world were facing a major and growing public health crisis: increasing disease and death from HIV/AIDS. The AIDS epidemic had been raging for a decade, and the scientific and biomedical communities were staunchly advancing our understanding of the disease and its prevention and treatment, at the individual and the population level. There were still many unknowns about HIV/AIDS, and the uncertainties about how to tackle it effectively, both medically and socially, made policy-making fraught with challenges.

Among those challenges was the fact that the disease particularly hit marginalized groups in the population. There were major controversies about the safety of the blood supply, about condom distribution and needle exchange programs, and about how to deal with HIV-infected health care workers.

The biomedical community felt that science and scientists should be making the decisions regarding public health—in other words, “getting politics out of public health.” Policy-makers said that these decisions should not be left to unelected public health experts.

Many of those same sentiments are being voiced today, during the COVID-19 pandemic. What’s worse now is that many in Washington, DC, and around the country seem to scorn even the idea of scientific experts. The fact is that each group needs the other—science without politics is impotent, and politics without science is subject to whim and caprice.

In previous decades, the CDC’s role in national and global public health was vital. There were very substantial infectious disease threats—emerging and reemerging—plus growing noninfectious disease challenges, including cancer, heart disease, obesity, tobacco use, environmental and occupational issues, and the mounting problems of injury and violence. Each of these had complicated overlays of science and politics, and included complex economic and cultural impacts.

And yet, it is as true today as it was then that the CDC and the other U.S. public health agencies are not infallible. That is especially true regarding new diseases, those without an existing body of knowledge. Early pronouncements often need to be revisited, and frequently revised, as new discoveries are made.

This year, the CDC has been off the mark more than once and has had to reverse its recommendations. But the solution to this reality is not to belittle and tear down this hugely important agency, but rather to continue the quest for more and better scientific knowledge, and to be willing to implement those insights. But there have been repeated reports of political folks pushing the CDC to alter their scientific judgments to fit a political agenda.

Politicians should use the product of the scientific process to make careful policy and to design programs that benefit the public’s health. And scientists should avoid being drawn into the political fray and being used to try to influence elections. Calling for this mutual respect and joint involvement in the public health process may seem naïve—especially in the wake of the recent scientific problems at the CDC, and also at a time of hyperpolitical division and unprecedented election-year chaos.

As a first step, we must recognize the legitimate roles that science and politics must have in our public health processes. And then with real transparency and accountability, we should vigorously debate how best to meet the challenges before us.

Every American—whether scientist or layperson, whether Republican, Democrat, or Independent—has a stake in getting this science–politics balance right. It is far too important for game playing.

—William Roper

“...many...
seem to
scorn even
the idea
of scientific
experts.”



William L. Roper served as the director of the U.S. Centers for Disease Control and Prevention from 1990 to 1993. He was dean of the School of Medicine at the University of North Carolina (UNC)—Chapel Hill and chief executive officer of the UNC Health Care System and then interim president of the UNC System.

Science, politics, and public health

William Roper

Science **370** (6515), 385.
DOI: 10.1126/science.abf2837

ARTICLE TOOLS

<http://science.sciencemag.org/content/370/6515/385>

PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. The title *Science* is a registered trademark of AAAS.

Copyright © 2020 The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works