

Preexisting Conditions That Kill Us

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To protect human life, science and public health need to guide public policy. We call for an end to the anti-science, anti-prevention, and anti-regulatory policies that have resulted in countless preexisting conditions and deaths. Reactive responses are not a substitute for primary prevention; we must invest in environmental and public health protections.

Key words: environmental health, policy, preexisting conditions, primary prevention, public health

IT STARTED innocently enough—with a low-grade fever and whole-body aches. It progressed to a deep cough and shortness of breath. A week later, no amount of oxygen, or support on the ventilator, was enough to save her life. Like thousands in this country, she died alone.

Official cause of death: acute respiratory distress syndrome. For others who do not survive COVID-19, the cause may be renal failure, cytokine storm, multiorgan collapse, or Kawasaki disease. But is that *really* the cause?

Laying blame on the Trump administration is easy. The president tragically failed to address the pandemic's threat. In another context, this would be a criminal act of manslaughter.¹ But even if he could be convicted, the bungled federal response to our modern plague is not the work of one individual. It was caused by preexisting conditions, by the decades-long assault on science and public health.

As a frontline physician and a public health lawyer, we both have witnessed the chronic neglect that allowed our country to rise to the top of the global list in infections and death rate. Where do we start? From the emblematic injustice of the Flint water crisis² to the incessant attacks on environmental health protections, insidious and largely invisible assaults on science and public health have stolen the potential of generations of children and already filled thousands of body bags.

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Well-financed lobbying campaigns, from the sugar to asbestos industries, have eroded government investment and action in key areas for decades. Polluters have used scientists-for-hire, corporate law firms, and PR gurus to develop a stunningly effective playbook for sowing doubt and suspicion about independent science.³ Scientists who documented threats from lead, arsenic, other toxic chemicals, tobacco, and climate change have been silenced and undermined, often suffering the retaliatory fate of brave whistleblowers. This has left our environmental protection and public health agencies at all levels of government in a constant state of disinvestment.

With the unchecked use of innumerable poisons in the food we eat, the air we breathe, and the water we drink—all too often disproportionately burdening poor and minority populations—the groundwork for our country's unrelenting COVID-19 fatalities was laid. Years of neglect and disinvestment were not enough, though. The Trump administration took the suspicion of science to its most extreme, moving even farther away from basing decisions on facts and studies. Instead of the health and protection of the population, it leans entirely on ideological dogma, political motivations, and the pecuniary interests of corporate supporters.

The list of nefarious acts is long and scandalous. Along with ignoring climate science, the current administration is disregarding evidence showing that aggressive action is needed on lead poisoning, refusing to address asbestos, opposing action on widespread toxic “forever chemicals” called PFAS, and rejecting the Environmental Protection Agency's (EPA's) own scientists' recommendations to ban chlorpyrifos—an insecticide that damages children's brains.^{4,7}

And as the death toll rises and pandemic rages on, the EPA is brazenly racing to enact another industry-favorable proposal—opposed by leading medical and scientific societies—that would block EPA from considering many epidemiological studies that show adverse health effects published in scientific journals.^{8,9} And just this May, indifferently turning a blind eye to the potential of our nation's children, the EPA refused to impose limits on the brain-damaging water contaminant perchlorate.⁷

These anti-science, anti-prevention, and anti-regulatory policies—decades in the making and worsening radically under this administration—are not just wrongheaded. They are literally killing us. Approximately 200 000 people die annually in the United States from weak air quality standards.¹⁰ And multitudes of Americans—the numbers are grossly underestimated—die of cancer each year provoked by exposure to pollution.¹¹ Now, in the midst of the COVID-19 pandemic, we are able to see, finally, the human consequences of government maleficence—in the overcapacity hospitals, unjust rationing of testing, unequal health care, the pages of obituary listings, and the dead bodies stuffed into rented freezer trucks outside medical centers and overflowing county morgues.

The United States can now claim the worst performance of the developed world. Was it really COVID-19 that ended the lives of so many Americans? Our rich and talented society could not even muster an adequate response to a foreseeable crisis. Playing catch-up on this scale is not possible; no amount of a reactive response can compensate for proactive prevention. In the face of the demands of the pandemic, our hollowed-out public health agencies are being asked to perform herculean feats.

In the face of so much sickness and death, the anti-science misinformation campaigns still continue. Many Americans deny the severity of the pandemic and happily flaunt public health recommendations—with mounting threats and personal attacks against experts such as Dr Fauci and Dr Bright, who are trying to keep us alive. This is more maleficence—and will only increase the number of deaths and the pandemic's duration.

Postmortem examinations of this crisis are not too far off. We will need to dig deep and dissect the true cause of the pandemic. We cannot save all the Americans we have lost, but we can commit ourselves to understanding how it came about. We can begin to accept that the outcome was not an accident. It was predictable and preventable.

Next, we must begin recognizing and undoing the preexisting conditions. Science tells us that many preventable catastrophes are on the horizon—from rampant antibiotic-resistant infections and contaminated drinking water to the potentially horrific impact of climate change. These are threats that only scientific study, long-range planning, and competent government can prevent and protect us from.

As we begin to emerge from this crisis and prepare for the next ones, that is exactly what will save us, and what we need to demand: science-driven leadership, robust public health protection, and a responsive, forward-looking government that has our best interests at heart. The only way to be optimistic about our future is to be ready for it.

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