Opinion

The Fires Are Burning

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THE FIRES ARE BURNING. BY THE START OF SEPTEMBER 2018, 100 fires across 13 states in the western United States had scorched nearly 2 million acres of land this year. The largest of these had destroyed more than 400,000 acres, an area 50% larger than the city of Los Angeles. The most lethal had destroyed 1,500 buildings and homes, engaged nearly 500 fire personnel, and killed 7 people, including 2 children and 3 firefighters.¹

The smoke continues to drift—to Sacramento, Portland, and Seattle, where measurements of particulate matter have exceeded those in Beijing. Wildfire smoke also has impaired air quality across the nation, with increases in particulate matter and carbon monoxide reported as far away as Washington, DC, and Baltimore. Exposure to smoke causes trouble for people with asthma and chronic obstructive pulmonary disease; it may also lead to more heart attacks and a greater risk of death.²

The climate is calling. It is no coincidence that fires have raged as California recorded higher temperatures in July than ever before. As Dr. Michael Mann of Penn State University explained, “You warm the planet, you’re going to get more frequent and intense heat waves. You warm the soils, you dry them out, you get worse drought. You bring all that together, and those are all the ingredients for unprecedented wildfires.”³

So why is the national response to the underlying causes of the fires so weak?

As the health impacts of climate change have become more apparent, so too has the disconnect between federal policy and the national interest. The Trump administration has pulled out of the Paris Agreement to limit greenhouse gas emissions, moved to block rules to close down polluting power plants, and embraced the greater use of carbon-emitting coal in the United States and around the world.

At one level, these decisions reflect the political moment. The president has suggested that global warming is a hoax invented

by the Chinese. His administration has embraced fringe views of climate science. Rather than advocate for solutions, the Environmental Protection Agency has sought to scrub mention of the problem from government websites.

Beyond politics, it is apparent that public understanding is lagging. Wildfires are largely seen as a West Coast story, and barely half of Americans link them to climate change.⁴

Part of the disconnect is the age-old challenge of prevention, the proverbial dog that does not bark. To save homes from an advancing fire, it is intuitive to call the fire department. It is not intuitive to set higher fuel economy standards, establish limits on pollution from major power plants, and endorse international targets for carbon emissions.

A second factor is that air pollution is generally invisible—and in more ways than one. Pollution floats beneath the public's radar, with few people aware that exhaust from idling buses and local highway interchanges causes difficulty breathing. Fewer still recognize the threat posed by fires thousands of miles away.

A third factor is the organized efforts by traditional energy industries to undermine scientific consensus on climate change. These efforts are reflected in a raft of loud voices on cable television and alternative media sowing confusion and doubt.

On top of everything else, there's also this basic fact: from a young age, we're all taught to prepare for the weather, not to change it.

These obstacles to policy change are daunting, but they are not a perfect storm. Health systems, health professionals, and health departments have an important role to play in mobilizing action to protect the environment, and the current wildfires offer a great opportunity to move forward. Here's how:

Step 1: Make air quality measurements widely accessible. Local data can focus people on threats to their health. The wildfires provide a rationale for distributing this information far and wide. By sponsoring weather reports, posting data on billboards, and even releasing local data sets, health organizations can increase awareness of environmental threats and open a space for a discussion of the causes.

Step 2: Discuss the causes. It is not enough for data from local air quality monitors to inform government recommendations about whether to stay inside or wear a mask. The data also should help people understand *why* they are being asked to stay inside or wear a mask. Hospitals and

health departments should join forces with local academic experts to educate their communities about the sources of nitrogen oxides, particulate matter, and other pollutants—as well as what can be done to stop the pollution. The wildfires are a great initial topic for exploration.

Step 3: Follow best practices in reducing carbon emissions and utilizing renewable energy. Actions by the private sector, cities, counties, and states are making up for a large part of the failure of the Trump administration to join international efforts on climate change. Nineteen major health systems, representing 763 hospitals in 39 states, have already joined these efforts. Dignity Health, for example, has set the goal of reducing greenhouse gas emissions by 40% and increasing renewable energy by 35% by the year 2020.⁵ Wildfires provide an opportunity for organizations and agencies to explain why they are taking these actions.

Step 4: Support policy change. It is astonishing, given the risks to human health, that climate change never came up as a topic in the 2016 presidential debates. Health and health care organizations should broaden the political appeal of efforts to address climate change and protect the environment. Several decades ago, Canadian physicians sent black postcards to their elected representatives every time a patient died of smoking-related disease. Wildfires should become a pressing matter beyond the districts that are aflame.

There is a special opportunity to work with young people in this effort. From middle school science fair projects to high school advocacy projects, students show tremendous (and understandable) interest in the planet they will inherit. Recently, a campaign led entirely by youth caused the city of Baltimore to ban Styrofoam products to protect local waterways. As the students from Parkland, Florida, exemplify, the energy and focus of the rising generation is a powerful force.

These steps all work together. The more local data that are available on air quality, the easier it is to have a conversation about the causes. As more people understand what is happening in their own communities, and as greater numbers of young people become engaged, the momentum to change national policy will grow stronger.

The 2018 wildfire season will not be the last. Next year's fires, and the ones that follow, will again cause tremendous damage and suffering. They also will continue to provide everyone in health and health care with the justification and opportunity to make a difference.

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