Climate Change Is a Public Health Issue We All Can Address

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On a cold winter day, have you ever looked out over the Helena Valley and wondered why the Sleeping Giant is resting under a blanket of smog? Would you believe that this local phenomenon is a direct reflection of what’s happening globally?

Let’s talk about climate change -- how it impacts us here in the Helena area; how it can affect our health; and what we can do to slow and even reverse the damage to the environment, as well as protect our health and that of generations to come.

The Debate Is Over

The U.S. Global Change Research Program, a federal program mandated by Congress to coordinate research on forces shaping the global environment, recently released a special report on climate change and its impacts on the nation. According to the report, we’re experiencing the warmest average annual temperatures in history – and the average keeps climbing each year.

Thousands of studies have documented “changes in surface, atmospheric, and oceanic temperatures; melting glaciers; diminishing snow cover; shrinking sea ice; rising sea levels; ocean acidification; and increasing atmospheric water vapor.” These temperature changes have expressed themselves in extreme weather patterns, including dry, hot, and drought conditions and massive hurricanes, typhoons, and tropical storms.

There has been considerable debate about what might be causing the temperature increase and the resulting severe weather. But after many years of study and scientific investigation, the debate is over. The evidence is clear. The primary cause of this warming can be linked to human activities that produce greenhouse gas emissions.

Climate change is not something to worry about later. Climate change is here, and it’s causing temperature extremes that have direct impacts on our health.
A Pall of Air Pollution

Among the many impacts of climate change, air quality ranks as one of the most troubling from a public health perspective. Vehicle and diesel exhaust, along with particulate matter released from wood-burning stoves, contributes to poor air quality. The temperature inversions we see here in the valley tend to trap that pollution, which exposes us to poor air quality for long periods of time.

Wildfires, too, are caused by increasingly frequent bouts of dry, hot conditions. They create air pollution that hangs on for days and even weeks at a time. Remember the pall we lived under just a couple summers ago?

A study conducted by the University of Chicago Energy Policy Institute reported that, worldwide, the average person’s life expectancy is reduced by 2.6 years due to air pollution, especially the kind we experience every summer and most winters.

With poor air quality comes substantial health hazards. Some of these might not be surprising, like heart and lung disease. You might have noticed getting a headache or feeling sluggish and short of breath during one of our local air-pollution episodes.

Now there’s research showing that childhood obesity, autism, and mental illness can be linked to air pollution exposure.

Unexpected Health Impacts

The World Health Organization has reported that 90 percent of the world’s children breathe unhealthy air. Pregnant women who breathe poor air, specifically nitrogen dioxide from diesel engines, are at a higher risk of delivering babies with low birth weight and birth defects. Children in their formative first few years are at greater risk of obesity later in life due to air pollution.

New research connects even low levels of air pollution to increases in mental illness, psychiatric disorders, autism spectrum disorders, and delayed learning and development in children.

And a study by the University of Singapore found that smoggy days might wreak havoc on productivity in the workplace. The researchers discovered that factory workers who had to work in polluted conditions saw their productivity slowly decline over time. Employees are also more apt to take sick days during poor air-quality episodes, and that can impact a business’s bottom line.

What We Can Do

Now that we have a better understanding of how climate change impacts air quality and how air quality impacts health, let’s focus on what we can do to improve the situation through individual
behavior change and public policy. Here are some suggestions from the National Association of City and County Health Officials:

- Learn more about climate change and how it affects us in the Helena area. Have conversations with your children, other family members, and friends about what you learn.
- Make small personal changes that can reduce air pollution: car pool, walk, bike, recycle, exchange your old wood stove for a high-efficiency model, buy local, plant trees, or grow a garden, for example.
- Join community conversations and groups working to address the impacts of climate change and limit pollution.
- Advocate for public policy that reduces our exposure to pollutants.

Although the picture seems dismal, there are ways to stop and even reverse pollution and improve health right here in our community. Together, we can improve the outlook for our children and our children’s children.

The director of the Energy Policy Institute put it well: “The present is not destiny. When you look around the world, forceful policy can really change air quality and lengthen people’s lives.”