Dr. Amir Sapkota: Can’t stand the heat? Let’s reduce our reliance on coal

By: Commentary  Dr. Amir Sapkota  August 4, 2016

Summer is a chance for Marylanders from all backgrounds and their families to enjoy what our beautiful state has to offer. However, as the region is collectively looking for a respite from the scorching heat, many people in Maryland, particularly the elderly, children and people suffering from respiratory diseases such as asthma and chronic obstructive pulmonary disease are experiencing heightened risk of adverse health outcomes related to the extreme heat and harmful pollutants that tend to worsen during such extreme heat episodes.

Marylanders get more than 44 percent of our electricity from burning coal — which translates into high levels of pollution in our air and water. Coal-burning power plants emit toxins including mercury, arsenic, lead, particulate matter, sulfur dioxide and nitrogen dioxide, to name few. Scientific studies over the past several decades have shown that exposure to some of these pollutants contributes to worsening of asthma, chronic obstructive pulmonary disease, heart attack, stroke, cancer and even premature death. In addition to the pain and suffering, the economic cost associated with these adverse health outcomes is substantial.

What's worse, exposures to these harmful pollutants are disproportionately experienced by low-income people and people of color, who often lack a political voice. The same is true for respiratory diseases, such as asthma. Recent data show that 15.5 percent of Marylanders with annual household income of less than $15,000 had asthma, compared to 7.6 percent of those whose annual household income was more than $75,000. Similarly, 16.1 percent of non-Hispanic black children in Maryland had asthma compared to 7.8 percent of non-Hispanic white children.

In addition to emitting hazardous air pollutants, coal-burning power plants are major sources of carbon dioxide, a greenhouse gas that causes global climate change. While it is difficult to attribute a single extreme weather event to global climate change, an increasing number of scientific studies show that the number of extreme heat events — such as the one that we are experiencing — is on the rise. More importantly, this trend will continue in the coming decades as extreme heat events will become more common, more intense and longer lasting in response to the changing climate.

More extreme heat events during summer months also mean more frequent bad ozone days, and that means more asthma-related hospitalizations. Parents with asthmatic children know too well that such bad ozone days are not good for their children’s asthma. A research group that I lead at the University of Maryland’s School of Public Health recently showed that daily asthma hospitalizations in Maryland increase by 23 percent for every one-day increase in extreme heat events during summer months.

We have also shown that extreme heat and extreme precipitation events increase the risk of Salmonella infections in Maryland. What is more interesting, the risk of Salmonella infections related to extreme events is much higher among Marylanders living in the coastal areas compared to those who live in the inland areas. The consequences of global climate change — a leading public health threat of our generation — are far-reaching, and we've only begun to understand them.

A real opportunity

Leaders in Annapolis have a real opportunity to do something about the impacts of air pollution and climate change by reducing our overreliance on coal. There is a need to revive the Clean Energy Jobs Act, which would increase Maryland’s use of clean energy by increasing the state’s renewable portfolio standard to 25 percent by 2020, up from the current goal of 20 percent by 2022. This goal is within our reach. The bill, passed by the General Assembly with bipartisan support, represents a real opportunity to generate jobs while cleaning our environment. Making this bill into a law will protect the health of Marylanders for generations to come.

Polling shows that nearly three-quarters of Maryland voters back the legislation to expand clean energy. This forward thinking bill is a win-win for public health, our environment and our economy. Every unit of energy from coal that is replaced by wind or solar means less pollution, less climate-change-causing greenhouse gases in our environment, and healthier Maryland families.

We all deserve the right to enjoy summer outdoors. Our kids should only have to remember to pack their swimsuits this summer, not their inhalers.
Dr. Amir Sapkota is an associate professor at the University of Maryland's School of Public Health. He can be reached at amirsap@umd.edu.