The Intersection of Public Health and Planet Health

By Melanie Reynolds
County Health Officer

Whatever befalls the earth befalls the sons of the earth.

These words have been attributed to Seattle, a prominent Suquamish Indian chief for whom the well-known West Coast city was named.

Although there’s some doubt about whether he uttered those exact words, there can be little doubt about the sentiment: Our health as individuals and communities depends on the health of the planet we call home.

I hope as we celebrate Earth Day next week that you’ll keep this critical relationship in mind. If you care about health, you should care about the environment.

The impact of the environment on health is so substantial that there’s a branch of public health specifically devoted to it: environmental health. It encompasses a wide swath of issues, including air quality, water quality, sanitation, food safety, toxic chemicals and elements, radiation safety, and climate change. Here at the Lewis and Clark City-County Health Department, our focus is primarily on the first five.

The World Health Organization (WHO) defines environmental health as “all the physical, chemical, and biological factors external to a person... that can potentially affect health.” These include air, water, food, soil, climate and living things, but they also include our built environment, like our homes, schools, workplaces, streets, and other public places. Roads that don’t accommodate walking and bicycling, for example, can contribute significantly to traffic deaths and injuries.

In a 2006 report, WHO attributed about a quarter of all human disease to poor environmental quality. Among children, whose young bodies are more vulnerable, it’s closer to a third.

When you hear the term environmental health, you might picture people in developing countries languishing with infectious diseases caused by poor sanitation. That’s a significant problem, but it’s only part of the problem. Environmental health is a global issue. Those of us who live in developed countries need to be concerned about it, too.
WHO has found that infectious diseases like diarrhea and malaria are 120 to 150 times more common in developing countries than in developed ones like ours. But the impact of heart disease and cancer caused by environmental factors is several times higher in developed nations.

Last month, WHO reported that air pollution alone – both indoor and outdoor – killed about 7 million people across the globe in 2012. That makes it the world’s largest single environmental health risk.

While we in Lewis and Clark County may enjoy cleaner air than people in more populated parts of the country, we still struggle with air pollution caused by wildfires, woodstove burning, and vehicle exhaust. The temperature inversions we experience in the winter exacerbate these problems by trapping pollution in the valley.

According to WHO, about 20 percent of all cancers, 15 percent of all heart disease, and almost half of all asthma are caused by environmental pollution.

Kate Davies, in her new book *The Rise of the U.S. Environmental Health Movement*, makes a compelling case for why the health of our planet should concern all of us.

“In the past fifty years, humankind’s ecological footprint has more than tripled, so that every year we are consuming 50 percent more resources than the earth can regenerate.... Unless we change our ways, it will become increasingly difficult to sustain human health and well-being and declines will be inevitable.”

Davies goes on to point out that pollution and heavy use of natural resources are major contributors to the extinction of plant and animal species – to the potential detriment of our health.

“Scientists say that the current rate of biodiversity loss is between one thousand and ten thousand times greater than the natural rate,” she wrote. “This issue is of particular concern for human health because most medicines, including all antibiotics and anti-cancer drugs, come from plants, animals, or microbes....”

So this Earth Day, as we recognize and celebrate our efforts to nurture and heal our planet, remember that our planet, if we treat it well, will repay the favor and sustain us.

Here are a few things you can do personally to nurse the health of our planet:

- If you use a fireplace or woodstove, be sure to burn cleanly. Find out how at [www.epa.gov/burnwise/](http://www.epa.gov/burnwise/)
- Take Helena’s Bike or Walk to Work Challenge in May. Learn how you can join the fun of commuting another way at [www.bikewalkhelena.org/commuter-challenge/](http://www.bikewalkhelena.org/commuter-challenge/)
- Avoid dumping chemicals or other pollutants down storm drains. Find out why at [http://water.epa.gov/action/weatherchannel/stormwater.cfm](http://water.epa.gov/action/weatherchannel/stormwater.cfm)

As cultural historian Thomas Berry said, echoing the words of that 19th-century Indian chief, “You cannot have well humans on a sick planet.”