

Health system unprepared for effects of climate change

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A number of my friends have asthma. It's distressing to learn that a new report says that climate change will dramatically increase respiratory diseases. In fact, the study concluded that climate change is likely to be the biggest global threat to public health this century. Preparing for these risks should be a top priority.

The health effects described in the report produced by University College London and The Lancet, a public health journal, are based on the likelihood that the Earth's average mean surface temperature will rise this century by between 3.6 degrees and 10.8 degrees. This makes sense because, even if tough carbon emission control policies are rapidly adopted, somewhere around a 3.6 degree increase is already in the pipeline. Let's hope we can keep temperatures from rising above that level.

The UCL-Lancet assessment found that billions of people's health will be affected, directly and indirectly, by this temperature increase.

Direct health effects include rising incidences of vector and water-borne diseases. Heat stroke, exhaustion and related illnesses and deaths will multiply. Injuries and deaths from extreme weather events will also climb. And, respiratory problems such as the asthma my friends have will swell, along with many allergies.

As troublesome as this seems, the indirect health effects are likely to be even larger. The UCL-Lancet study found that malnutrition and hunger will rise due to falling crop yields caused by rising temperatures, damage from extreme weather, and more drought and insect infestation. Rising sea levels will force millions worldwide to flee coastal areas, and the movements of climate refugees will spread communicable diseases.

We won't all be equally affected. The analysis found that the poor, especially in non-industrial nations, will, at least initially, experience the worst health consequences of climate change.

Public health systems worldwide need to be significantly improved, said the report, if they are to effectively respond to the health risks posed by climate change.

Turns out the findings of the UCL-Lancet study apply here in Oregon almost as much as elsewhere.

Asthma is already a problem in Oregon, and it is likely to increase as temperatures rise. The Oregon Asthma Program's 2000 report estimates that almost 10 percent of adults and more than 8 percent of children have asthma. More than 10 percent of adults in Lane County are believed to have the disease.

One reason asthma is likely to rise locally is because higher temperatures will magnify the effects of respiratory irritants.

For example, allergens sometimes trigger asthma, and the vegetation that produces allergenic pollens grow more robustly in warmer temperatures.

In addition, irritants such as tobacco smoke, smoke from wood-burning fireplaces and air pollution can also trigger an attack. When allergenic pollens combine with other pollutants, the effects of asthma and other respiratory diseases expand even more.

Heat-related illnesses, diseases borne by water or vectors, and other ailments will also likely become more common statewide as temperatures rise. People with impaired immune systems, lower-income people, rural communities with less access to health care, and the elderly will be at greatest risk.

Due to these and other climate-related health risks, in partnership with the Oregon Coalition of Local Health Officials, my program at the University of Oregon recently completed an assessment of where public health officials across the state stood on climate change.

Almost 90 percent of the health officials who responded to our survey said they realized that climate change poses a "serious" or "very serious" problem, and 60 percent said they are already seeing some health effects in their counties. Just a little less than 90 percent said they believe the health effects of climate change will grow worse in their areas in the coming decades.

Despite this knowledge, our survey found that preparing for climate change is not a top priority for most county health officials. Insufficient resources, a lack of information, and the need to attend to other urgent matters prevent climate preparedness from rising to the top. However, 86 percent of the respondents said that climate change would become a main focus if sufficient resources were available.

One conclusion to be drawn from both studies is that because respiratory diseases and other illnesses will expand as temperatures rise, every effort should be made to reduce locally generated pollutants. The less irritants that are in the air, the less effect that climate-induced health detractors will have.

But the most important message is that our current public health system is not equipped to respond to the health effects of climate change.

A major investment will be needed to build a public health system capable of responding to the climate risks of the 21st century.

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