Health Risks of Climate Change for People with Lung Disease: What You Need To Know

Climate change harms human health now. Warmer temperatures and longer, more intense wildfire seasons create more air pollution. Longer growing seasons produce more pollen. More severe weather from flooding, hurricanes, and tornadoes increases the risk of damage and loss of homes. These threats pose special risks for people with lung disease.

American Lung Association.

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Who Is at Risk

More than 35 million people in the U.S. live with a chronic (long-term or recurring) lung disease. The two most common lung diseases are asthma and chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis. Others include chronic pneumonia, cystic fibrosis, pulmonary fibrosis, and lung cancer.

How Climate Change Makes Your Breathing Worse

- **Increased Air Pollution from Heat, Droughts, and Wildfires.**
  - As temperatures increase, warmer air helps to form ground-level ozone, sometimes called smog. Smog is a powerful air pollutant that makes it harder to breathe, especially for someone with lung disease. Smog can even shorten life.
  - Some parts of the U.S. have less rainfall because of climate change. As a result, wildfire seasons are longer, and wildfires are more frequent and affect larger areas. Wildfires produce smoke that contains tiny particle pollution that goes deep into the lungs. Breathing these tiny particles makes asthma and COPD symptoms worse and can shorten life. Wildfire smoke can travel thousands of miles, and can cause spikes in air pollution that affect people far beyond the immediate fire path.
- **Damage from Severe Storms and Flooding**
  - In many areas, climate change makes storms, including hurricanes, more frequent and more severe. More severe storms increase the risk of flooding and the loss of homes and communities.
  - Flooding from severe storms threatens the health of people with lung disease in many ways. Often they have to evacuate, making it harder to get their normal medical care and medications. Floodwaters damage homes, leaving behind mold, sewage and toxic chemicals. Cleanup too often means more local pollution from outdoor generators and open burning of debris.
- **Increased allergens and disease risk**
  - Warmer weather from climate change contributes to longer pollen seasons, more pollen and more powerful pollen. These allergens harm people who suffer from allergies and they can also trigger asthma attacks.
  - Diseases, such as Valley Fever (a fungal infection that cause respiratory problems in parts of the American South and West) are likely to become more common due to the changing climate.

Climate change poses special risks for people with lung disease.

How Climate Change Can Disrupt Your Community

- **Disrupted Communities**
  - Climate change increases the chances that extreme weather events, such as wildfires and storms, will affect whole communities. These events may block roads and force widespread evacuation. Electricity often goes out, affecting clean water or sewage systems. Hospitals and pharmacies may be damaged or destroyed, leaving patients and doctors in them at risk.
  - People with lung disease often depend on access to medical care, prescriptions, and medical records. They often need reliable electricity to run necessary equipment. In extreme weather events, they may lack these essential services.

- **Already-burdened communities**
  - People of color and people living in low-income communities are more likely to have chronic lung diseases, and live and work in places in areas with increased risks from climate change.
    - Communities of color, including black and Hispanic communities, already experience more air pollution. Climate change adds to that burden.
    - For example, many people of color are outdoor workers, including agricultural and construction workers, who will face greater exposure to unhealthy air and increased heat.
    - Communities of color and low-income communities often face greater challenges from weather disasters. They have a harder time planning for and affording protective steps, much less recovering from the flood damage.

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