



Reducing the Lung Health Burden of the Climate Crisis

A Public Health Intervention in Houston, Texas

The American Lung Association, in collaboration with CVS Health Foundation, is working with healthcare providers, partnering organizations and individuals to support people with lung disease who are facing health complications due to poor air quality and the impacts of climate change. The goals of this project are to:

1. Equip healthcare providers with tools to improve care of patients with lung disease during poor air quality days.
2. Empower people with lung disease to take steps that reduce their risk of health complications during days with unhealthy air.
3. Utilize local air quality data to develop education programs and promote policies to protect lung health.

Key elements of this project include climate and lung health education for people with lung disease and their caregivers and the distribution of air quality sensors. This intervention is being implemented in Houston, Texas (Harris County), as it is one of most polluted cities in the United States for ozone and particulate pollution.

State of the Air 2025

- Compared to other metropolitan areas, the Houston area ranked 7th worst for high ozone days and 8th worst for annual particle pollution.
- Harris County received a failing grade for high ozone days, meaning these levels exceeded Environmental Protection Agency standards.

Populations at Risk in Harris County

- Total Population: 4,835,125
- Pediatric Asthma: 93,301
- Adult Asthma: 303,648
- COPD: 172,540
- Lung Cancer: 2,063

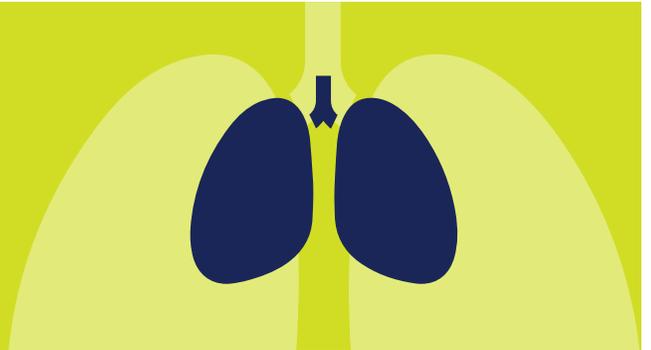
Air Quality and Lung Health

Health Impacts and Communities at Risk

Climate change is worsening air quality issues, as record heatwaves, droughts and wildfires become commonplace. Exposure to unhealthy air causes complications for the 35.2 million people in the U.S. who are living with lung disease and puts millions more at risk of developing chronic illness.

Exposure to unhealthy air can cause or contribute to:

- Wheezing and coughing
- Shortness of breath
- Asthma attacks
- Worsening COPD
- Lung cancer



Some people are more at risk of illness and death from air pollution than others. Risk factors like exposure, physical susceptibility, healthcare access and psychosocial stress often interact in ways that lead to significant health inequities among population groups including:

- Children
- Older adults
- People with chronic lung disease
- Individuals who are pregnant
- People with a smoking history
- Black and Hispanic individuals
- People experiencing poverty

This project aims to decrease the negative impact that poor air quality has on people with lung disease and address the associated health disparities faced by marginalized communities. Resources developed for this project are available to everyone and can be found on our webpage.

Learn more about Reducing the Lung Health Burden of the Climate Crisis:

[Lung.org/lunghealth-airquality](https://lung.org/lunghealth-airquality)

