



Low carbon power is better for
heart and lung health

Carbon-based Power



Carbon based power comes from burning of fossil fuels, which produces air pollutants, especially ground level ozone and small particles. These pollutants are harmful to the lungs and heart. Nearly everyone in the U.S. knows someone with a heart or lung condition.

Air pollutants come from several sources:

Ozone increases in warmer weather when exhaust from burning fossil fuels reacts with heat + light



Particulate matter also comes from:

- Emissions from fossil fuel burning in power plants, industrial processes and vehicles
- Dust
- Fires
- Pollen



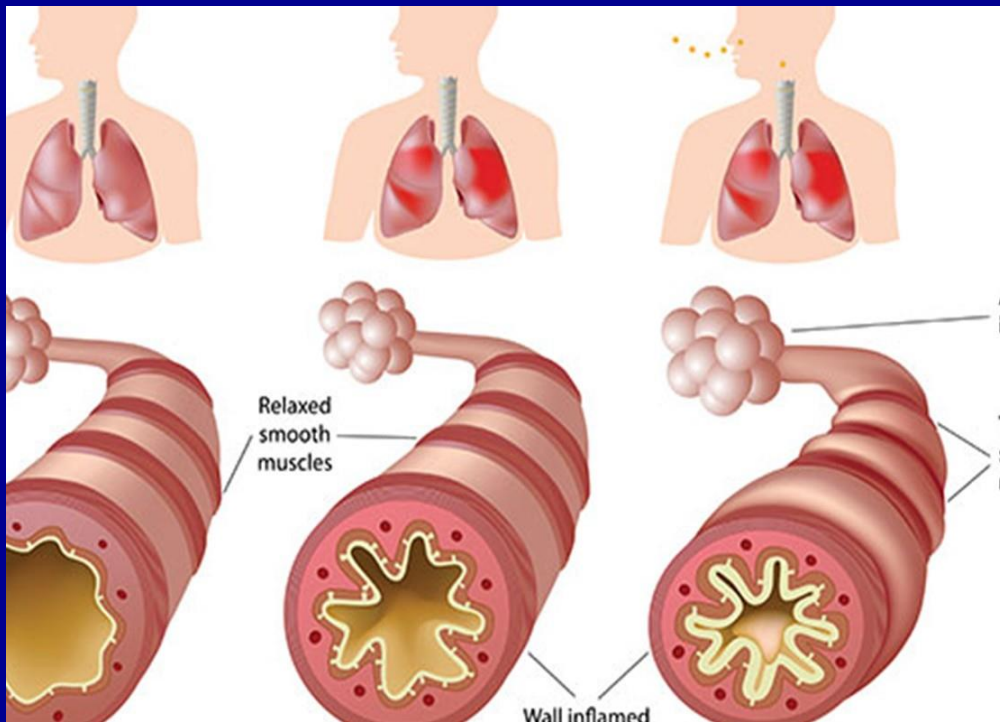
Health Effects of Air Pollution

Ozone

- Directly irritates the lungs

Particles (>PM 2.5 μ)

- Small particles get deep into the lungs
- Produce inflammation
- Contribute to:
 - Worsening heart disease
 - ER visits/hospitalization
 - Poor lung development in children



Pollutants can harm people of all ages



Reducing them is better for everyone's health

Reducing pollution reduces demand for healthcare:

The 1996 Summer Olympics were in Atlanta, GA:

Traffic restrictions led to a 23% decrease in peak a.m. traffic

- Ozone levels decreased 28%.
- Emergency room visits for children with asthma decreased 42%.
- Children's emergency room visits for causes other than asthma did not change.



The benefit of clean renewable energy:

Reducing the burning of fossil fuels for energy and switching to clean renewable sources creates immediate improvement in air quality (less ozone and particles), bringing immediate improvement to lung and heart health. This reduces the demand for medical care.



Using clean renewable power (low carbon, low fossil fuel) leads to improved health



What can you do?

Find out about the air quality where you live and work

- Check your air quality online at:
 - **Air Now:** www.airnow.gov
 - **App** (Platform: Apple, Android, Web):
<https://developer.epa.gov/airnow/>
 - **State of the Air – By American Lung Association**
 - **Apple app:** <https://itunes.apple.com/us/app/state-of-the-air/id522123660?mt=8>
 - **Android app:**
<https://play.google.com/store/apps/details?id=com.reddeluxe.sota&hl=en>

What can you do?

- Be careful on hot weather days since air quality will be worse, especially if you have a heart or lung condition.
- If ozone is in the red zone, stay inside; consider doing the same for code orange.
- If you have any lung condition, avoid exercise during code yellow.
- If you have heart disease and particulates are high, (codes yellow, orange, or red) stay inside.

