

# Outdoor Air Pollution

Air pollution refers to harmful gases or particles in the air that come from both natural and man-made sources.

## Types of Air Pollutants:

**Particulate Matter**  
small solid particles and liquid droplets present in the air

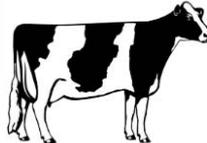
**Gases**  
sulfur dioxide, nitrogen oxides, carbon monoxide, chemical vapors, etc.

**Ground-level Ozone**  
created when sunlight reacts with gases in the air

## Sources of Air Pollution



**Natural Sources**  
Forest fires, volcanoes, pollen



**Agriculture**  
Livestock, animal waste, fertilizer



**Energy Use**  
Household & powerplants



**Dust**  
From activities such as construction



**Industry**  
Oil refineries, factories, etc.

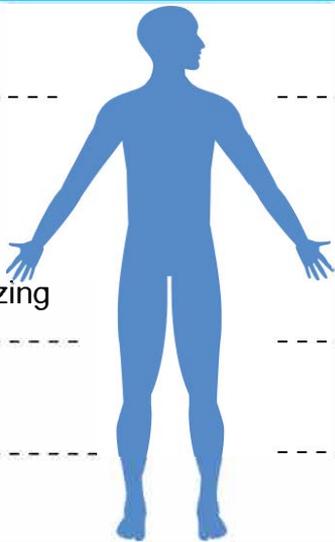


**Transportation**  
Cars, buses, planes, trucks, and trains



**Waste Management**  
Emissions from landfill & trucks

## Health Effects of Air Pollution



**Cardiovascular**

- heart disease
- chest pain
- palpitations
- high blood pressure

**Respiratory**

- asthma attacks and wheezing
- lung diseases
- lung cancer

**Endocrine**

- Obesity
- Diabetes

**Brain Function**

- impaired brain development
- increased autism risk
- mental health issues
- neurodegenerative disorders

**Pregnancy**

- preterm birth
- low birth weight
- asthma in infants

**Mortality**

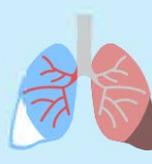
- Lower life expectancy

## Who is Most Affected?

**People who work outdoors**  
Jobs where there is high exposure to contaminated air



**People with pre-existing conditions**  
Respiratory issues, cardiovascular, & mental health



**Frontline Communities**  
Low-income, communities of color are disproportionately exposed to air pollution



**Pregnant women**



**Infants and young children**



**Older adults & the elderly**



# How Can I Reduce My Exposure to Outdoor Air Pollution?



**Avoid Heavy Traffic**



**Don't idle your vehicle**



**Plan outdoor activities when and where pollution levels are lower**



**Check your local air quality by using the air quality index (AQI) on [airnow.gov](http://airnow.gov)**

## Air Quality Index (AQI)

The AQI is an index for reporting daily air quality. The index is broken into six different number ranges and color categories. Increasing index values correspond to increased health risks

**Good**

**0-50**

Air pollution poses little or no risk.

**Moderate**

**51-100**

Potential health impacts for sensitive groups.

**Unhealthy for Sensitive Groups**

**101-150**

Sensitive groups may experience health effects.

**Unhealthy**

**151-200**

Everyone may experience health effects. Limit heavy outdoor activity

**Very Unhealthy**

**201-300**

Everyone should avoid prolonged or heavy exertion outdoors

**Hazardous**

**301-500**

Health Warnings of emergency conditions. Avoid all physical activity outdoors

# How Can I Reduce my Contribution to Air Pollution?



Walk, bike ride, carpool, or take public transportation



Support industries taking steps to reduce contribution to air pollution.



Recycle and avoid single use plastics



Choose energy saver appliances and lightbulbs and unplug items not in use



Support national, state and local laws that reduce air pollution



Plant trees and support local parks & green spaces



Preventing air pollution reduces impacts of climate change.



Join a group that is working to reduce air pollution in your community