

Asthma and Air Pollution

Health and Daily Living

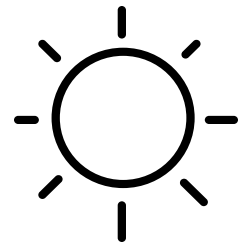
Did you Know?

- 26 million people in the United States have asthma
- 6 million children in the US have asthma
- The decrease of pollution levels in Southern California from 1990 to 1999 saved \$220 million

Outdoor sources that trigger asthma

Weather

- Hot summer
- Cool winter days
- Windy days



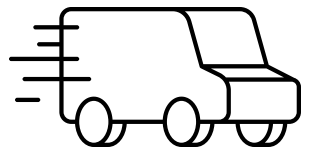
Particles and Dust

- Wildfires
- Agricultural burning
- Playa dust



Other Pollution Sources

- Trucks, rail, warehouses
- Children that live closer to a busy road are almost 2 times more likely to develop asthma than children who live farther from a busy road



Air pollutants that trigger asthma

Ozone (O3)

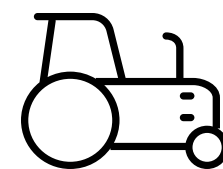
- Traffic related pollutants + hot sun = high ozone
- Highest from 2-6pm on hot sunny days
- In communities with high ozone, children that play many team sports were 3 times as likely to develop asthma compared to children playing no sports.

Nitrogen Dioxide (NO2)

Fine Particulate Matter (PM2.5)

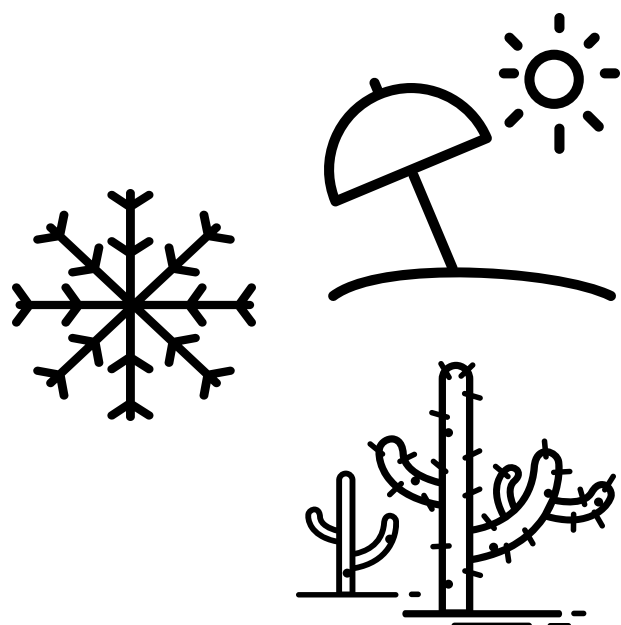
Diesel Particulate Matter

- Traffic related from engine combustion



Children who spend more time outdoors are more likely to use asthma medication and be exposed to air pollutants

Asthma and Climate Change

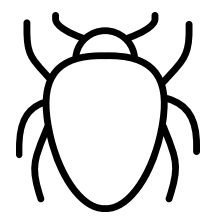


Climate Change affects asthma

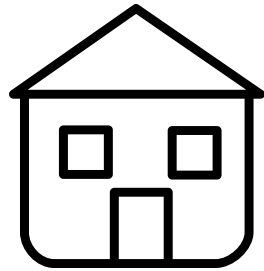
- Heat and drought
- More wildfires = more pollution
- Hotter days = more ozone
- Dust storms in dry places
- Rain and flooding = mold growth

Additional Triggers and Tips

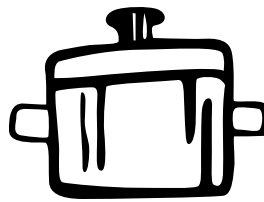
Indoor Asthma Triggers



- Food Allergies
- Strong Emotions
- Mold & Mildew



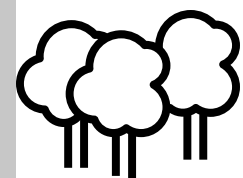
- Carpet
- Pests
- Smoking and Strong Smells
- Stuffed Animals



- Colds & Flu
- Dust and Dust Mites

- Pets & Pet Dander
- Kitchen cooking
- Roasting chilies
- Candles and incense
- Fabric softeners
- Frying foods with oil, using reheated oil to cook foods (burns)

Tips: If pollen affects your asthma



- **Check** pollen counts
- **High pollen** times of the day: early morning, dry or windy days
- Keep **windows closed**



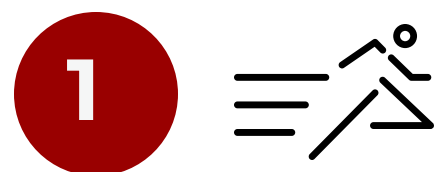
- Take a **shower** and change clothes after being outside
- Avoid **hang drying clothes** so they don't collect pollen

Research shows

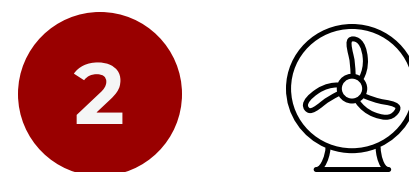
Lower air pollution = fewer new asthma cases in kids



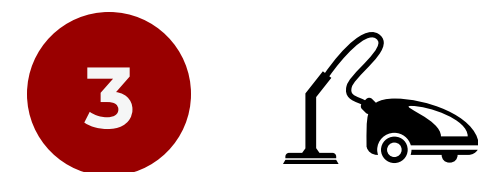
What you can do



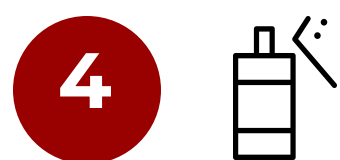
Exercise at certain times of the day and away from busy roads. Avoid peak traffic times.



Ventilate your home and reduce moisture and mold



Make sure dust is kept at a minimum in your home (hvac, window AC units, and vacuums all need special filters)



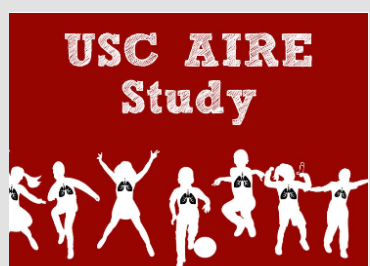
Use green cleaning products



Tell your friends and neighbors and get involved in a local group that works to reduce sources of air pollution!

Infographic: Wendy Gutschow/USC

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