Air Quality Press Fact Sheet

How is ground-level ozone
formed?

Ozone is an odorless, colorless atmospheric gas, sometimes written as a chemical symbol, O3. It's formed by a chemical reaction between nitrogen oxides (NOx) and a group of chemicals called volatile organic compounds (VOCs). These "ozone precursors" can combine in sunlight at low altitudes to form ground-level ozone.

When is ozone season?

Ozone season runs from March through October every year.

How does ground-level ozone affect public health?

Ground-level ozone creates respiratory problems such as shortness of breath and irritation to the throat and lungs in sensitive individuals. For these individuals, exposure to ozone can make the lungs more susceptible to infection, aggravate lung diseases, increase the frequency of asthma attacks, and increase the risk of early death from heart or lung disease.

Who's at risk?

The region's ground-level ozone levels are high enough, at times, for the U.S. Environmental Protection Agency to consider them "unhealthy for sensitive groups." These sensitive groups include:

- Children (under 18), including teenagers, because their lungs are still developing and they breathe more air per pound of body weight than adults.
- Older adults (65+).
- Other adults (18-64) with lung diseases, such as asthma.
- People who are active outdoors, including outdoor workers.

More than 750,000 Central Texas residents fall into the "sensitive" group.

What is the Air Quality Index?

The Air Quality Index is a color-coded guide used nationwide to help individuals understand how healthy the air quality may be on a particular day. The table below shows each air quality level of health concern and the matching color indicator.



Air Quality Index (AQI) Values	Levels of Health Concern
0 to 50	Good
51-100	Moderate
101-150	Unhealthy for Sensitive Groups
151-200	Unhealthy
201-300	Very Unhealthy
301 to 500	Hazardous

Source: <u>airnow.gov</u>

An Ozone Action Day is declared when weather conditions are likely to What is an Ozone Action Day? combine with pollution emissions to form high levels of ozone near the ground that may cause harmful health effects. People and businesses should take action to reduce emissions of ozone-causing pollutants. **Ozone Action Day tips:** Conserve electricity and set your air conditioner at a higher temperature. Choose a cleaner commute -- share a ride to work or use public transportation. Bicycle or walk to complete errands when possible. Defer use of gasoline-powered lawn and garden equipment. Wait until after dusk to refuel cars and trucks. Combine errands and reduce trips. • Limit engine idling. Use household, workshop and garden chemicals in ways that keep evaporation to a minimum, or try to delay using them when poor air quality is forecast. Gaseous compounds from various sources like motor vehicles, power What contributes to days when plants and industrial activities, which can mix like a thin soup in the outside air and interact with sunlight to form ozone. Increased summer ground-level ozone is high? heat, low winds and dry skies keep the ozone reaction occurring in our immediate atmosphere, causing high ground-level ozone on certain days. Check local air quality conditions online at airnow.gov or download the How can I prevent exposure on AirNow app. Also, watch local weather forecasts for air quality reports. Then take action to protect yourself against harmful air pollution. days when ground-level ozone is high? If you are an individual who is sensitive to air pollution or take care of someone who is, take these steps on high ground-level ozone days: Choose less-strenuous activity. Take more breaks during outdoor activities. Reschedule activities to the morning or to another day. Move your activity inside, where ozone levels are usually lower. Take the following actions to improve regional air quality: How can citizens participate? Drive less – Use alternative modes of transportation, such as biking, walking and carpooling. • Drive clean – Keep your car tuned up and combine multiple errands into one trip. Conserve – Use less water and electricity throughout the day to help reduce the amount of emissions put out by utility plants. Promote air awareness through outreach programs like the Central **Texas Clean Air Ambassadors Program.**

For more information regarding air quality in Central Texas, please visit <u>AirCentralTexas.org</u>. Other Air Quality Resources: <u>CLEAN AIR Force of Central Texas</u>; <u>Texas Commission on Environmental Quality</u>; <u>EPA AirNow</u>; <u>FHWA It All Adds Up to Cleaner Air</u>.