



You Can Make a Difference!

Here's what you can do to help:

- Skip a trip in your car and use alternative modes of transportation by – carpooling, walking, taking the bus, riding a bike, vanpooling, or teleworking. Even once or twice a week will help.
- Keep your vehicle well-maintained. Poorly maintained vehicles pollute more and cost more to operate.
- Keep tires properly inflated and check them monthly. Under-inflated tires increase drag and reduce gas mileage.
- Plan trips to combine errands. A cold engine emits more pollution and reduces efficiency. Avoid idling, especially at schools, drive thru restaurants and banks.
- Avoid filling your gas tank to the very top. Spills and fumes contribute to air pollution. Refueling after dusk in the summer reduces ozone production.
- Start charcoal with an electric or chimney-type fire starter instead of using lighter fluid. Or use natural gas or propane BBQs.
- Use an electric or hand mower on your lawn – or better yet, change to low-water use desert landscaping.
- Avoid using oil-based paints and solvents.
- Limit recreational use of fireplaces. The smoke is an irritant and contributes to urban haze and particulate matter air pollution.
- Cast your vote for cleaner air. Let your elected officials know that you support clean air initiatives.

Who is Especially Vulnerable?

- Air pollution is particularly harmful to young children and the elderly. Children are at risk because their lungs are not fully developed; they breathe faster, and they often spend lots of time outdoors.
- People with heart or lung disease, older adults, and children are considered at greater risk from particulate matter, especially when they are physically active.
- Ozone can affect outdoor exercisers and workers by causing permanent damage to lung tissue and reduce resistance to infections. Exercisers should avoid congested streets and peak times for ozone (summer afternoons). Ozone is also harmful to those suffering from asthma, emphysema, chronic bronchitis, or previous lung infections.
- Smokers and those exposed to second-hand tobacco smoke are more susceptible to the harmful effects of air pollution.
- And ground-level ozone can have detrimental effects on plants and ecosystems, including interfering with the ability of plants to produce and store food, damaging the leaves of trees and plants, and reducing forest growth and crop yields which could impact species diversity in ecosystems.



Did You Know?

- Air pollution affects everyone, and is especially harmful to the very young and old, outdoor exercisers and workers, and those with lung and heart diseases.
- Laws are in place to protect our health from major air pollutants. Over the years, Pima County has violated the health standards for carbon monoxide, ozone, and particulate matter. Other pollutants of concern are nitrogen oxides and volatile organic compounds as these contribute to the creation of ground-level ozone.
- About 60 percent of the air pollution in Pima County comes from motor vehicle use. The more miles we drive, the more air pollution we produce. By skipping a car trip during the week and carpooling, riding the bus, bicycling, or walking instead, we can save money and keep our air healthy to breathe.

For up-to-the hour air quality information,
(520) 882-4AIR • www.AirInfoNow.org

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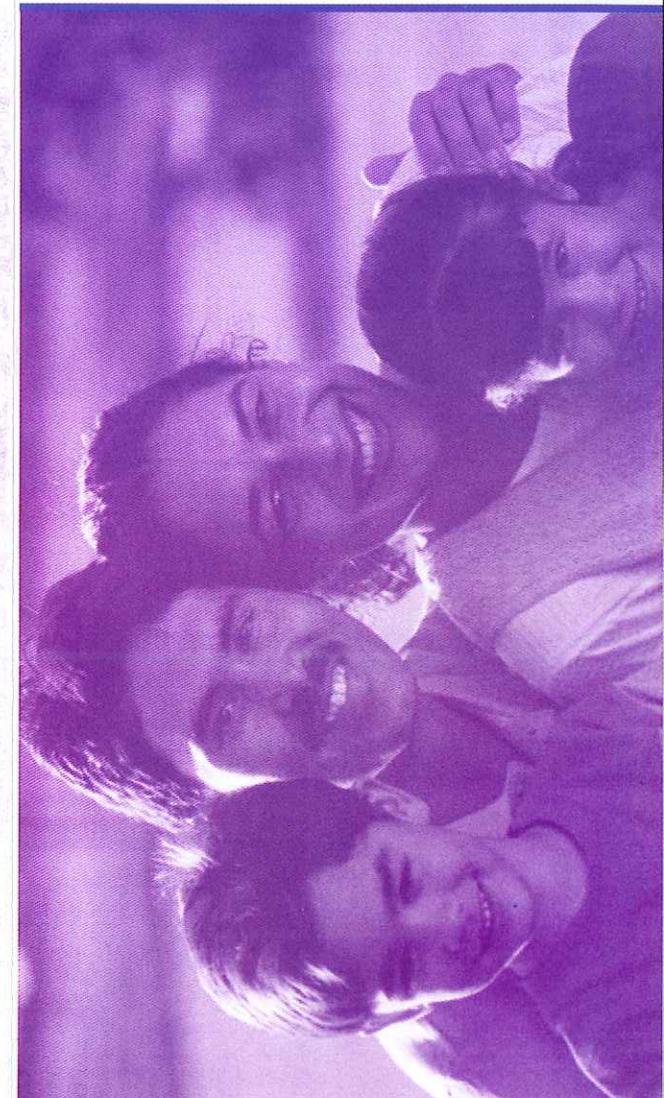


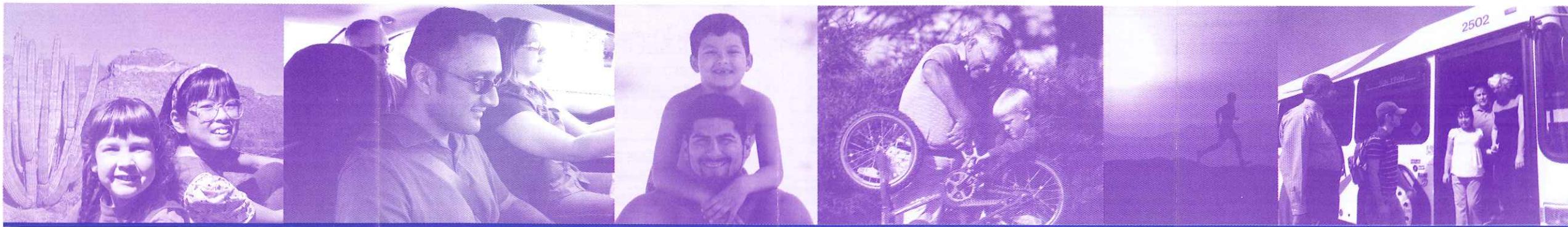
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Air Pollution and Your Health





Ozone {O₃}

There are two different places where ozone (O₃) occurs in the air: the ozone layer in the upper atmosphere and ozone at ground level. The ozone layer above the Earth protects us, like sunscreen, from the sun's harmful ultraviolet rays. The "hole" in this protective ozone layer, enlarged by human-made chemicals, is of great concern.

Ozone that occurs at ground level is a pollutant. It is formed by the reaction of sunlight with emissions from power plants, industries, construction equipment, gas stations, lawn and garden equipment, the vehicles we drive, and the products we use. Ozone levels typically peak during the summer in the afternoon.

Possible Health Effects

- Irritates mucous membranes of the respiratory system causing shortness of breath, coughing, wheezing, chest pain, and headaches.
- Damages the individual air sacs and airways in the lung where oxygen and carbon dioxide are exchanged, reducing lung capacity over time.
- Aggravates asthma, inflames and damages the lining of the lungs, increases sensitivity to allergens.

Carbon Monoxide {CO}

Carbon Monoxide (CO) is an odorless, colorless, poisonous gas that forms when the carbon in fuels does not completely burn. Carbon monoxide is emitted in motor vehicle exhaust, during wildfires and residential wood burning, and through industrial combustion processes. It is more concentrated near busy roads and intersections, as motor vehicles emit the majority of the carbon monoxide in our community.

Possible Health Effects

- Reduces oxygen levels reaching the brain, heart, and other tissues by obstructing the work of red blood cells. This may cause reduced mental alertness and decreased ability to perform basic tasks.
- May increase the risk of heart disease and cause chest pain in individuals with coronary heart disease.
- May promote the long-term development of arteriosclerosis (abnormal thickening and hardening of blood vessel walls).

Particulate Matter {PM}

Particulate Matter (PM) is a problem in the hot, dry climate of Tucson, especially during times with dry, windy weather. PM consists of small particles, such as soot and dust, which can be visible to the naked eye or microscopic in size. It comes from motor vehicle emissions, earth-moving activities, tire and brake wear, industrial processes, dust from disturbed vacant land, unpaved surfaces, wood burning, forest fires, and other sources. Because of its small size, PM bypasses the body's filtering system and can be very harmful. Toxic and cancer-causing chemicals can be carried by particulate matter into the lungs.

Possible Health Effects

- May cause coughing, breathing difficulties, and respiratory pain.
- May cause irritations to the nose, throat, and ear canal which are often mistaken for allergic reactions.
- May clog the lungs and lymph nodes. May diminish lung function, especially in children.
- May weaken the immune system and lower resistance to infection.
- May increase the incidence and severity of acute bronchitis, pneumonia, asthma, emphysema and other severe lung illnesses.
- May cause heart attacks, strokes, and premature deaths, as well as increased visits to emergency rooms and hospitals.

Problem Pollutants

Problem Pollutants

