SMOG

ARMED WITH THE FACTS

WHAT IS SMOG?

Smog – or ground level ozone – is not emitted directly into the air but is formed through the reaction, triggered by sunlight, of certain chemicals in the atmosphere with oxygen. Chemicals that undergo such reaction are known as "ozone precursors" and include volatile organic compounds (VOCs) such as methane and nitrogen oxides (NOx).

You may have heard of "good" ozone high in our atmosphere, which acts as a protective layer against the sun's radiation. But ozone is a strong respiratory irritant, so at ground levels ozone is harmful to breathe and can negatively affect your health.

Smog levels in the air climb during hot, sunny days, but high smog concentrations have also been measured in winter months in parts of Wyoming and Colorado where there are high emissions of VOCs and NOx associated with oil and gas development. Smog can travel great distances carried by the wind.

HOW DO I KNOW IF I'M BREATHING SMOG?

The Environmental Protection Agency (EPA) monitors air pollution around the country through a nationwide network of monitors. When a monitor detects smog in violation of federal standards, it is posted on the AirNow.gov website.

Be sure to check your current air quality there before engaging in outdoor activities with your family.

HOW IS SMOG HARMFUL?

Smog is a powerful oxidant that can irritate the airways, causing a burning sensation, coughing, wheezing, and shortness of breath.

Smog has been linked to a host of maladies, including premature mortality, heart failure, increased hospital admissions, increased emergency room visits, and possible long-term damage to the lungs.

Children, the elderly, and people with existing respiratory conditions are the most at risk from smog pollution. Children are more vulnerable to the damaging effects of smog because their lungs are still developing—and they tend to be more active outdoors, even when smog levels are high.

Studies have shown that children with asthma are especially vulnerable to smog, as are people engaged in vigorous outdoor activity.

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WHERE DOES SMOG COME FROM?

Some of the major sources of ozone precursors are emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents.

A considerable amount of smog-forming pollution is emitted by oil and natural gas operations. Unfortunately, smog monitoring in most oil and gas basins is either extremely limited or entirely lacking. Based on this fact, petitioners have respectfully urged the EPA to take actions that will provide important public health protections for communities faced with ozone pollution from gas development.

Sadly, more than 4 in 10 people in the United States (41%) live in areas with unhealthy levels of smog.

WHAT CAN MOMS DO?

Arm yourself with the facts. Share them with your friends.

You can do things to cut down your personal contribution to smog:

- Try choosing a cleaner commute; trade the car for your bike, car pool, take public transportation or walk when possible.
- Consolidate errands to one trip; limit engine idling.
- Conserve energy in your home by setting your thermostat a little higher in the summer and lower in the winter.

Significant wide-scale change will happen when we USE OUR CITIZENSHIP!

Demand clean energy that does not contribute to smog pollution. Demand regulations that cut emissions from pollutants that make smog worse.

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