Ozone and Particulate Matter Forecasting

Do you ever find yourself asking, “I wonder how the air quality is today?” Wonder no more! ADEQ provides forecasting for both ozone and particulate matter. While the air in Arkansas is healthy and continues to improve, it is important for everyone, especially sensitive people like children and the elderly, to be aware of day-to-day amounts of two specific kinds of substances found in the air: ozone and particulate matter. ADEQ currently provides an ozone forecast and will soon debut a particulate matter forecast.

Particulate matter is an air pollutant that consists of tiny particles in the air. These tiny particles come from combustion of heating oil, coal, and natural gas. They could also come from vehicles or fire, or particulate matter can form from atmospheric reactions with other gases in the air.

Ozone forms in many of the same ways as particulate matter, except those gases that contribute to particulate matter react in the presence of sunlight to create ozone. This gas is present in the upper atmosphere and on the surface in the air we breathe. Ozone is good in the upper atmosphere because it protects us from harmful solar radiation. On the surface, ozone can be harmful to our health: “Good up high, bad nearby!”

Symptoms from exposure to high levels of ozone and particulate matter include: coughing, difficulty breathing, lung damage, heart attacks, and strokes. People most likely to be affected by these gases include older adults, children, people with asthma, people with certain predisposed genetic characteristics, and people with heart or lung disease.

ADEQ’s Ozone and Particulate Matter Forecasting Program was developed to provide advanced warning for sensitive groups to help them modify their activities to reduce or avoid exposure when high levels of particulate matter and ozone are expected. When the forecast indicates higher levels, you may consider rescheduling activities, taking more breaks during outdoor projects, or spending less time near busy roads. Remember to check the ozone forecast before exercising outdoors this summer. It is important for your health to be air aware!

The particulate matter forecasting program is still in development. When particulate matter forecasts are ready to be issued, they will be available by the same methods as the ozone forecasts. Check for updates to the forecasts as they may be amended when unforeseen changes in weather occur. To learn more about what you can do to reduce air pollution and protect your health, click here. To view ozone forecasts and sign up to receive alerts via email or text, click here.