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For Immediate Release

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SWNPHD INSTALLS NEW TOOL TO SUPPORT LOCAL AIR QUALITY MONITORING EFFORTS

SWNPHD, in collaboration with the Nebraska Environmental Public Health Tracking Program, is pleased to announce the installation of a new air quality sensor in our communities, called a PurpleAir sensor. Installed in McCook, Ogallala, Benkelman, and Imperial this sensor will help support air monitoring efforts in our state to help our residents make informed decisions for their health.

Air Quality and Health

The quality of our air can have direct impacts on our health. No matter where you live, you can be exposed to air pollution from vehicle exhaust, smoke, road dust, industrial emissions, pollen, gas-fueled yard equipment, and other sources. The new sensor will monitor a very important component of air pollution from these sources: small particles referred to as PM_{2.5}. These particles are very small, just 2.5 micrometers (mm) in diameter, invisible to the human eye.

When we breathe in air pollution, which can contain these particles, they can enter the bloodstream and can contribute to short-term or even long-term health effects. Short-term health effects from breathing in air pollution can include shortness of breath, chest pain, coughing, wheezing, fatigue, asthma attacks, and irritation to the eyes, throat, and airways. Long-term exposure, such as for those people working outside, can increase the risk of respiratory infections, heart disease, lung disease, stroke, and lung cancer. Individuals with pre-existing conditions such as asthma, heart disease, or respiratory conditions may be particularly vulnerable. Children, the elderly, and pregnant women are considered at high risk when the amount of PM_{2.5} particles in the air are high.

PurpleAir Sensors: Supporting Current Air Quality Monitoring Efforts

Collecting data every ten minutes, the sensor will help SWNPHD keep an eye on changes in air quality throughout the day, the season, and during the year in our community. “Air quality monitoring plays a very important role in protecting public health in our community,” says Diana Garcia, Program Manager for SWNPHD. Information collected from the sensor is also publicly available for you to view at www.swhealth.ne.gov by navigating to more resources at the bottom of the air quality page. You can view individual sensor readings on a map from these resources.

The PurpleAir sensor will be part of a group of sensors across the state that are used to determine an Air Quality Index (AQI) for your area. The AQI is a measure of your air quality, which ranges from good (0-50), moderate (51-100), unhealthy for sensitive groups (101-150), unhealthy for all (151-200), very unhealthy (201-300,) and hazardous (301-500).

It's important to regularly check the air quality index (AQI) because there are steps that you can take reduce exposure to air pollution on poor air quality days, such as avoiding exercising outdoors and limiting the amount of time that you and your family spend outdoors.

For more information contact SWNPHD at 308-345-4223. Southwest Nebraska Public Health Department serves Chase, Dundy, Frontier, Furnas, Hayes, Hitchcock, Keith, Perkins, and Red Willow counties. The website swhealth.ne.gov contains many resources and additional information helpful to prevent disease, promote and protect health. Follow us on Facebook, Instagram, YouTube and TikTok.

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