

## **OZONE**

### WHAT IS OZONE?

Good ozone occurs naturally 10-30 miles above the earth's surface. It makes a protective layer in the atmosphere that shields us from the sun's harmful ultraviolent rays. Ground-level ozone is created by chemical reactions at the Earth's surface. This type of ozone is a harmful air pollutant, because of its effect on people and the environment.

## **GROUND-LEVEL OZONE**

- Forms when fuel burned in cars and trucks, power plants, factories, and other sources reacts with heat and sunlight
- Is formed depending on weather conditions and sunlight intensity
- Is usually worse in the summer months
- Is a bigger problem in urban areas, but can also be in rural areas

#### WHO IS AT RISK?

- People who have asthma or another lung disease
- Infants and children
- Active people of all ages who exercise or work outside
- Older adults

## **PM2.5**

### WHAT IS PM2.5?

Particle pollution or particulate matter less than 2.5 micrometers in diameter is called PM2.5. Particles are small enough to be breathed into the deep part of your lungs, and even into your bloodstream.

## **SOURCES OF PM2.5**

- Vehicle exhaust
- Power plants
- Factories
- Forest, leaf, and grass fires
- Outdoor wood boilers
- Tobacco smoke

### WHO IS AT RISK?

When PM2.5 is at unhealthy levels, everyone should be concerned. Those most at risk are:

- People who have asthma or another lung disease
- People with heart disease
- Infants and children
- Active people of all ages who exercise or work outside
- Older adults





mdhhs-mitracking@michigan.gov





www.michigan.gov/mitracking





## **OZONE**

## **ASSOCIATED HEALTH RISKS**

- Worsened asthma, bronchitis, and emphysema
- Respiratory illnesses such as pneumonia or bronchitis
- Lung and throat irritation
- Coughing and pain when taking a deep breath
- Wheezing and breathing difficulties during exercise or outdoor activities

# **PM2.5**

### **ASSOCIATED HEALTH RISKS**

- Worsened asthma and chronic obstructive pulmonary disease (COPD)
- Asthma attacks
- Irregular heartbeat
- Heart attack
- Lung cancer
- Poor birth outcomes, such as low birth weight
- Death at a younger age

## PROTECT YOURSELF & YOUR FAMILY

## Know your air quality:

- Get air quality forecasts from local TV and radio stations.
- Sign up for EnviroFlash email or text messages to find out about unhealthy levels.
- Find out daily air quality information from Mlair.
- Check the Air Quality Guide for ozone and particle pollution to learn what actions to take.

## If there are unhealthy levels of the following, take these steps:

### **Ozone**

- Take it easy when you're outside.
- Limit outdoor activity to the morning or evening.
- Spend more time inside.
- Avoid using ozone generators that are sold as air cleaners.

### **PM2.5**

- Take it easy when you're outside.
- Stay away from vehicle exhaust.
- Stay away from indoor and outdoor smoke.
- Stay away from tobacco smoke.
- Exercise inside or away from roads and highways.

