Air Quality & Particle Pollution

Harmful particles are among the nation's most common air pollutants. Use this chart to reduce exposure and protect your health. Check AirNow.gov for your local air quality forecast (www.airnow.gov).

Air Quality Index	Who Is at Risk?	What Can I Do?
Good (0-50)	It's a great day for activity outdoors.	
Moderate (51-100)	People who may have unusual sensitivity to particle pollution.	**Unusually sensitive people:** Consider shorter, lighter outdoor activities. Watch for coughing or shortness of breath; these are signals to ease your effort. **Everyone else:** A good day for activity outdoors.
Unhealthy for Sensitive Groups (101-150)	Sensitive groups are **people with heart or lung disease, older adults, children and teens, pregnant women, minority populations, and people who work outdoors.**	**Sensitive groups:** Shorten outdoor activities and lower their intensity. You can be active outside, but pause more often. Watch for coughing or shortness of breath. **People with asthma:** Use your asthma action plan and keep quick-relief medicine nearby. **People with heart disease:** Palpitations, breathlessness, or unusual fatigue could signal a serious problem. Contact your health care provider if any of these occur.
Unhealthy (151-200)	**Everyone**	**Sensitive groups:** Avoid long or intense outdoor activity. Consider a new time or moving indoors.* **Everyone else:** Cut back on long or intense activities. Pause more often when active outdoors.
Very Unhealthy (201-300)	**Everyone**	**Sensitive groups:** Avoid all outdoor physical activity. Move activities indoors or wait for better air quality.* **Everyone else:** Avoid long or strenuous activities. Consider moving them indoors or rescheduling.*
Hazardous (301-500)	**Everyone**	**Everyone:** Avoid all outdoor physical activity. **Sensitive groups:** Stay indoors and limit activity. Follow tips to keep indoor particle levels low.*

***Note:** During extreme heat, staying indoors with closed windows can be dangerous without air conditioning. If you feel hot, seek an air-conditioned place or ask your local government whether cooling centers are available in your community.

Essential Facts About Particle Pollution:

- Particle pollution may trigger asthma attacks, heart attacks, strokes, and premature death.
- Depending on where you live, particle pollution may be a concern in any season.
- You can stay active while lowering your exposure to ozone pollution. Plan outdoor activities with the latest Air Quality Index (AQI) readings and forecasts from AirNow (www.airnow.gov).

Understanding particle pollution

Particle pollution has many sources. Fine particles, no larger than 2.5 micrometers across, come from power plants, industry, vehicle exhaust, wood stoves, and wildfires. Coarse particles, 2.5 to 10 micrometers across, come from crushing and grinding, road dust, and certain agricultural work.

Why can particle pollution be harmful?

Particle pollution can cause coughing, wheezing, lower lung function, asthma attacks, heart attacks, and strokes. It is also associated with premature death among people with heart or lung disease.

Who needs to be especially careful?

Keeping track of air quality is wise for everyone. It matters even more for people who may be more vulnerable to its effects, including:

- People who have heart disease.
- People with lung disease, such as asthma or chronic obstructive pulmonary disease (COPD).
- Older adults.
- Children and teens: their lungs are still developing, and they inhale more air per pound of body weight than adults.
- Women who are pregnant.
- People in minority populations.
- People who work outdoors.

Ways to protect yourself

Use AQI forecasts at AirNow.gov to schedule outdoor activities. When forecasts show unhealthy air, check AirNow for current conditions and take these steps to reduce your exposure:

- Pick an activity with lower intensity.
- Spend less time active outdoors.
- Change the timing of activities.
- Exercise farther from busy roads.

High outdoor particle levels can also mean high levels indoors.

To limit indoor particles:

- Use fireplaces and wood stoves less often. Avoid candles and smoking indoors.
- Fit your HVAC system with HEPA air filters (https://www.epa.gov/indoor-air-quality-iaq).
- Buy or build a portable air cleaner made to remove particles from indoor air.

Can I reduce particle pollution?

Yes. Try these steps:

- Drive less: walk, bike, share rides, or take public transportation.
- Save energy and select products certified by ENERGY STAR.
- Choose cleaner heating: a heat pump, electric heat, or a ductless heat pump.
- Tune car, boat, and other engines.
- For wood heating, burn efficiently. See EPA's Burn Wise Program (www.epa.gov/burnwise) for guidance.
- Never burn leaves, trash, plastic, or rubber.

EPA United States Environmental Protection Agency

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