Know before you go!

Does the air look hazy? Has an inversion settled over your community? Are wildland fires in the area?

Many factors impact air quality in Idaho. To help protect your health and air quality, DEQ monitors and measures air pollutants throughout Idaho and posts daily air quality alerts on its website.

What do the alerts mean?

Category	Index Value	Level of Health Concern
Green	0-50	Good
Yellow	51-100	Moderate
Orange	101-150	Unhealthy for sensitive groups
Red	151-200	Unhealthy
Purple	201-300	Very unhealthy
Maroon	301-500	Hazardous

View the daily air quality report at *www.deq.idaho.gov/daily-air-quality-reports-forecasts*

To receive daily e-mail alerts, look for the note that says "Subscribe to this page."

When air quality is poor:

- ✓ Limit or cancel strenuous outdoor activities.
- ✓ Choose a cleaner commute, share a ride to work, or use public transportation.
- ✓ Reduce driving by combining trips.
- ✓ Limit engine idling.
- ✓ Comply with local burn bans or burning restrictions.
- ✓ Burn smart using dry, untreated wood.

For more information

Idaho Department of Environmental Quality

State Office
Air Quality Division
1410 N. Hilton
Boise, ID 83706
(208) 373-0502

Regional Offices

Boise
1445 N. Orchard
Boise, ID 83706
(208) 373-0550
toll-free: (888) 800-3480

Lewiston
1118 F Street
Lewiston, ID 83501
(208) 799-4370
toll-free: (877) 541-3304

Coeur d'Alene
2110 Ironwood Parkway
Coeur d'Alene, ID 83814
(208) 769-1422
toll-free: (877) 370-0017

Pocatello
444 Hospital Way #300
Pocatello, ID 83201
(208) 236-6160
toll-free: (888) 655-6160

Idaho Falls
900 N. Skyline, Suite B
Idaho Falls, ID 83402
(208) 528-2650
toll-free: (800) 232-4635

Twin Falls
650 Addison Ave. W,
Suite 110
Twin Falls, ID 83301
(208) 736-2190
toll-free: (800) 270-1663

Web Resources

AIRNow
www.airnow.gov/

Air Quality Index
www.deq.idaho.gov/air-quality-monitoring

Daily Air Quality Reports for Monitored Locations in Idaho
www.deq.idaho.gov/daily-air-quality-reports-forecasts

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Air Quality in Idaho

Fine Particulate Matter ($PM_{2.5}$)

How particulate pollution affects our view, our health, and air quality

Idaho Department of Environmental Quality
www.deq.idaho.gov

Sources of $PM_{2.5}$

Fine particulate matter ($PM_{2.5}$) is an air pollutant comprised of small particles less than 2.5 micrometers in diameter. It is both a primary and a secondary pollutant, meaning it can be directly emitted into the air or formed chemically as other pollutants and chemicals combine in the air.

Primary sources of $PM_{2.5}$ include dust, soot, smoke, and combustion. Secondary $PM_{2.5}$ forms from chemical reactions between nitrogen oxides, sulfur dioxide, ammonia and/or volatile organic compounds. The main sources of nitrogen oxides are vehicles and construction and farm equipment. Sources of ammonia emissions include waste from dairies and other animal operations.

In the winter, $PM_{2.5}$ pollution is often a problem during inversions (see "Inversions and $PM_{2.5}$"). In the summer, particulate matter pollution can become an issue as a result of smoke from wildfires.

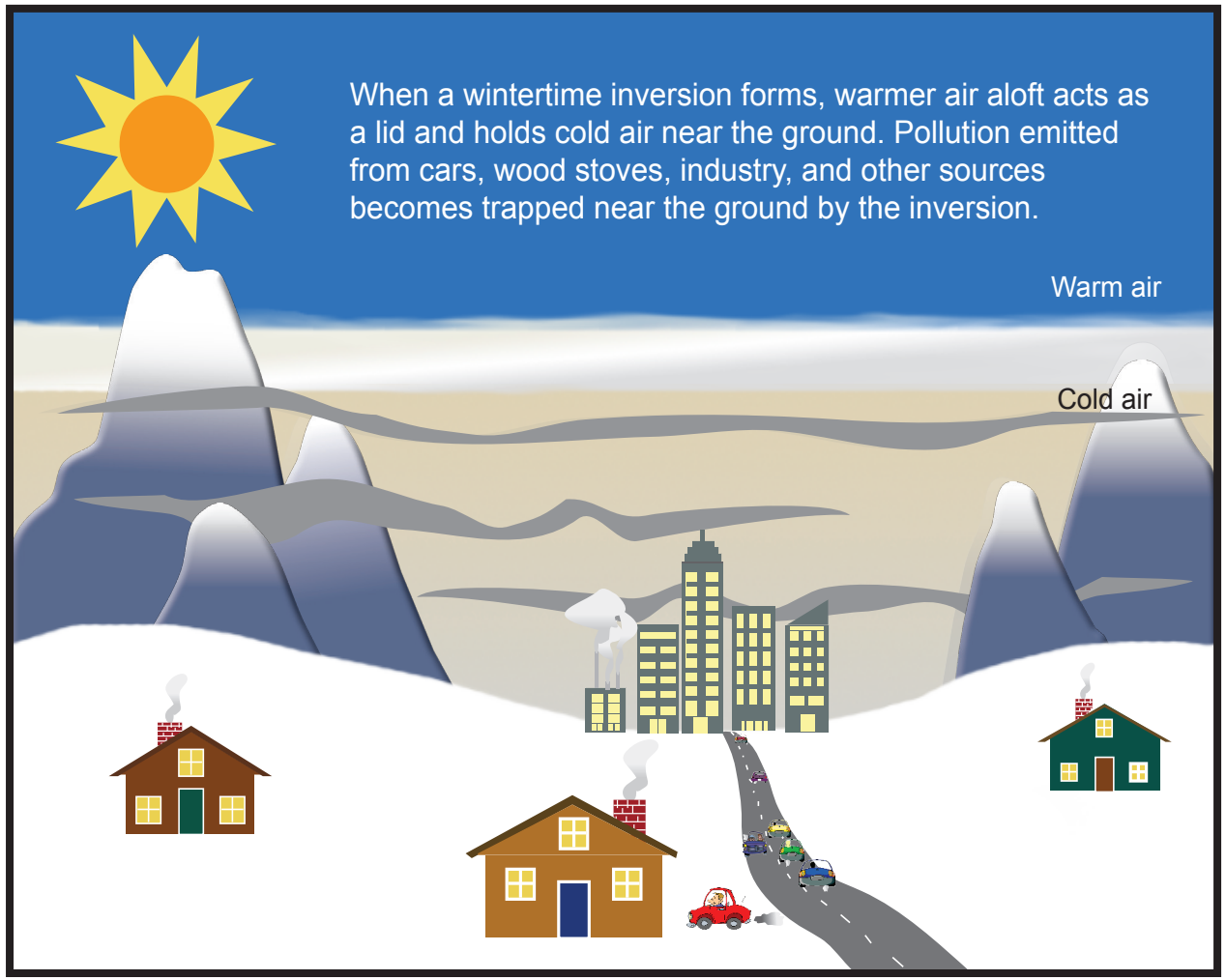
$PM_{2.5}$ and health

Exposure to fine particulate matter is associated with several serious health effects including premature death. Adverse health effects have been associated with exposure to particulate matter over both short periods (such as a day) and longer periods (a year or more).

Breathing fine particulate matter is bad for everyone, although it is most harmful to children, adults who are active outdoors, and people with respiratory and cardiovascular diseases.

Inversions and $PM_{2.5}$

Due to topography and weather patterns, Idaho is subject to some of the most severe wintertime inversions in the Intermountain West. A temperature inversion occurs when colder, heavier air settles into valleys and a layer of warm air settles on top. During an inversion, air is stagnant and does not mix. Pollution from wood stoves, vehicles, industry, and other sources becomes trapped in the cold air layer. Pollution builds until the emission sources are controlled and/or a strong weather system moves through and breaks up the inversion. During these events, monitors have recorded pollution levels above the national health-based standard for $PM_{2.5}$.



Wintertime inversions create ideal conditions for particulate matter to accumulate and adversely impact our air quality.