

Knowledge Break Series

Take a short break to learn something new

CLIMATE SMART
FUTURE *Ready*



CSFR Focus Areas & Action Teams

5 year Plan (2024-2029) Addressing Climate Risks
through Mitigation & Adaptation



Built Environment,
Circular Economy,
Businesses & Jobs

Mobility of People,
Goods, and Services

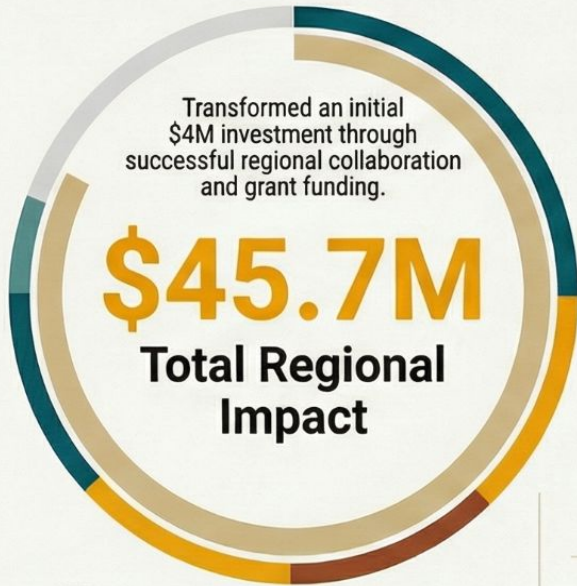
Natural Environment,
Water, and Agriculture

What is the County's Approach and Role?

- Zoom out and look beyond local government boundaries to what is happening in our County and region
- Consider sustainable (environmental, economic, and social) needs and impacts
- Discover gaps and overlaps
- Nurture and enhance partnerships
- Align priorities as much as possible

CSFR 2025 Impact & 2026 Vision

2025 Impact: Regional Success



150%

Minimum Return on Investment
Every \$1 invested by the County generates at least \$2.50 in community benefit.

Land Conservation
6,569
Acres Conserved

Landfill Diversion
10,547
Mattresses Diverted

Wildfire Resilience
457
Home Assessments Completed

3,366
Volunteer Hours Contributed
Dedicated community members completed 34 major actions to improve regional climate resilience.

2026 Vision: The Path Forward

Expanding EV Infrastructure & Water Security
Expanding the charging network and developing frameworks for regional drought response.

Building Economic Resilience
Scaling green workforce training and programs to help small businesses

Regional Water-Sharing Frameworks
Turning the 2024 Water Master Plan into active programs for agricultural and municipal users

CLIMATE SMART

FUTURE *Ready*



www.larimer.gov/csfr

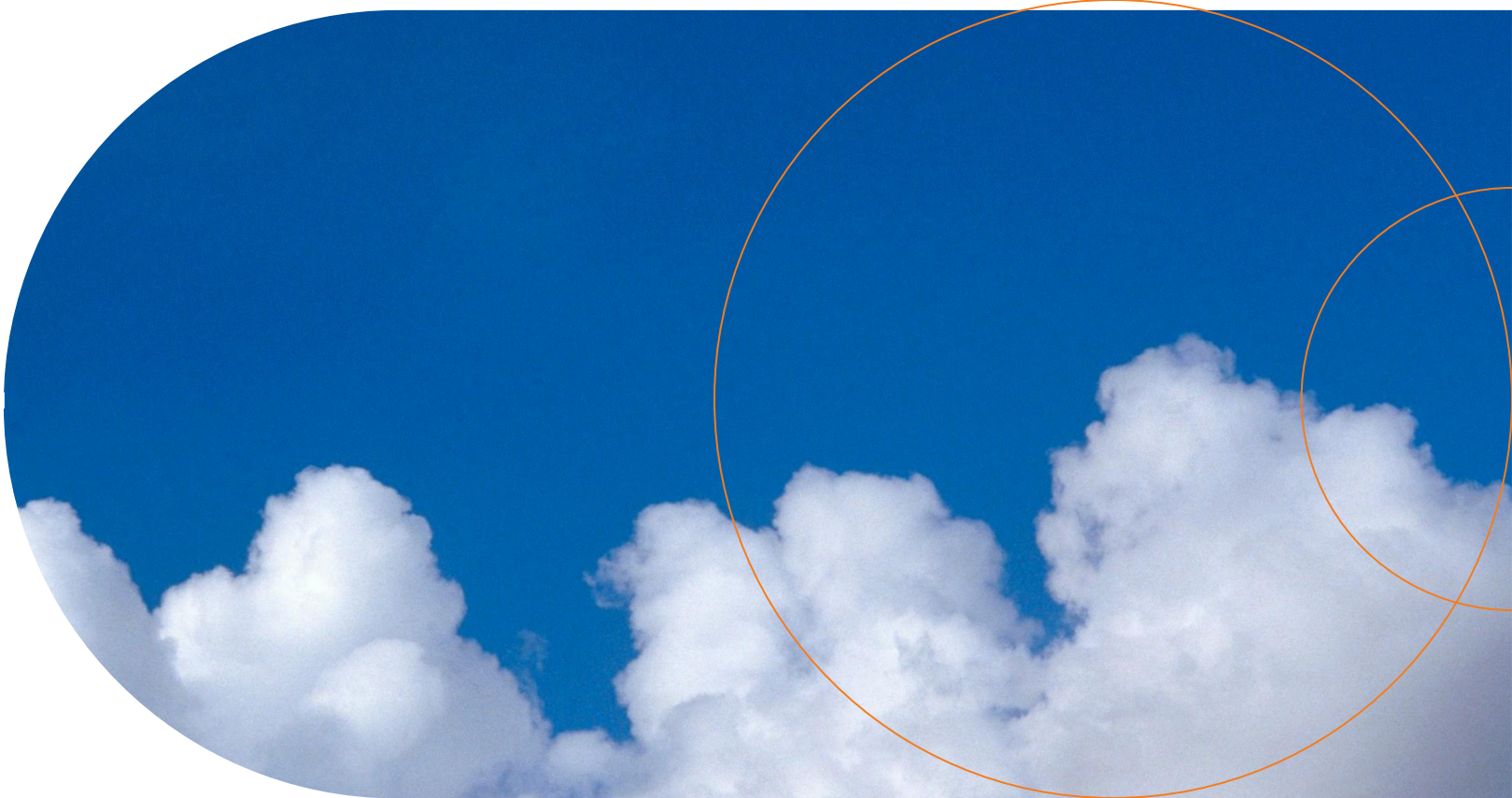
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Be Air Aware!



Air Quality Pollutants

EPA National Ambient Air Quality Standards (NAAQS) for primary pollutants:

- Carbon monoxide (CO)
- Nitrogen oxides (NO_x)
- Ozone (O₃)
- Particulate matter (PM₁₀)
- Particulate matter (PM_{2.5})
- Sulfur dioxide (SO₂)
- Lead (Pb)

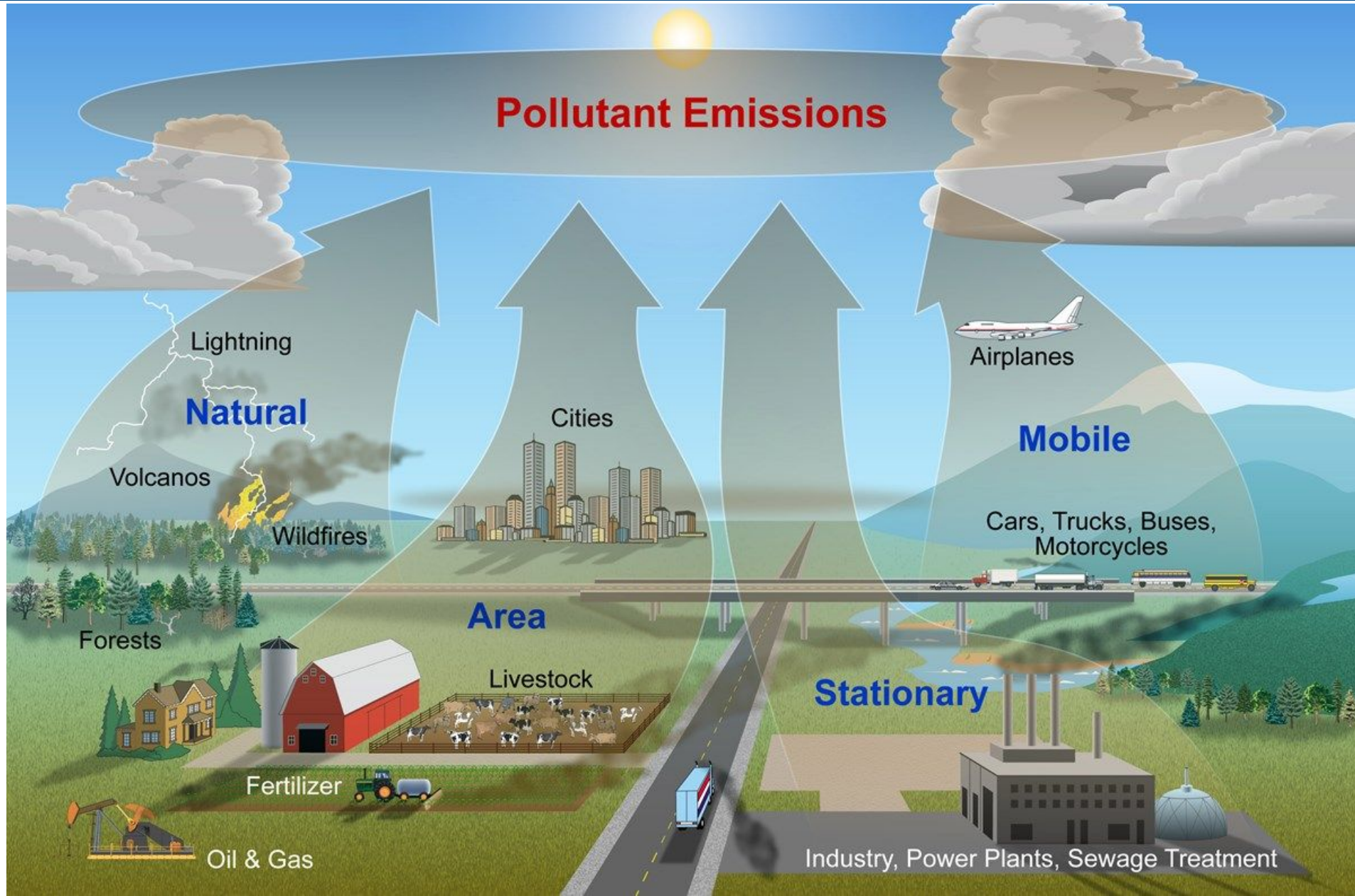
Colorado Department of Health & Environment (CDPHE) additional regulated pollutants:

- Volatile organic compounds (VOCs)
- Hazardous Air Pollutants (HAPs)*
- Total Suspended Particulates (TSPs)
- Fluorides
- Municipal waste combustor emissions
- Reduced sulfur compounds
- Sulfuric acid mist
- Total reduced sulfur
- *Priority Toxic Air Contaminants (PTACs): benzene, ethylene oxide, formaldehyde, hexavalent chromium compounds, and hydrogen sulfide

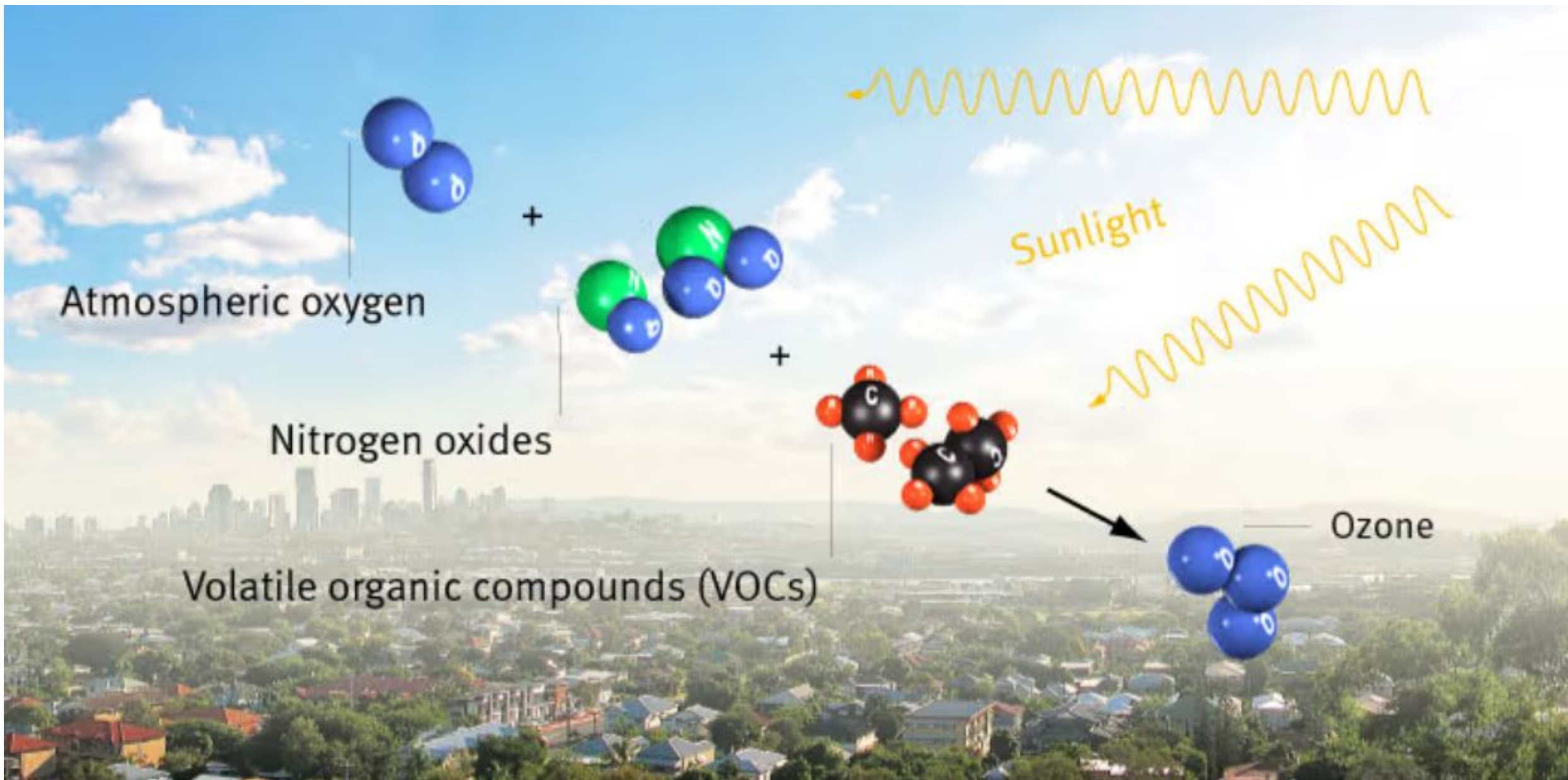
Greenhouse Gases (GHG):

- carbon dioxide
- methane
- nitrous oxide
- hydrofluorocarbons
- perfluorocarbons
- sulfur hexafluoride

Ozone Formation



Ozone Formation



Health Impacts of Ozone

Ozone is colorless, odorless, oxidizing gas.

- When inhaled, ozone reacts chemically at a cellular level.
- Prolonged exposure to inhaling ozone acts like a “sunburn” on your lung tissue.
- EPA NAAQS for ozone is 70 parts per billion (ppb)

Short-term ozone exposure can cause:

- inflammation of the airways
- coughing
- eye, nose, throat irritation
- chest pains
- difficulty breathing
- asthma attacks
- aggravated lung diseases (ex: emphysema)

Additional long-term, cumulative exposure potential impacts:

- permanent lung scarring/reduced lung function
- children develop asthma
- lungs become susceptible to infection
- premature death

Groups Whose Health Is At Greatest Risk



- Children
- Adults over 65
- Pregnant people
- Those active outdoors while exercising or working (construction, landscaping, postal service)
- People with chronic health conditions (lung disease, asthma, COPD)
- Individuals experiencing homelessness
- People with reduced intake of certain nutrients, such as vitamins C and E

Particulate Matter

Human-Made Sources

- Transportation
- Combustion
- Industry & Construction
- Agriculture

Secondary Atmospheric Sources

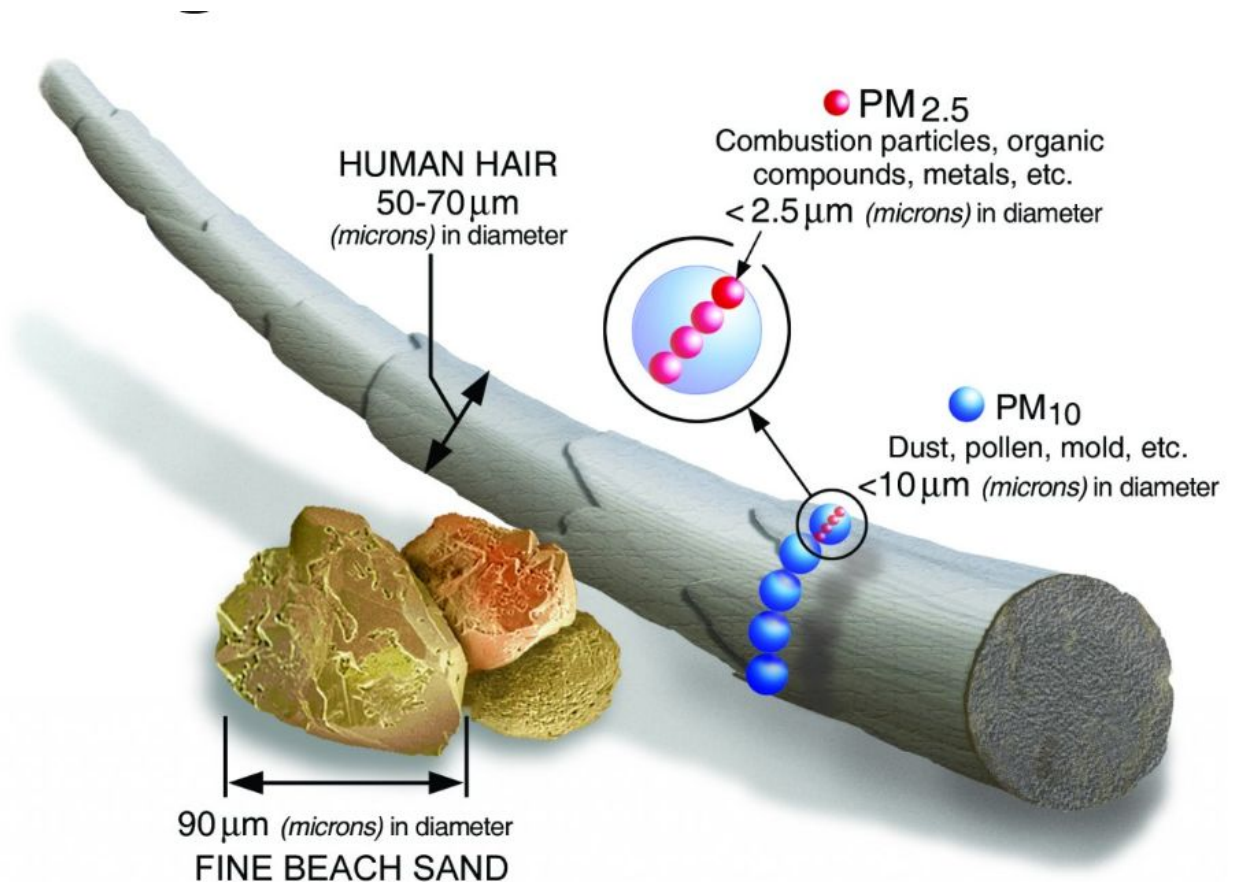
- Precursor Gases
- VOCs & Ammonia

Natural & Biogenic Sources

- Dust
- Vegetation & Pollen
- Wildfires & Volcanoes

Indoor Sources

- Cooking
- Wood-burning stoves & fireplaces
- Tobacco smoking
- Burning candles
- Aerosol sprays



Size comparisons for PM particles

Health Impacts of Particulate Matter

Airborne particulate matter is a mixture of solid particles and aerosols composed of liquid and solids.

- When inhaled, the finer the particulate matter, the deeper it can enter the lungs and bloodstream.
- EPA NAAQS for fine particulate matter of 2.5 micrometers and smaller (PM_{2.5}) is 35 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$).

Fine particles can cause:

- inflammation of the airways
- burning eyes
- runny nose
- bronchitis, and
- shortness of breath
- asthma attacks
- heart attack, stroke

Additional short-term exposure potential impacts:

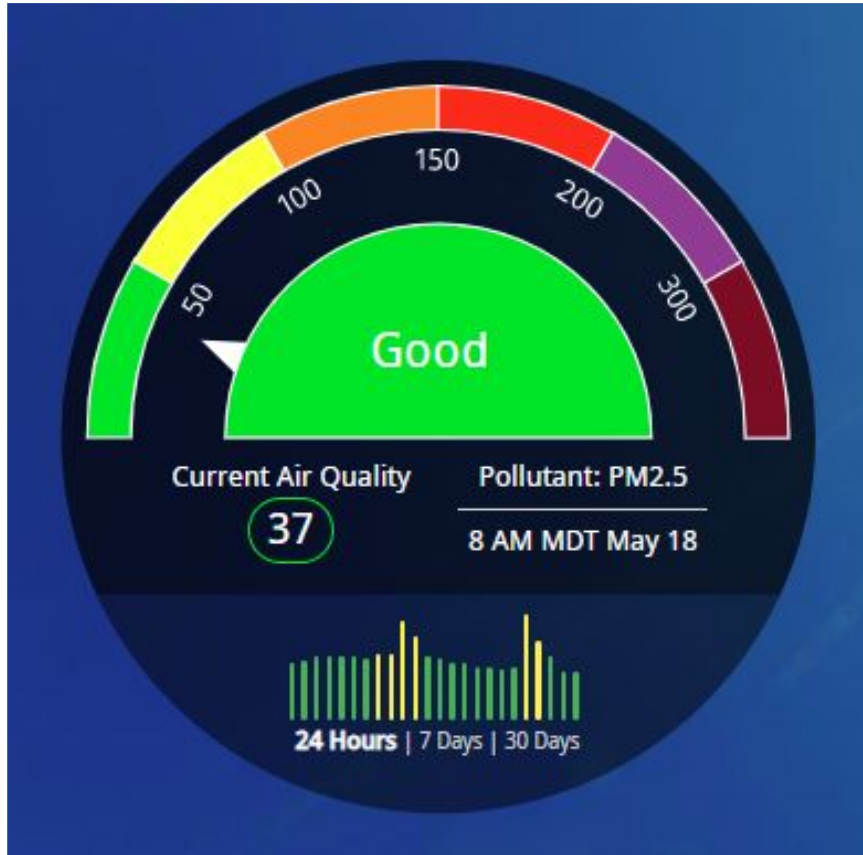
- Pre-term birth
- Lower brain function (cognitive impairment)
- Lower ability to remove viruses and bacteria from the lungs
- Mental health impacts (anxiety, sleeplessness, and more)
- Premature death

Groups Whose Health Is At Greatest Risk



- Children
- Adults over 65
- Pregnant people
- Outdoor workers
- People with chronic health conditions (heart/cardiovascular diseases, lung disease, asthma, COPD)
- Individuals experiencing homelessness
- Those with limited access to healthcare

How to Stay In-The-Know: Air Quality Index



- The U.S. Air Quality Index (AQI) is EPA's tool for communicating about outdoor air quality and health.
- The AQI reports on 5 major pollutants: ozone, particulate matter (PM), carbon dioxide, nitrogen dioxide, and sulfur dioxide
- AQI values at or below 100 are generally thought of as satisfactory. When AQI values are above 100, air quality is unhealthy:
 - at first for certain sensitive groups of people,
 - then for everyone as AQI values get higher.

How to Stay In-The-Know: Air Quality Index

Green	Good 0-54 ppb O3 8hr 0-9 µg/m3 PM2.5 24hr	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Yellow	Moderate 55-70 ppb O3 8hr 9.1-35.4 µg/m3 PM2.5 24hr	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Orange	Unhealthy for Sensitive Groups 71-85 ppb O3 8hr 35.5-55.4 µg/m3 PM2.5 24hr	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Red	Unhealthy 86-105 ppb O3 8hr 55.5-125.4 µg/m3 PM2.5 24hr	151 to 200	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
Purple	Very Unhealthy 106-200 ppb O3 8hr 125.5-225.4 µg/m3 PM2.5 24hr	201 to 300	Health alert: The risk of health effects is increased for everyone.
Maroon	Hazardous 201+ ppb O3 8hr 225.5+ µg/m3 PM2.5 24hr	301 and higher	Health warning of emergency conditions: everyone is more likely to be affected.

Air Quality Alerts

CDPHE Smoke Blog

Website covers wildfire activity, prescribed burning operations, and the transport of smoke from out-of-state sources:

<https://colosmokeoutlook.blogspot.com/>

Colorado Smoke Blog

The CDPHE Air Pollution Control Division periodically updates this page to provide information about smoke in Colorado. This page covers wildfire activity, prescribed burning operations, and the transport of smoke from out-of-state sources.



[All posts](#) [Wildfire information](#) [Prescribed burning information](#) [Other resources](#)

[Air quality health advisories](#) [Avisos en Español \(Spanish Advisories\)](#) [Health information](#) [Prescribed fire map](#)

Search

If you would like to request a Spanish interpretation, please email cdphe_apcd_outreach@state.co.us
Si desea solicitar interpretación al español, envíe un mensaje por correo electrónico a cdphe_apcd_outreach@state.co.us
[Accessibility statement and support](#)

FRIDAY, MAY 15, 2026

Smoke in southeast Colorado

Smoke from multiple fires is lingering in the southwest corner of the state.

The State Line Fire, CR G Fire, and County Road 51 Fire are burning in or near southeast Colorado. Smoke from these fires is lingering in the area, as far north as Lamar.

CDPHE is monitoring the situation and will issue an advisory if conditions worsen. For now, we recommend that folks who are sensitive to wildfire smoke take precautions to protect their health.

Stay up-to-date with real-time air quality conditions at EPA's [Fire and Smoke Map](#).

- May 15, 2026 No comments:

Labels: [Wildfire Information](#)

Air Quality Monitor Maps

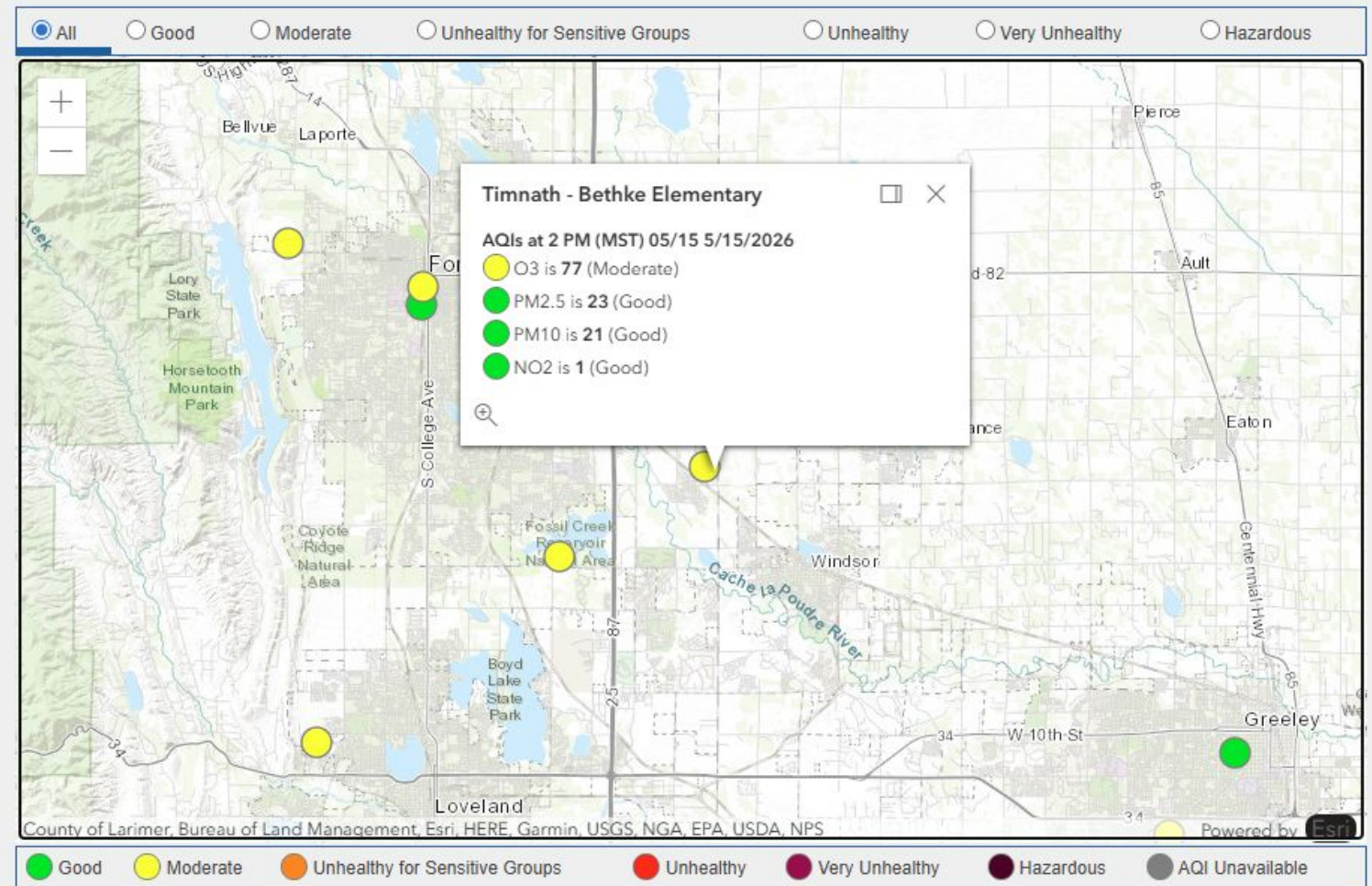
CDPHE Air Quality Monitor Map
AQI values for each criteria
pollutant monitored:

https://www.colorado.gov/airquality/all_sites_map_ag.saspx

Monitoring Sites Map Air Quality Index (AQI) 2 PM (MST) 05/15/2026

Select from the following AQI designations to see which monitoring sites are reporting the selected worst case AQI:

There are 47 sites currently reporting an AQI.



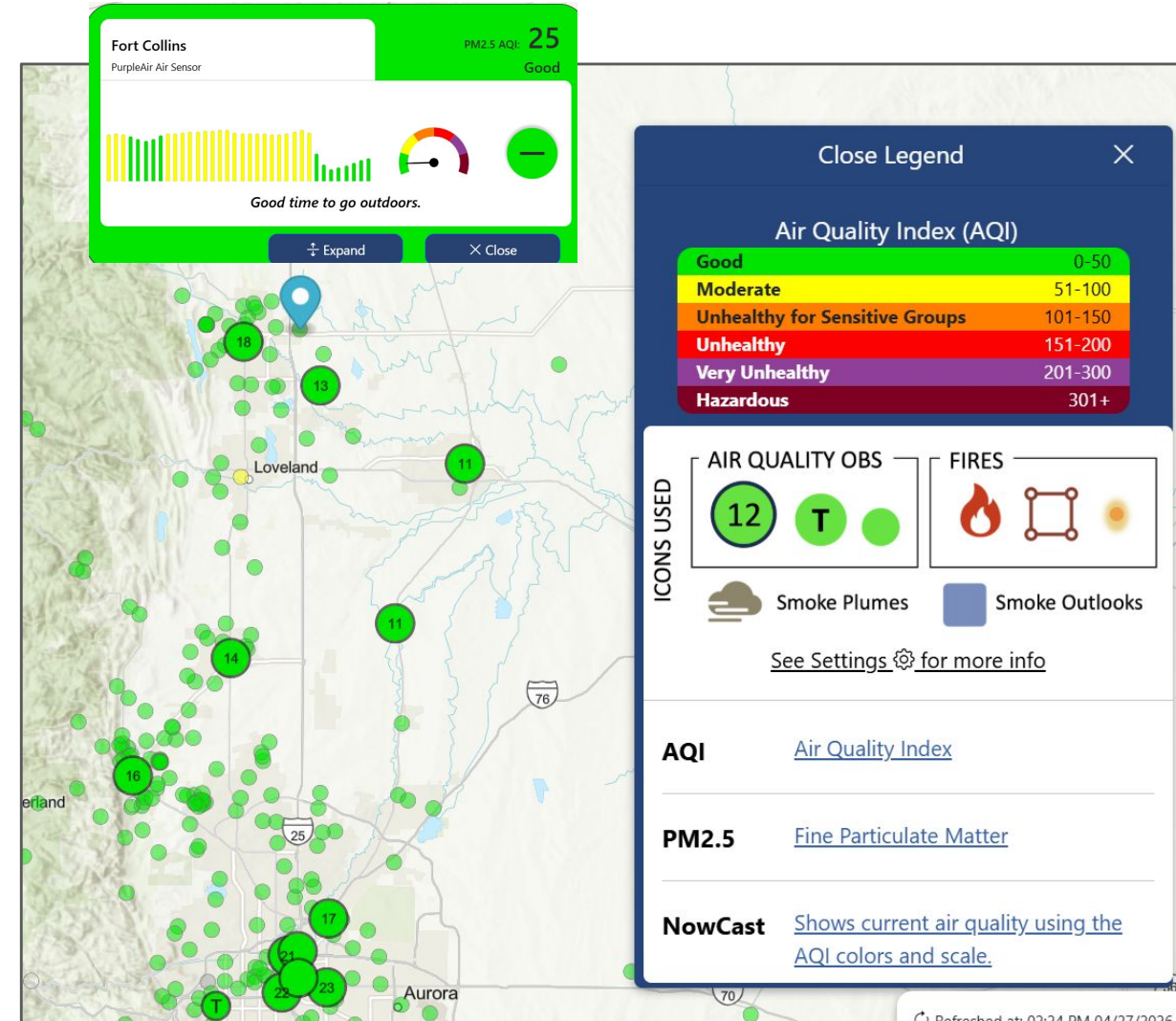
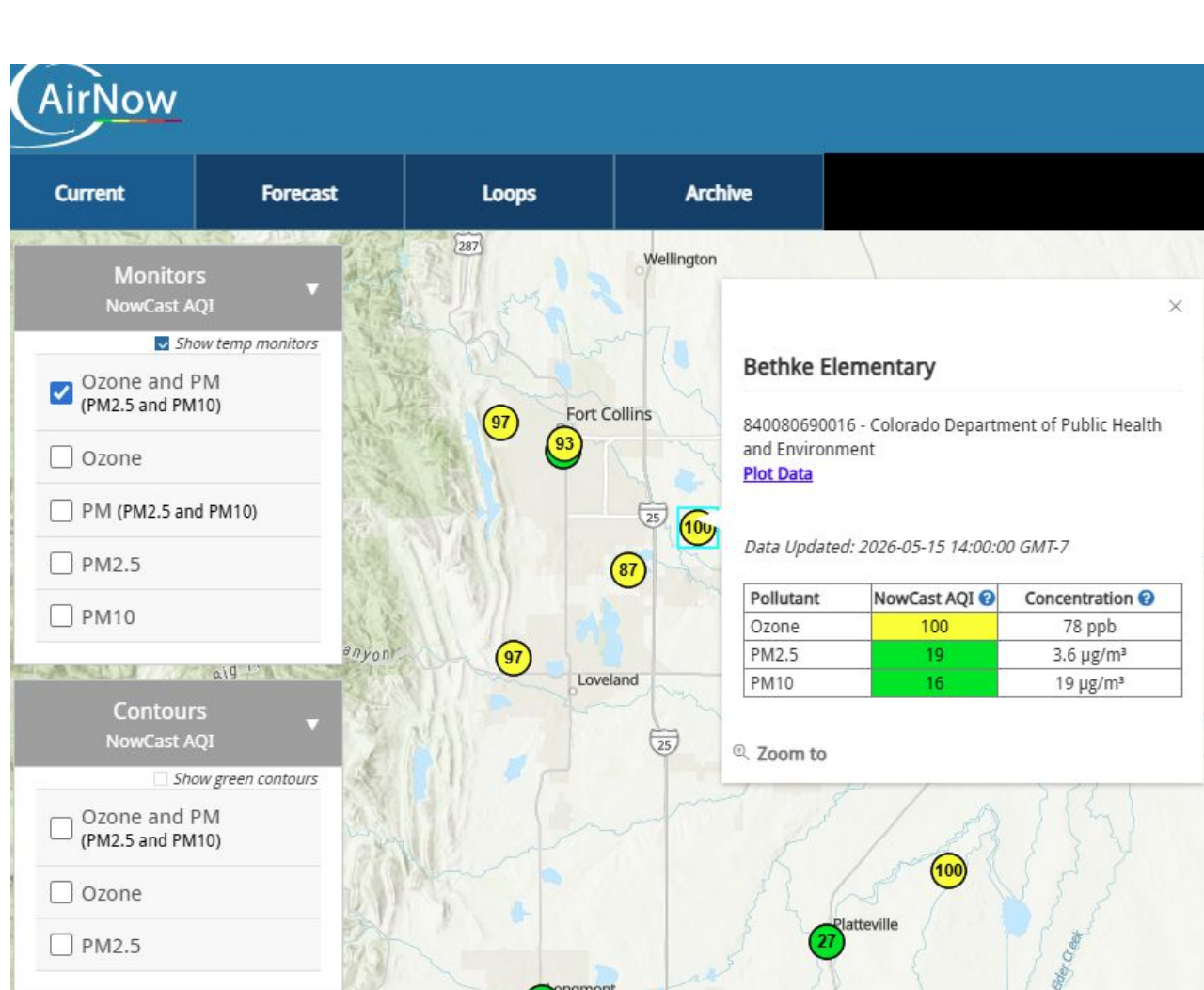
Air Quality Monitor Maps

EPA's AirNow Map for Ozone and PM2.5

<https://www.airnow.gov/>

EPA's Fire and Smoke Map for PM2.5 only

<https://www.fire.airnow.gov/>



Air Quality Monitor Maps

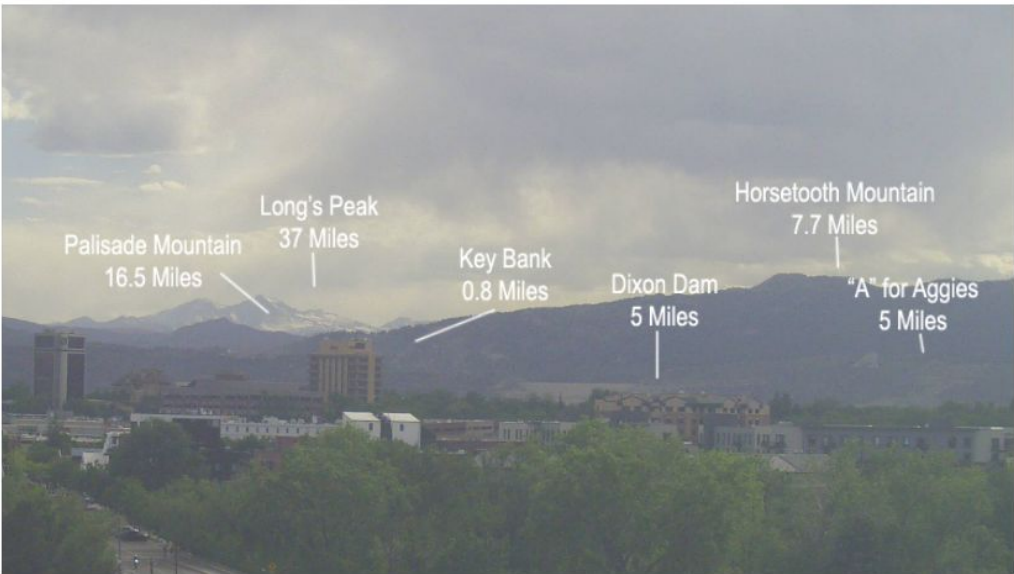
City of Fort Collins pollutant monitors & visibility cameras:

<https://ftco.air-resource.net/>

Fort Collins

New Belgium Brewery Webcam | Museum of Discovery Webcam | Soapstone Prairie Webcam | Monitoring Sites

View Southwest from the New Belgium Brewery
05/15/2026 5:00 PM

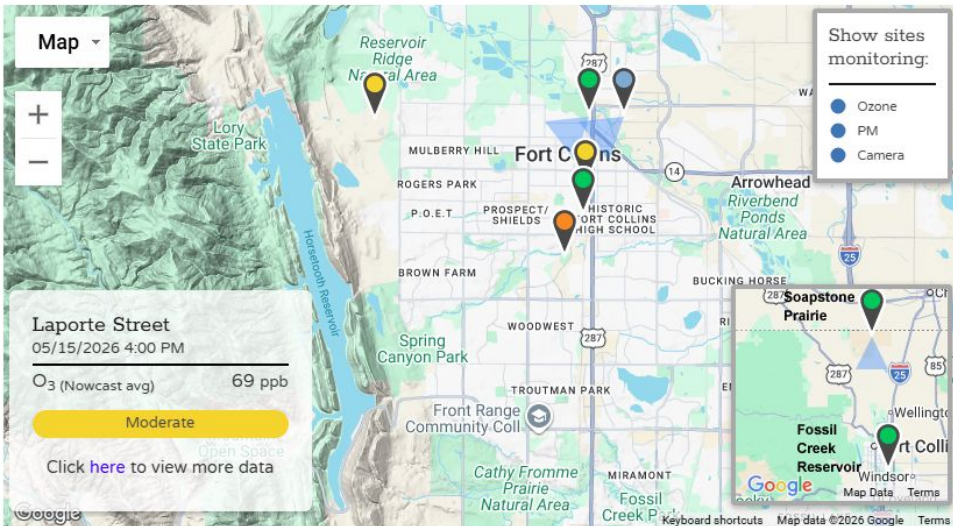


Palisade Mountain 16.5 Miles | Long's Peak 37 Miles | Key Bank 0.8 Miles | Dixon Dam 5 Miles | Horsetooth Mountain 7.7 Miles | "A" for Aggies 5 Miles

Camera | Landmarks | Timelapse

Fort Collins

New Belgium Brewery Webcam | Museum of Discovery Webcam | Soapstone Prairie Webcam | Monitoring Sites



Map

Reservoir Ridge Natural Area | Lory State Park | Fort Collins | Arrowhead | Riverbend Ponds Natural Area | Soapstone Prairie | Fossil Creek Reservoir

MULBERRY HILL | ROGERS PARK | P.O.E.T. | PROSPECT/SHIELDS | HISTORIC FORT COLLINS HIGH SCHOOL | BROWN FARM | WOODWEST | TROUTMAN PARK | Spring Canyon Park | Front Range Community Coll. | Cathy Fromme Prairie Natural Area | MIRAMONT | Fossil Creek P.

Laporte Street
05/15/2026 4:00 PM
O₃ (Nowcast avg) 69 ppb
Moderate
Click [here](#) to view more data

Show sites monitoring:
● Ozone
● PM
● Camera

Data Summary

Summary of All Fort Collins Monitoring Sites
05/15/2026 5:00 PM

Ozone	
O ₃ (Nowcast avg)	69 ppb
Moderate	

Particulate Matter	
PM _{2.5} (1-hr avg)	5.5 µg/m ³
Good	
PM _{2.5} (Nowcast avg)	3.4 µg/m ³
Good	
PM ₁₀ (Nowcast avg)	16 µg/m ³
Good	

Air Quality Index (AQI)

● Good	● Moderate	● Unhealthy for Sensitive Groups
● Unhealthy	● Very Unhealthy	● Hazardous
● AQI Unavailable	● AQI not monitored	

Indoor Air Quality Impacts



Fine particles can get into your home through:

- open/cracks in windows or doors
- bathroom/kitchen fans that are meant to take air out
- heating, ventilation systems

Indoor Air Quality Impacts



- Americans, on average, spend 90% of their time indoors
 - where pollutants can be 2-5 times higher than outdoor air quality
- EPA lists indoor air quality as a top environmental risk to health
 - we have greater control of our environment in our own homes

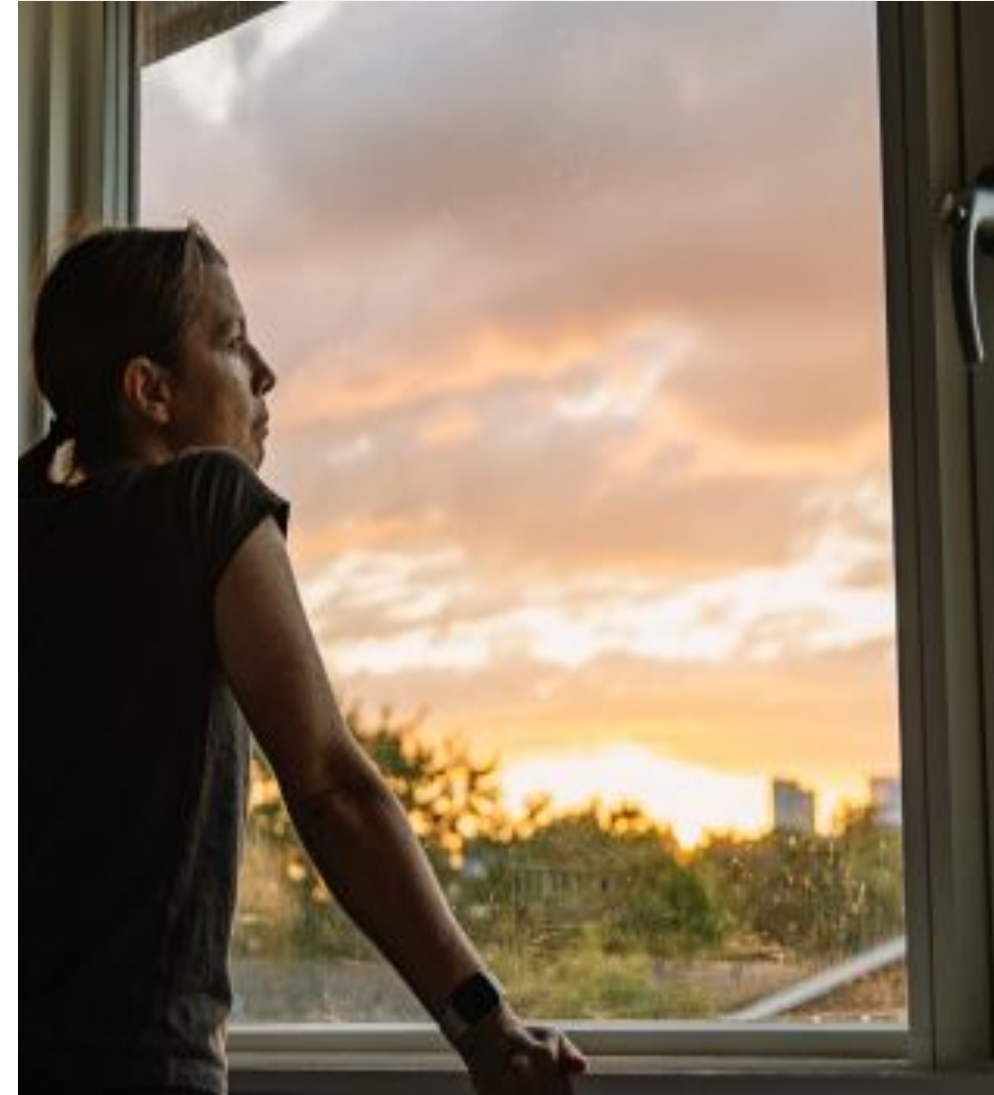
Indoor Air Quality Impacts

- 1 in 4 homes report a family member with a respiratory ailment
- Colorado is located in Zone 1 for Radon
- Under-served communities are more susceptible to asthma and home health hazards



What To Do When There Is Poor Air Quality

- Stay indoors as much as possible
- Keep windows and doors closed
- Avoid activities that could worsen indoor air pollution: vacuuming, smoking, using gas/propane/wood stoves, spraying aerosol products, frying food, burning candles, etc.



Quick Air Sealing Tips: Doors

Exterior doors only (drafts, moisture, pests)

Prepare: Inspect/repair framing & hardware, caulk around frame

Top & Sides: Determine type of weather stripping (many types!)

Bottom: Determine type of sweep and attachment method

Great DIY job! Watch Youtube Videos



Quick Air Sealing Tips: Windows

Prepare:

- Identify stationary & moveable parts

Stationary Parts:

- Caulk around frame
- Foam tape, rubber tube, ... (lots of options!)

Moving Parts (tricky!)

- Try to match original weather stripping



Replacing Your Filter



- 1-inch/4-inch
- MERV 13+
- Replace regularly
- Right-size to your furnace
- Pay attention to airflow

Ok, so, it's smoky. Now what?

Staying Safe during Smoke Events:

- Stay indoors as much as possible
- If you must be outside:
 - Consider wearing an N-95 mask (must be properly fitted)
 - Stay hydrated
 - Limit your activity
- Know and watch for health symptoms, especially related to heat illness



Creating A Clean Air Space

- Choose a room that is comfortable for extended periods of time
- Keep windows and doors closed (including internal doors)
- Stay cool with fans or air conditioning and set it to recirculate
- Filter the air with a portable air cleaner (PAC) in the room
- Avoid activities that could worsen indoor air pollution: vacuuming, smoking, using gas/propane/wood stoves, spraying aerosol products, frying food, burning candles, etc.



Portable Air Cleaners (PACs)

Tips for using your PAC

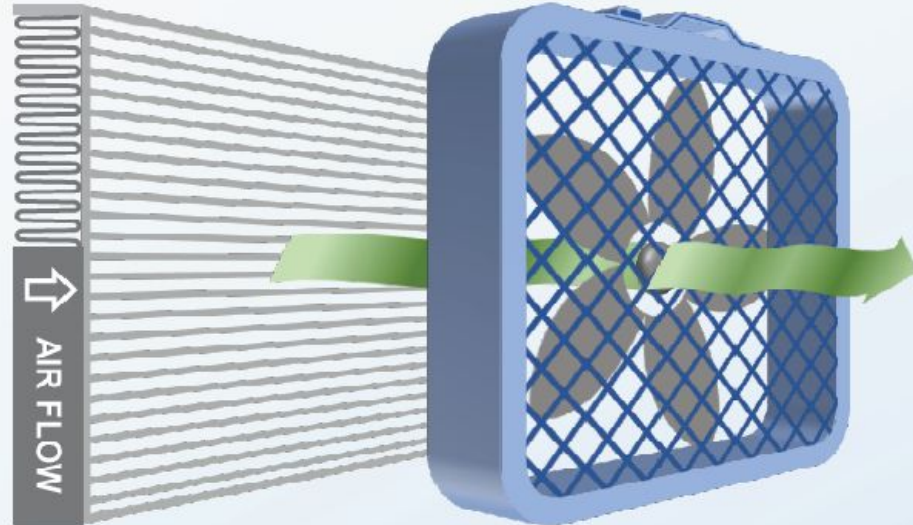
- Machine is only effective when the fan is running continuously
- Clean and/or change filters regularly
- Right-size to the room



Portable Air Cleaners (PACs)

DIY Air Cleaner to Reduce Wildfire Smoke Indoors

Materials



20" X 20" air filter

Suggested rating: **MERV 13**

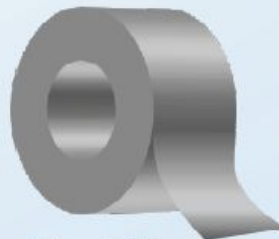
20" X 20" box fan

Only use certified fans with UL or ETL marking (2012 model or newer)



Clamps

or



Duct Tape

or



Bungee Cords

Assembly

1. Attach the air filter to the back of the box fan using either clamps, duct tape or bungee cords.
2. Check the filter for the direction of the air flow (marked on the side of the filter).
3. Replace filters when dirty.

Breathing Clean Air vs Staying Cool: What to do?

If you do not have a way to cool your home, consider:

- Staying somewhere else
- Going to public spaces such as libraries, recreation centers, or stores during the day
- Keeping blinds/curtains closed during the day
- Use fans if the temperature indoors is **below 90°**
- Temporarily opening windows/doors at night to cool the room

Watch for symptoms of heat-related illness:

- Muscle cramping
- Unusually heavy sweating
- Shortness of breath
- Dizziness
- Headaches
- Weakness
- Nausea



How to Stay In-The-Know



[App.WatchDuty.org](https://www.app.watchduty.org)



[AirNow.gov](https://www.airnow.gov)

[Colorado Smoke Blog](https://colosmokeoutlook.blogspot.com)

colosmokeoutlook.blogspot.com



[Leta911.org](https://www.leta911.org)

The Healthy Homes Program



Vision: All Fort Collins community members have a healthy, energy efficient, and comfortable home environment

Resources Everyone Receives



- Indoor Air Quality Assessment
- Radon test kit
- All-purpose natural disinfectant
- Skoy cloth

Additional Resources (As Needed and Eligible)



- Doormat
- Smoke and CO Alarms
- Portable air cleaner and filter
- Furnace inspection & cleaning
- Weatherization services

Trivia Time!

True or False: Healthy Homes is open to all homes with a Fort Collins address

What can you do to

Name one place where you can check the Air Quality Index