



Why care about indoor air?

The air inside your home is often more seriously polluted than outside air. Because people may spend up to 90 percent of their time indoors, the risks to health can also be greater from poor indoor air quality than from outside air.

Elders, children, pregnant women and people with heart and lung conditions, such as asthma, are most at risk from indoor air pollution. Asthma may be triggered in young children by wood smoke, mold, and certain toxic chemicals in the home. Asthma attacks tend to increase along with the amount of pollution in the air.

Why may risks from indoor air in Alaska be of particular concern?

In cold climates, people tend to spend even more time indoors and in homes and buildings made air tight to save heat and keep out the cold. However, without fresh air and adequate ventilation, indoor pollutants and humidity can rise to unhealthy levels.

Smoke from woodstoves, fireplaces and steam baths contributes pollution to air indoors, as well as outside. Fumes and toxic pollutants from equipment, fuels, and chemicals kept in homes to prevent freezing, can escape into the confined air. Smoke from cigarettes and other tobacco products may also become more concentrated indoors where climates are harsh.

What causes indoor air to become unhealthy?

Some common sources of air pollution that are found within homes and buildings include:

- Burning oil, gas, kerosene, coal, and wood products.
- Smoking cigarettes and other tobacco products indoors.
- Wet or damp carpet and moisture buildup within walls and attics that leads to mold growth.
- Diesel and other petroleum fuel products and equipment; and
- Aromatic products for household cleaning and maintenance, personal care, or hobbies.

If outdoor air pollution levels are high, this can also contribute to poor indoor air quality. Outdoor sources of air pollution common in rural Alaska include: road dust, burning solid waste, woodstove smoke, diesel exhaust, and forest fires.

Tips for Healthier Indoor Air

- Ensure adequate ventilation
- Keep pollution outside
- Clean without toxic chemicals
- Burn safely and efficiently



Protecting air quality inside homes sealed tightly against the cold is particularly important.

Other ANV Air Fact Sheets

- Diesel Fuel Use
- Road Dust
- Solid Waste Burning
- Wood Smoke

For these fact sheets and related videos, visit:
www.epa.gov/region10/tribal/air/alaska.html

What can you do?

Ensure adequate ventilation

- Maintain and use your home's ventilation system to bring in fresh air to replace damp or polluted air.
- Use bath and kitchen fans to eliminate excess moisture and toxic fumes.
- When you weatherize for energy-efficiency, ensure that there is still adequate ventilation.

Keep pollution outside

- Don't smoke indoors; and ask others not to do so.
- Avoid storing fuels and chemicals inside; if they must be kept indoors, seal containers tightly.
- Never burn household garbage in or near homes or steam baths.
- Don't idle vehicles near ventilation intake, doors or windows.
- Use green building materials (fiberboard, insulation, carpeting, paint) to reduce off-gassing.

Clean regularly and without toxic chemicals

- Clean regularly to reduce asthma triggers, dust, toxins, animal dander and mites.
- Use green cleaning agents rather than toxic chemicals.

Burn safely and efficiently

- If burning wood for heat, use the best burning practices to minimize smoke and increase energy efficiency. See Fact Sheet on Wood Burning in this series.
- Use carbon monoxide alarms if using wood stoves, fireplaces, or heaters to help prevent deaths from carbon monoxide poisoning.

Region 10 Contacts:

Susan Titus
(206) 553- 1189
Titus.Susan@epa.gov

Joan Tovsen
(907) 271-1481
Tovsen.Joan@epa.gov

EPA Region 10 main number: (800) 424-4372

Who can protect indoor air?

It is up to building occupants, home owners, tribal housing departments, clinics and others in the community to all work together collaboratively to ensure that indoor air quality is as healthy as possible, at all times.

If people are aware of the importance of clean indoor air, they can take action to keep it healthy to breathe. Outreach and education helps to spread this understanding and can empower community members to work together toward safe and healthy home environments. Every community member can help, if they know what to do!

In Alaska Native Villages, environmental staff, housing departments, health clinics, and other community groups need to work together toward protecting health from indoor contaminants. Non-profit organizations, state and federal agencies may also contribute to these efforts. These may include organizations and agencies such as:

- Northwest Tribal Healthy Homes Working Group www.thhnw.org
- Indian Health Service/Alaska Native Tribal Health Consortium www.anthc.org
- HUD Office of Native American Programs www.hud.gov/offices/pih/ih/codetalk/onap
- US Dept of Energy <http://apps1.eere.energy.gov/tribalenergy/>
- American Lung Association-Alaska www.aklung.org

Learn more on the web

General indoor air quality information:

www.epa.gov/iaq/is-imprv.html

Asthma and its triggers in the home:

www.epa.gov/asthma

Carbon monoxide poisoning:

www.epa.gov/iaq/pdfs/co_factsheet_en.pdf

Environmental tobacco smoke:

www.epa.gov/smokefree

Household cleaning and personal care:

www.epa.gov/iaq/voc.html

Mold: www.epa.gov/mold

Radon: www.epa.gov/radon

Wood burning stoves:

www.epa.gov/burnwise/woodstoves.html

School air quality:

www.epa.gov/iaq/schools