

Focus on: Wood stove standards

Reducing Fine Particle Air Pollution

The Problem

Smoke from wood stoves is a major source of air pollution in Washington during the winter months and a major threat to public health. New, clean-burning wood stoves can minimize that smoke, but Washington's laws regulating wood stoves are outdated.

For nearly 30 years, Washington's emission standards for new wood stoves were more protective than federal standards set by EPA. Until 2020, Washington had its own program to review wood stove testing and certify devices for sale in Washington. Starting in 2020, EPA standards for new wood stoves became more stringent than Washington's.

Since 2020, Ecology has relied on EPA to certify that new wood stoves meet national emission standards. In 2021, Alaska and a coalition of Northeast states [conducted a comprehensive review](#)¹ and found systemic deficiencies in test reports for wood stoves that had received certification from EPA. [EPA's own review](#)² in 2023 and a [follow-up report](#)³ by EPA's Office of the Inspector General in 2024 also found that the EPA residential wood heater program does not always properly test and certify wood stoves before they reach consumers. As a result, some wood stoves sold as certified do not emission standards and release too much fine particle pollution. This puts human health and the environment at risk.

Why This Matters

Wood stoves are the primary human-caused source of [fine particle pollution](#) in Washington during the winter.⁴ Exposure to smoke from wood stoves can lead to short- and long-term [health effects](#) — including asthma, emphysema, bronchitis, cancer, and premature death.⁵

Wood smoke pollution disproportionately impacts the health of children, people over 65, and people with existing heart and lung conditions. Burning wood for home heating is common in both urban and rural areas and low-income households.

Wood smoke contributes to unhealthy levels of air pollution in several communities across the state, putting communities at risk of not meeting (or "nonattainment" with) federal clean air standards. Failing to meet federal clean air standards would trigger stricter and more costly controls and limits on all sources of air pollution in the community.

Ecology's Proposal

Ecology is proposing legislation that would:

- Update Washington's outdated emission standards for new wood burning devices and align with federal standards set by EPA.
- Allow Ecology to review and verify the results of required EPA tests for wood stoves and ensure that stoves are properly tested before being certified.
- Ensure both new and used wood stoves sold in Washington meet national emission standards.
- Protect Washington families from buying wood stoves that put their health at risk.
- Ensure that state grant funding to replace older higher-polluting wood stoves is going towards wood stoves that actually meet emission standards.
- Provide Washington with another tool to improve community air quality and meet federal clean air standards across the state.

Ensuring that new and used wood stoves meet existing federal emission standards will help keep Washington air clean for everybody. Ecology and stakeholders in Washington agree on the importance of preserving wood stoves as an affordable way to heat a home, especially for low-income families. Ecology's proposal will help prevent nonattainment (or not meeting) federal clean air standards and will help ensure that wood stoves remain viable as either a primary source of heat or a backup source of heat during the cold, winter months.

Ecology's proposal complements our existing work to reduce harmful air pollution from wood stoves by ensuring that the cleanest burning stoves are available for purchase by consumers. It will increase the effectiveness of our current work to educate families on the importance of burning dry, seasoned wood, proper stove operation and installation, and compliance with burn bans. It will

also ensure that state funding through the Capital Budget to replace old, uncertified wood stoves with cleaner heat sources are going towards wood stoves that are actually meeting emission standards.

This bill is forward-thinking, allowing Ecology to adopt new EPA standards and align with EPA test methods, should EPA make such a change. Woodstove change-out programs have already replaced more than 7,300 old, inefficient stoves since 2006, preventing more than 225 tons of fine particle pollution each year. This legislation will ensure that only the most efficient models are available for purchase as owners of more than 200,000 uncertified stoves across Washington consider replacement in the years ahead.

Related Information

- <https://ecology.wa.gov/about-us/budget-legislative-priorities/2025-legislative-priorities>



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To request an ADA accommodation, contact Ecology by phone at 360-704-0514 or email at joanna.ekrem@ecy.wa.gov, or visit <https://ecology.wa.gov/accessibility>. For Relay Service or TTY call 711 or 877-833-6341.

¹ <https://www.nescaum.org/documents/nescaum-review-of-epa-rwh-nsp-certification-program-rev-3-30-21.pdf>

² <https://www.epaig.gov/reports/evaluation/epas-residential-wood-heater-program-does-not-provide-reas>

³ https://www.epaig.gov/sites/default/files/reports/2024-05/_epaig_20240522-24-n-0040_redacted_cet_002.pdf on file-able-
assurance

⁴ <https://ecology.wa.gov/air-climate/air-quality/air-quality-targets/air-quality-standards/particle-pollution>

⁵ <https://ecology.wa.gov/air-climate/air-quality/smoke-fire/health-effects>