

ULTRAFINE PARTICLES (UFPs)

WHAT TO KNOW AND WHAT TO DO



UFPs ARE SMALLER THAN DUST

UFPs are very, very small particles that contribute to air pollution. You can't see these particles with your naked eye like you can dust, soot, and dirt. They are very tiny - no bigger than a flu virus. Common sources of UFPs are:

- exhaust from cars, trucks, and airplanes
- burning wood from fireplaces and wood stoves
- cooking

UFPs ARE IN THE AIR WE BREATHE

Everyone is exposed to UFPs, because we all breathe in air, but some groups of people are more exposed than others. Communities that are located near big roads and airports are more exposed to UFPs.

SOME ARE MORE SENSITIVE TO UFPs

Some groups of people may be more sensitive to UFPs, such as:

- Children
- Pregnant people and their fetuses
- Those with heart or lung diseases

WHAT DOES SCIENCE SAY?

UFPs are not as well studied as other types of air pollution. But scientists think that the very tiny size of UFPs allows them to reach the brain, heart, and deepest parts of the lung. More studies are needed, but high levels of UFPs could cause damage to these parts of the body.



LEARN MORE

WHAT YOU CAN DO TO REDUCE YOUR UFP EXPOSURE

- Support local community efforts to reduce UFPs.
- Ventilate when you cook by opening windows or turning on the range hood.
- Your exposure to UFPs increases when you breathe faster. Consider distance to traffic and busy airports when planning outdoor physical activities.
- Consider reducing your contribution to UFPs by prioritizing clean transportation and replacing residential wood stoves with EPA-certified wood stoves.
- Check the Air Quality Index (AQI) regularly. Visit: <https://www.airnow.gov/>
- On days when the AQI is poor: limit time outdoors, close windows and doors when possible, and filter indoor air with a High Efficiency Particulate Air (HEPA) filter or low-cost box fan filter. If you have a home ventilation system, you may also try a filter with a MERV rating of 13 or higher, or the highest rated filter that your system can accommodate (consult your system's manual).
- A well-fitting N95 respirator could offer some short-term protection for people over 7 years of age.

References:
1. WA State Dept Summary of UFPs: <https://doh.wa.gov/sites/default/files/legacy/documents/4609/134-454.pdf>
2. HEI perspectives: <https://www.healtheffects.org/system/files/Perspectives-ExecutiveSummary.pdf>
3. Research article: <https://pubmed.ncbi.nlm.nih.gov/34954833/>
4. University of Washington healthy air, healthy schools pilot study report: <https://dehs.washington.edu/sites/default/files/2021-02/healthy-air-healthy-schools-pilot-study-report%20FINAL%202021031.pdf>
5. American Academy of Pediatrics article: <https://pubmed.ncbi.nlm.nih.gov/34001642/>

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