INDOOR AIR QUALITY IS IMPORTANT

In the U.S., the average person spends 87% of their time indoors and with the pandemic, that number has increased. But did you know that indoor air can often be more polluted than the air outside because of common household products and activities like those shown below? This can irritate your body and make you more likely to get sick from viruses like COVID-19 and the flu.

<table>
<thead>
<tr>
<th>Activities we do inside (cooking fumes, non-HEPA* vacuuming, cleaning with chemicals)</th>
<th>Materials used to build homes (paint, sealants, flooring, insulation)</th>
<th>The items inside our homes (toys, furniture, carpets, sprays, fragrances)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooking</td>
<td>Sealants</td>
<td>Toys</td>
</tr>
<tr>
<td>Vacuuming</td>
<td>Flooring</td>
<td>Furniture</td>
</tr>
<tr>
<td>Cleaning with chemicals</td>
<td>Insulation</td>
<td>Carpets</td>
</tr>
</tbody>
</table>

Opening a window (normally a great way to reduce pollutants) is not an option for communities next to major roads or industrial activities, a result of environmental racism. Therefore, it is important to find other ways to reduce indoor air pollution.

* HEPA (High Efficiency Particulate Air) vacuums have a HEPA filter on them to prevent dust from going into the room – unlike regular vacuums, which release dust into the room when utilized
**BETTER AIR INSIDE EQUALS BETTER HEALTH**

Having clean air inside your home is important for your health. Poor indoor air quality can lead to:

**Immediate impacts like:**
- Irritation of the eyes, nose and throat
- Headaches
- Dizziness
- Fatigue
- Cold or flu-like symptoms

**Long-term impacts:**
- Cancer
- Respiratory diseases (like asthma and COPD)
- Heart disease
- Make existing health conditions worse

**WHO IS MOST SENSITIVE TO POOR INDOOR AIR QUALITY?**
- Young children
- People with respiratory disease or illness, heart disease, or chronic diseases,
- People over 65 years of age
- People who have (or have had) COVID 19
- People experiencing the effects of environmental racism
- Pregnant women

**WHEN TO USE THE BOX FAN FILTER**
- During wildfire smoke days
- When air outside is poor
- During or after indoor activities that create poor air quality (e.g., smoke from cooking)
- Do not use when out of the home or sleeping
- Do not use if windows are open!

**OTHER WAYS TO IMPROVE INDOOR AIR**
- Take off shoes inside
- Damp dust and mop frequently
- Use a vacuum with a HEPA filter
- Do not use scented products meant to cover up odors in the home (air fresheners)
- Do not smoke indoors
- Do not burn candles indoors
- On polluted days, avoid using gas cooktops

**Take off shoes inside**
**Damp dust and mop frequently**
**Use a vacuum with a HEPA filter**
**No scented products like air fresheners**
FILTER FANS CAN HELP KEEP YOUR INSIDE AIR HEALTHY

By using indoor air filtration systems inside your home, you can significantly improve your indoor air quality and reduce your exposure.

A low-cost way to clean your air at home is with a box fan and a furnace filter. These “filter fans” can filter out the small particles that are common in wildfire or wood smoke, as well as viruses, mold, and dust released by common household activities, reducing the impacts of indoor air pollution on health.

Filter fans suck air through the furnace filter, trapping dust, pollen, and other particles so cleaner air comes out the other side of the fan!

Puget Sound Clean Air Agency measured the effectiveness of these filters and found they can lead to a 90% reduction in certain types of air pollution:

![Filter Fan Performance Graph](image)

**WILDFIRE SMOKE**

As a result of climate change and impacts from forest management practices, summer wildfire smoke is becoming a new normal for our region. These filter fan kits, when maintained with a clean filter, can help you to create a clean air room in your home during wildfire smoke days.
FILTER FAN INSTRUCTIONS FOR USE

This box fan filter kit provides a low-cost solution to help reduce the impacts of wildfire smoke. However, box fans were not designed for use with a MERV-13 furnace filter and their safety is still being tested by Underwriter’s Laboratory (a third-party testing company that verifies the safety of many products). The box fans do not contain a trip wire or other mechanism that will turn them off should they over-heat when used after the installing a MERV-13 furnace filter on the air intake side of the fan.

While there is no data to show that this has been a problem when box fans with filters have been used in the past, no formal testing has been conducted and risk of overheating remains possible. Proper use and maintenance of the box fan with the filter is highly recommended by practices listed below:

The fan with filter should be used in accordance with the following safety practices:

- Never leave the box fan/filter unattended.
- Do not use while sleeping or not at home. Remove the filter before sleep if airflow is important to stay cool.
- Turn off the fan with attached filter every 30 minutes and allow the unit to cool off for 15 minutes before turning unit back on.
- Use the fan in the room you spend the most time in.
- Position the fan toward the middle of the room, away from walls and big objects. Do not position the fan near a dusty or dirty area or the fan will blow the dust into the air.
- Close all windows and doors while fan is in use. The filter fan can’t clean the air if outside pollution is re-entering the room.
- For electrical safety, do not use the fan in the bathroom or near water.
- Replace filters every 3 months or when they look dirty.
- Filters should have a “MERV-rating” of 13 (20x20x1 inch filters work with this box fan unit).
- Box fans used in this way should be newer than 2012 when motors were updated to reduce overheating hazards.
- Keep small children away from the box fan filter.

By accepting the box fan filter kit, the user accepts responsibility for the use, maintenance, and performance of the box fan filter kit products received from Public Health – Seattle & King County.
ASSEMBLING THE BOX FAN FILTER KIT

Materials needed:

How to assemble:
Make sure the filter is attached to the back-side of the fan where the air flows in and the arrow on the filter points towards the fan.

Photos above provided by Puget Sound Clean Air Agency.