



Face Masks for Wildfire Smoke

The best way to protect your health from wildfire smoke is to seek cleaner air. Use a portable air cleaner at home, find an indoor environment with filtered air, or relocate to an area with less smoke. If you cannot access cleaner air, some face masks can provide protection from wildfire smoke. However, it is important to be aware of the limitations and potential risks.



Well-fitted respirators offer the most effective protection from fine particulate matter (PM_{2.5}).

- Respirators are marked with letter and number combinations, such as **N95**, **KN95**, and **KF94**. These products are very similar, but the markings indicate different standards used to test them.
- A good fit is the most important thing for filtration of PM_{2.5}. **Inhaled air must pass through the material of the mask, not around it.**
- A well-fitted respirator will reduce PM_{2.5} concentrations by more than 90%.
- It can be difficult to get a good fit if the respirator is the wrong size or shape for your face, especially if you have a small face or facial hair.
- A 3-layer cloth or disposable mask provides moderate protection compared with a respirator.
- The effectiveness of 3-layer masks can be improved by following the same advice used for COVID-19 protection <https://u.nu/dwmi4>.
- Simple 1-layer cloth masks, bandanas, gaiters, scarves, or t-shirts offer no protection, whether wet or dry.



If you chose to wear a respirator or mask for wildfire smoke, you should be aware of the limitations and potential risks.

- It is **NOT SAFE** to wear any mask while sleeping.
- Most respirators and masks cannot protect against the gases in wildfire smoke, which may also cause irritation.
- Wearing a respirator or snugly-fitted mask may make breathing more difficult. **Pregnant women and people with respiratory and cardiovascular conditions should talk to their health care providers before using masks for wildfire smoke.**
- Respirators and snugly-fitted masks are uncomfortable to wear, especially when it is hot.
- Respirators and masks do not work against wildfire smoke when saturated with sweat or water.
- People with limited upper body mobility may need help putting respirators or masks on and taking them off.
- The fit of a respirator can be affected by physical activities such as bending or lifting, and should be re-checked often (see next page).
- **Wearing a mask may lead to a false sense of security** – listen to your body at all times and stop or reduce activities if you feel unwell.



Respirators come in a wide range of shapes and sizes.



- If you are exposed to wildfire smoke while working, speak with your employer about respiratory protection.
- There are many new respirators available since the COVID-19 pandemic, and it can be difficult to spot counterfeit products.
- The US CDC has been testing different products and publishing the filtration efficiency results <https://u.nu/zh25z>.
- All respirators have two straps – some go around the head and some hook behind the ears.
- Test different respirators **BEFORE** the wildfire season begins. Once you find a model that fits well, buy a few replacements.

Steps for wearing a respirator properly:

Choose the right shape and size for your face. Many models come in multiple sizes, ranging from XS to XL.

If you are wearing glasses or a hat, take them off while you fit the respirator.

1

Put the respirator on and arrange the straps or ear loops. If the respirator has two straps, the top one should sit above your ears and the lower one should sit below your ears, as shown.



2

Mold the nose piece (usually a metal strip) around the bridge of your nose with both hands to create a snug fit.



3

Test the respirator for leaks by covering it with both hands. When you inhale, the material should pull in towards your face. When you exhale, you should not feel air escaping from around the edges. If air leaks in or out around the nose, re-mold the nosepiece. If air leaks in or out around the cheeks or chin, adjust the placement of the straps on your head or tighten the ear loops.

If you cannot get a good fit, consider asking someone for help or finding a different respirator that is better fitted to your face.



Store your respirator in a clean, sealed container with hard sides to make sure it does not get dirty, wet or bent out of shape.

Most respirators are disposable, but you can re-wear each one for wildfire smoke as long as it stays clean, dry, and well-fitted. Test the fit of your respirator each time you put it on.



BC Centre for Disease Control
Provincial Health Services Authority

FOR MORE INFORMATION: bccdc.ca/wildfiresmoke

LAST UPDATED: MAY 2021