



Respiratory Protection for Wildfire Smoke

Wearing a respirator can help reduce exposure to the tiny particles in wildfire smoke, especially when you cannot access cleaner indoor air. A well-fitted respirator can remove more than 90% of smoke particles. It is important to understand how to use respirators safely and effectively.



Well-fitted respirators offer 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 reducing smoke particles. **Inhaled air must pass through the material of the respirator, not around it.**
- A well-fitted respirator will reduce PM_{2.5} concentrations by more than 90%.
- Make sure your respirator is the right size and shape for your face.
- A 3-layer cloth or disposable procedure mask provides some protection against PM_{2.5}, but less effective than a respirator.
- Simple 1-layer cloth masks, bandanas, gaiters, scarves, or t-shirts offer no protection, whether wet or dry.



Know how to use respirators properly.

- 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 may make breathing more difficult. Seek cleaner indoor air and remove your respirator if you are having trouble catching your breath.
- Respirators can be uncomfortable to wear for long periods, especially when it is hot.
- Respirators do not work as well when they are sweaty, wet, or dirty. Put on a new respirator when needed.
- People with limited upper body mobility may need help using respirators.
- If you move around a lot, the fit of a respirator might be affected. Make sure to check the fit often if you are bending, lifting, or running (see next page).
- **Even when you are wearing a respirator**, 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 and fit testing.
- All respirators have two straps - some go around the head and some hook behind the ears.
- Some respirators are cupped and some are packed flat. They can both provide protection against wildfire smoke.
- Try out different respirators **BEFORE** the wildfire season. 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 vertical 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

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