

Mask or Respirator Use by Children and Pregnant Women During Wildfire Smoke Events:

Guidance developed by the Western States PEHSU in collaboration with many partners.



General Information:

You can find the current AQI level and smoke information for your area at: www.airnow.gov

- Consider using a medical mask or respirator for your child (or pregnant person) when the AQI is greater than 151 or if smoke is making them cough.

The best protection against wildfire smoke is to shelter in an indoor space with good indoor air quality. For guidance on reducing smoke exposure indoors, see

<https://www.airnow.gov/sites/default/files/2020-06/reduce-your-smoke-exposure.pdf>

When wildfire smoke is present, and if your child must spend time in an area where the AQI level is in the orange to red range or higher ('unhealthy for sensitive groups' or 'unhealthy') or if your child is having breathing symptoms like coughing, you may want him or her to wear a mask or respirator to reduce exposure to wildfire smoke. When looking for a mask or respiratory for your child, ask three questions:

- How well does the material filter?
- How easy is the material to breathe through?
- How tightly does the mask or respirator fit to my child's face? The mask or respirator should fully cover the nose and mouth without gaps around the nose, cheeks, and chin.

Don't increase your child's outdoor activity (e.g., playing sports) just because you feel they are protected wearing a mask or respirator. Use your good judgement and remember that these solutions reduce exposure; they do not eliminate exposure.

Different Types of Respirators and Masks:

NIOSH-approved respirators (N95, P95, and P100) will reduce exposure the most, especially if they seal effectively to the face.

- Wearing a respirator with a good seal, your child will be protected from about 900 out of every 1,000 smoke particles. Without a good seal, for example, if there are gaps around the face or nose, more smoke particles will be able to enter the respirator.
- Check the seal of the respirator by cupping your hands around the edges of the respirator and your child's face. First, have the child blow out hard, as if they are blowing birthday candles, and feel for air leaking around the respirator. Then, have the child take a deep breath in. You should see the respirator suck toward the face and should *not* feel air flow around the edges. Pregnant women can also follow this guidance.
 - Valves are a comfort feature on some respirators, and you may feel airflow come out of the valve, but no air should go in through the valve.
- N95 respirators are regulated so that the material must filter 95% of small and large particles and be easy to breathe through. Look for products labeled as NIOSH certified.
- Even without a good seal, an N95 respirator will likely provide more protection than a medical mask.
- There are no respirators currently certified for use by children in the US, but children aged 7 and older may be able to effectively wear small adult sized respirators.
- Dirty, torn, wet, or crumpled N95 respirators are not effective in reducing exposure and should be discarded.

Medical (e.g., surgical) face masks generally do not seal effectively to the face. However, certain models may reduce exposure somewhat.

- Wearing a medical mask, your child may be protected from about 200 or 300 out of every 1,000 smoke particles.
- Gaps around the face or nose will allow more smoke particles to reach the child's nose or mouth.
- The FDA ensures that the material in medical masks is safe for the wearer, but the material is not regulated for its ability to filter wildfire smoke, so there is more variety in how many smoke particles these masks filter. Some may be of limited help in reducing exposure.
- Medical masks come in adult and child sizes. Choose the type that best fits your child's face.

Cloth face masks or coverings, which help reduce the spread of infectious respiratory diseases (such as COVID-19) by protecting individuals from droplets, do not reliably reduce exposure to wildfire smoke and air pollution.

- There are no regulations for cloth masks or coverings related to how well the material filters smoke particles or how easy they are to breathe through.

Safety Considerations:

- Both NIOSH-approved respirators and medical masks can be worn safely by most children, but younger children should be supervised.
- Your child can use a mask or respirator safely when they can tell you about any trouble the mask or respirator causes. If your child is uncomfortable or reports difficulty breathing take off the mask or respirator.
- Do not use a mask or respirator for your child if it could be a choking or strangulation hazard based on their developmental level or other medical conditions (e.g., if your child frequently puts things in their mouth, or if they can't have a mask or respirator on their face without pulling on it).
- If you have concerns, check with your child's health care provider.

Pregnancy

If you are pregnant, this information applies to you as well. If you aren't breathing well, your baby isn't either. Exposure to wildfire smoke may raise the risk that your baby would be born too soon or too small.

During Times When There are Shortages of Masks or Respirators:

- Remember that this guidance applies to protection from wildfire smoke and may be different from guidance targeted at protection from infectious diseases.
 - In particular, N95 respirators with or without exhalation valves are equally effective for protection from wildfire smoke but may *NOT* be equally effective for protecting others from infectious diseases of the wearer.
- During times when the public is asked to avoid purchase of N95s (to prioritize their availability for healthcare use), people should follow public health guidance. If there is not also a shortage of medical masks, these can be used for some protection, and the focus can also be on other smoke avoidance strategies (such as improving indoor air quality).
- Respirators from other countries are usually not sold in the US, but may be available during times of shortages. They are not necessarily manufactured to the same standard as NIOSH approved devices.