

# Masks to Protect from Wildfire Smoke During Pregnancy or Early Child Years



This information sheet was developed by the Western States PEHSU along with our partners.

Local public health officials might have additional advice for where you live. Local conditions may be important, including weather and how long wildfire smoke events last. When there is smoke outside, the best place to be is an indoor space with good air quality. To learn about creating an indoor space with good air quality see <https://www.airnow.gov/sites/default/files/2020-06/reduce-your-smoke-exposure.pdf>.

## General Information:

### **Will a mask help protect me and my children from wildfire smoke?**

Yes, some types of masks (face-coverings that go over your mouth and nose) can partially protect you and your children from breathing in wildfire smoke. Some masks are much better than others, and some masks may not protect you *at all* from smoke. Keep reading to find out which masks are the best for keeping out wildfire smoke. Your child should not participate in *extra* outdoor activities (like playing sports) whether or not they are wearing a mask. Remember that masks can help your child breathe *less* smoke, but they still breathe *some* smoke, especially if they are being active.

### **What is the best type of mask?**

The best mask to keep out wildfire smoke is a type of mask that is made to keep out small particles in smoke when you breathe. These masks are called respirators (like N95s).

- If your child is age 7 or older, their face will likely fit an adult small N95.
- If your child is age 2 to age 7, it is less likely that you will be able to find an N95 that will fit their face well. But, there are child size medical/surgical masks that may fit their face.
- Children should only wear masks if they are over age 2 and are able to tell you if they are uncomfortable.

### **How can I find a good mask for my child?**

When looking for a mask for your child, you want to think about three things, described below in more detail for different kinds of masks:

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

### **How do I know if my air quality is bad?**

You can go to [airnow.gov](http://airnow.gov) on a computer or smartphone. That page can tell you about the air quality index value (AQI) for your zip code.

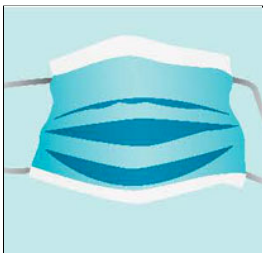
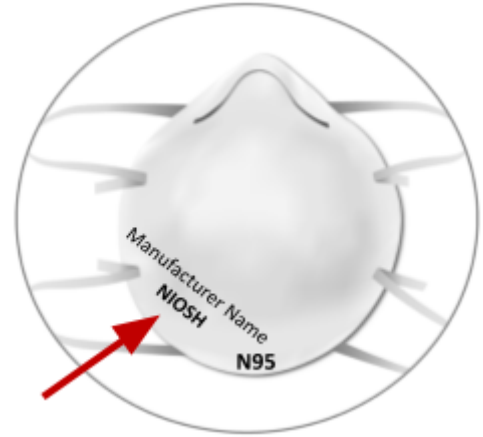
- For more detailed local information, you can look at the map at [fire.airnow.gov](http://fire.airnow.gov)
- When the AQI is higher than 101, if smoke is causing coughing, or if smoke events last more than a few days consider using a mask, especially during pregnancy, early child years or if one has underlying health conditions.

Daily AQI Color	Levels of Concern	Values of Index
Green	Good	0 to 50
Yellow	Moderate	51 to 100
Orange	Unhealthy for Sensitive Groups	101 to 150
Red	Unhealthy	151 to 200
Purple	Very Unhealthy	201 to 300
Maroon	Hazardous	301 and higher

## **Different Types of Masks:**

**NIOSH-approved masks** will decrease the most amount of smoke that your child breathes, especially if they seal (fit well) to the face. This type of mask is sometimes called a *respirator*.

- **Look for masks labeled as “NIOSH N95”.**
  - NIOSH is the National Institute for Occupational Safety and Health, the government branch that protects workers.
  - Masks that say ‘NIOSH N95’ have material that blocks nearly all smoke particles.
  - For example, pretend there are 1000 smoke particles in the air near your child. If they are not wearing a mask, they will breathe in all 1000 particles. If they are wearing a NIOSH N95 with a good seal, they will breathe only 100 particles. If there are gaps around the face, nose, or chin they will breathe many more particles.
- **Check the seal** of the mask by cupping your hands around the edges on your child’s face. First, have your child blow out hard, as if they are blowing birthday candles, and feel for air leaking around the mask. Then, have your child take a deep breath in. You should see the mask suck toward the face and should *not* feel air flow around the edges. Follow this guidance during pregnancy.
  - Some masks have exhalation valves. You may feel air come out of the valve, but no air should go in through the valve. N95s with or without a valve will protect you from wildfire smoke.
- Even if there are small gaps when your child wears an N95 mask, the N95 is still the best protection from smoke.
- N95 masks aren’t made specifically for children in the US, but children aged 7 and older may be able to wear small or extra small adult sized masks
- Dirty, torn, wet, or crumpled N95 masks should be thrown away.



**Medical (or surgical) face masks** usually have gaps between their edges and the face. Although this type of mask doesn’t work as well as an N95, some models may help protect your child from smoke.

- In the example above, if there are 1000 smoke particles in the air near your child and they are wearing a medical mask, they will breathe in 700-800 particles. The bigger the gaps between their face and the mask, the more they will breathe in.
- There are rules making sure that the material in medical masks is easy to breathe through. There are no rules about how many particles the material should filter.
  - Because there are no rules about filtering, some masks may only reduce exposure a little.
- Medical masks come in adult and child sizes. Choose the type that best fits your child’s face.

**Cloth face masks or coverings**, which may help decrease the spread of infections, usually do not reduce exposure to wildfire smoke and air pollution.

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



## **Safety:**

- Both NIOSH-approved N95 masks and medical masks can be worn safely by most children.
- Younger children should only wear a mask with an adult present.
- Your child can use a mask safely if they can tell you about any problems they have with the mask. If your child is uncomfortable or says that it is hard to breathe, take it off. Do not use masks for children under age 2.
- Do not use a mask for your child if they might choke or strangle themselves with it (if your child frequently puts things in their mouth, or if they can't have a mask on 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 are not breathing well, your baby is not either. Exposure to wildfire smoke may increase the risk that your baby may be born early or small.

## **If Masks are Not Available:**

- Remember that this information is about protection from wildfire smoke and may be different than protection from infections.
  - In particular, N95 masks with or without exhalation valves protect from wildfire smoke.
- If N95 masks are in short supply and are being saved for healthcare use, don't buy them. If medical masks are available, these can be used for some protection. Remember to always focus on other smoke avoidance strategies (such as improving indoor air quality).
- Masks (such as KN95s) from other countries may not follow the same rules as NIOSH approved devices and might not provide the same protection.

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