

Air Pollution Chemicals

Why did we measure air pollution chemicals in kids?

We all breathe chemicals from the air in our everyday lives. Air pollution is harmful for all of us. Air pollution may cause heart and lung problems, and cancer. It may be especially harmful for children because their lungs and other organs are still developing. There is growing concern about effects of air pollution on brain development. For children with asthma, air pollution may trigger asthma attacks. Symptoms of asthma can include wheezing, coughing and tightness in the chest. Asthma is a leading cause of absence from school.

Many different chemicals can be in the air. Healthy Kids measured two common types: **PAHS (OR POLYCYCLIC AROMATIC HYDROCARBONS)** and 1-NITROPYRENE. PAHs are released into the air mainly by burning wood, trash, gasoline, oil, coal and tobacco. 1-nitropyrene comes from diesel fumes. Metals can also be in air pollution.



How do kids come in contact with the air pollution chemicals in Healthy Kids?

How can you protect them?

HOW: Breathing polluted air – inside the home

- WHAT YOU CAN DO:**
- Take shoes off before entering the house, dust and mop regularly, and have your child wash hands before meals. Air pollution chemicals can be tracked into the house as dirt and dust.
 - Don't idle your vehicle in an attached garage.
 - Make sure your wood stoves and fireplaces vent properly.
 - Consider using a high efficiency filter for forced air furnaces and replace it regularly, if possible. Children spend the majority of their time indoors: <https://bit.ly/2FES0Rr>
 - Use the kitchen fan and open windows while cooking.
 - Limit the use of candles and incense around your child.



HOW: Breathing polluted air – from secondhand smoke

WHAT YOU CAN DO:

- If you smoke, smoke outside the home or car away from your child. Talk to your doctor about quitting and get the right help you need to quit for good. For free help call 888-354-7526 or visit www.quitplan.com or <https://bit.ly/2VguYoy>
- Avoid areas where your child might breathe secondhand smoke. Ask people not to smoke around your child. Find information about smoke-free housing options in Minnesota: <https://bit.ly/2g7H9zS>



HOW: Breathing polluted air – outside the home

WHAT YOU CAN DO:

- Find out more about the air quality in your area and sign up to receive air quality alerts: <https://bit.ly/2rLTMJE>. During an air quality alert, limit your child's outside time and close windows.
- Find pollution sources in your neighborhood: <https://bit.ly/2Hfsd4D>. For North Minneapolis, the state has a special air monitoring project. Learn more and sign up to receive updates: <https://bit.ly/2FKCLGX>
- Minimize your child's time around:
 - Smoke from barbecues, camp fires, wood fires, etc.
 - Walking near heavy traffic areas or idling vehicles
 - Asphalt road construction and tar roofing sites
 - Motorized, gas-powered equipment such as mowers, weed trimmers, snow blowers
- Work with your neighbors to improve air quality in your neighborhood, for example by planting and caring for trees. Minneapolis has the City Tree Program: <https://bit.ly/2Sy6A06>



HOW: Eating some foods

WHAT YOU CAN DO:

- Eat less grilled, charred or smoked food. Slow cook, boil or steam food instead. Avoid burning food – if you burn it, discard the burned part before eating. These foods can have PAHs.
- Always wash produce well before eating, especially if it was grown near roadways.

