

Preparing the Air for Newborns and Children

DID YOU KNOW...

90%

The average amount of time Americans spend indoors

2-5x

The increase in concentration of some air pollutants in the home compared to outdoors

Top 5

Where indoor air pollution ranks among environmental health risks to public health

FERTILITY AND PREGNANCY

- Air pollutants can impact the health and development of babies before they are even born.
- Some chemicals that are commonly found in household and personal care items such as cosmetics, upholstery and paints can reduce fertility.
- Air pollution may indirectly harm lung development and lead to low birth weight, preterm birth, and improper immune system development.

CHILDREN ARE NOT LITTLE ADULTS

- Compared to adults, children are more vulnerable to the effects of poor air because they breathe in more air in proportion to their body weight; they have a faster respiration rate; and their natural defense systems aren't fully developed.
- Babies and children spend more time crawling and playing on the floor where pollutants gather before they become airborne. They frequently put their hands, toys, and other items into their mouths, exposing them to harmful substances.

HEALTH EFFECTS THAT MAY RESULT FROM POOR INDOOR AIR QUALITY

Health effects may occur following a single exposure or repeated exposures to a pollutant. Early exposures to some indoor air pollutants for newborns and children can result in lasting and irreversible health outcomes, such as neurological damage from lead exposure.

Short-term Symptoms:

- Irritation of the eyes, nose, throat and chest
- Coughing and sneezing
- Headaches, dizziness and fatigue
- Allergy and asthma events

- Long-term Symptoms:
- Respiratory and heart disease
- Neurological damage
- Learning and behavioral challenges
- Cancer

We will provide you with simple steps you can take to help protect your family's health in the home.

How Can I Improve the Air Quality in My Home?

POLLUTION SOURCES

Human activities in and around the home including:

- Smoking and vaping
- Use of gas power appliances
- Burning wood, incense and candles
- Use of air fresheners
- Applying fragranced cosmetics and perfumes
- Pesticide use indoors and outdoors
- Lead paint exposure from peeling and cracking walls

Vapors in the air can come from many home furnishings and consumer products including:

- Carpeting and upholstery
- Wood finishers
- Chemical-based house cleaners
- Paints for walls, home decoration and crafts

Natural organisms in the home that may contaminate the air including:

- Animal dander
- **Dust mites**
- Rodents and insects
- Infectious agents (bacteria and viruses)
- Mold and mildew

Outdoor pollutants can make their way indoors by way of:

- Fumes from idling vehicles in a garage
- Wildfire and industrial smoke
- Radon through cracks in the housing foundation
- Dust, pollen and agricultural pesticides

POLLUTION SOLUTIONS Daily Routines

- Remove your shoes before entering the home.
- Don't allow smoking or vaping in the home.
- Avoid dry dusting and sweeping. Instead use a microfiber cloth and vacuum on a weekly basis or more.
- Vacuums with a high efficiency particulate air (HEPA) filters are highly recommended.
- Keep pets in areas of the home that are easier to clean. Avoid allowing on beds and couches, especially if there are pet allergies in the home.
- Keep food prep areas clean and store all food in sealed containers. Use garbage bins that can be tightly sealed.
- Pesticides should always be the last resort when managing pests.
- To prevent mold and mildew, don't ignore leaks and moisture buildup or allow parts of your home to remain damp.
- Promote good air ventilation by opening windows or using fans, especially in moist environments such as the bathroom.
- Regularly service your furnace and air conditioner, as well as all gas-powered appliances, according to the manufacturer's recommendation.

Product Use

• Choose cleaning products that can be found on the EPA Safer Choice List.

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POLLUTION SOLUTIONS

- Avoid chlorine bleach and never mix cleaning solutions.
- Avoid personal and household products with triclosan and triclocarban. They are often advertised as "anti-bacterial."
- Choose fragrance-free cosmetics/personal care products that are EWG Verified.
- Choose toys made from non-toxic materials such as wood, organic cotton and BPA-free plastic. Clean toys regularly.
- Use washable cloth diapers or chlorinefree, fragrance-free and dye-free singleuse diapers and wipes.
- Avoid the use of air fresheners or fragranced products. Many air fresheners contain chemicals that are especially dangerous for pregnant mothers and newborns.
- Consider using a portable HEPA filter in the areas of the home you spend the most time in. Follow the manufacturer's recommendation to change the filter.

Monitor

- Install smoke and carbon monoxide (CO) detectors on each floor of your home. Test detectors monthly and replace batteries as indicated.
- If your home was built before 1978, have your home checked for lead hazards. Find a certified inspector or risk assessor at epa.gov/lead.

RESOURCES AND REFERENCES

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FOR MORE INFORMATION

Please visit our website: https://www.calnursesforehj.org/indoor-airquality/

