

Healthy Home /Health Issue

Indoor Air Pollution - Facts

Each day, we inhale 88 lbs. of air and ingest 5.5 lbs. of liquids and 1.5 lbs. of food - and **we spend 90% of our time indoors**

- Common pollutants are 2-5 X higher inside homes than outside
- **Incidence of asthma in U.S. is 1.75 X more common than 1980; incidence of asthma in children under age 18 is 2.6 X more common than 1980.**

The number of people who have asthma has greatly increased in recent years, up 61% between 1982 and 1994, to a total of 14.6 million people in the United States. Asthma in children under 18 years of age increased by 72% in the same period, to a total of approximately 5 million children. The number of deaths from asthma rose 45.3% between 1985 and 1995, to more than 5,600 deaths annually.

Indoor Air Pollution - 5 Sources

- **Naturally Occurring Pollutants - dust, dust mite, and etc.**
- Volatile Organic Compounds(VOCs)
- Toxic By-Products of Combustion
- Pesticides
- Electromagnetic Field Pollution

Example of naturally occurring pollutants

- Biological pollutants - **dust, dust mites**, mildew, pollen, mold spores, mildew, carpet beetles, moths, ants, spiders
- Heavy metals - traces found in drinking water - copper, lead - can accumulate in human tissues
- Radioactive contaminants - radium, uranium occur naturally in earth's crust

FIGHT THOSE DUST MITES NOW!

Approximately 80% of children with asthma are allergic to house dust mites. Dust mites are approximately 0.25mm in size, and thus not visible to the naked eye. They live in bedding, carpets, soft furnishing and cuddly toys. In even the cleanest of houses, a single bed mattress may contain one million mites!

Mites survive and thrive by eating human shed skin. They thrive best in bedding used by someone with eczema because their skin sheds profusely. Mites also survive well in environments where the sleeper may sweat, scratch and bleed. The most allergenic part of the mite is the excreta (dung) which form into tiny pellets about the size of pollen grains. When the dust mite is released into the atmosphere and enters the respiratory tract, the body has both

immediate and delayed responses. In the nose and sinus, producing swelling of the mucosa, mucus secretion and blockage. In the chest, the mites cause asthma.

Signs of dust allergy are sneezing, blocked or runny nose, wheezing or coughing during vacuum cleaning or entering into a dusty environment.

The house dust mite is extremely difficult to eradicate completely. However, if certain guidelines are followed the numbers can be reduced greatly, especially in the bedroom.

GUIDELINES

1. Use polished/painted floorboards, cork tiles or linoleum in preference to carpet. Do not use any rugs.
2. Use a vacuum cleaner with a special dust filtration. Vacuum mattress and room regularly.
3. Remove fabric covered headboards.
4. Mattresses and pillows should be fully enclosed in recommended covers, e.g. Anti-dust mite covers. Some stores stock anti-dust mite covers. They only cover the top of the mattress and aren't expensive. It may be worth while to buy two, in order to seal the mattress completely. Anti- dust mite mattress, duvet, and pillow covers can also be ordered. They have zips and seal bedding completely. They are expensive but they have the advantage of comfort and are 'noise free'. Plastic covers may also be used but they tend to collect sweat and are noisy.
5. Remove feather pillows, and use polyester pillows and cover.
6. Use synthetic or cotton bed linen and wash weekly at 131 degrees Fahrenheit or higher.
7. Wash quilt or eiderdown every 2-3 weeks, if not specially covered.
8. **Use light, washable curtain material or blinds.**
9. Dust room with damp cloth. Do not dry dust.
10. Place cuddly toys in freezer every week for six hours.
11. The dust mite increases in numbers, especially when the heat is turned on during the autumn / winter months. Keep rooms at an even temperature.
12. Rooms should be as clutter free as possible.
13. Open windows and keep rooms well ventilated.
14. Mite spray or anti-dust mite spray, may be used on the mattress, divan or other soft furnishing. This non-toxic spray is effective for up to three months. (Be careful, you may stain soft furnishing.) Ask your chemist for more information.
15. Avoid drying clothes on radiators
16. Do not keep furry animals or birds in the home.

--Catherine Kirrane SRN. SCM. {Asthma Nurse Specialist }