



## Can You Name One of the Top 5 Environmental Risks to Public Health?

By James Trout, CAASTLC's Director of Weatherization

*Clue: You already have it. It's at home. You used it this morning. There's plenty more where that came from.*

Give up? It's invisible, sometimes odorless indoor air quality. Your doctor may not even know about the quality of air in your home. So why does this matter? Over 30 million Americans have been diagnosed with asthma – about 15% of children have it. Indoor air causes more deaths than car accidents, every year. Toxic air can cause endocrine disruption – changes on a cellular level, not just your lungs. Indoor air can be 5, 10, even 100 times as polluted as outdoor air. Over 30,000,000 American homes are deemed toxic to inhabitants.

We've introduced products into building material, cookware, household chemicals, cosmetics that, when mixed with each other, can cause a toxic reaction. Over the past 30 years we've tightened up homes, and in the last decade people spent more time indoors than ever before – kids on game systems, growing number of elderly and disabled, better air conditioning, fewer front porches.

So there's a strong connection between home products and disease, and our air is the delivery vehicle. It doesn't work alone either. 40,000 dust mites can sit on a dust particle. Moisture feeds and transports particulates. Our gas appliances generate unburnt gases. Cosmetics, glues and paints produce volatile organic compounds (VOCs).

So what's a person to do? Open the windows in the middle of winter? Throw everything out? Not really, at least, not yet. You can take simple steps that are easy, and easy to forget.

- Keep your indoors dry (plug the water an air leaks, fix minor plumbing issues)
- Keep it clean (bedding and fabrics especially, especially if you have pets)
- Keep it ventilated (use the bath fan, the range hood, a dehumidifier in the basement if necessary)
- Keep it pest free (even pest carcasses are dangerous so make them dead and clean them out)
- Keep it maintained (once done, it's easier to keep it this way)
- Keep it safe (repair broken parts when they happen )
- Keep it contaminant free (separate and lock up paints and chemicals – even cleaning products)

Some studies show that proper ventilation can reduce doctor visits, reliance on prescriptions and improve comfort and health. CAASTLC is on the cutting edge on this solution. In Weatherization we test the air, install ventilation devices and educate homeowners on the dangers. One of our best solutions is to install an ERV (energy recovery ventilator). This is a powerhouse: it exhausts all the air and brings in fresh air 3 or 4 times a day. A window could do that, right? Right, but not very well, and not very

efficiently. An ERV exchanges the energy as the “inside” air passes out. It also dehumidifies and filters. For homes that cannot naturally handle all the pollutants, moisture and particulates, an ERV does it cheaply and quietly 24/7. The Affordable Care Act extends health care into the community and the home, so insurance may help pay for this remedy someday, and save patients thousands and hospitals millions of dollars in re-treating stubborn respiratory symptoms.