

or many of us, home is our sanctuary; our retreat from the world. And while it is important to question the health of our homes, it is in the recognition of om – the oneness of all that exists – that our possible salvation lies; in the acknowledgement that what affects us, affects the world around us, if only we connect the dots...

Over the past few decades, homes have been designed to be 'tighter' and more energy efficient. While positive in terms of cost savings and reduction of energy consumption, we are often guilty of furnishing our homes with products imported across vast distances, with scant knowledge of their true origins or the materials used to create them. Unbeknownst to us, this oversight could be releasing noxious toxins into our cherished homes, negatively impacting our health and our environment.

From formaldehyde to carbon monoxide, airborne gases and particles rank as the primary cause of indoor air quality problems in homes, and have been linked to the dramatic increase in asthma, respiratory illness, hyperactivity and even cancer. Fortunately, the solution is simple: control, monitor and ventilate.

## CONTROL

Source control means avoiding not just toxic materials but also substances that can fuel other toxins such as mould. This includes formaldehyde, volatile organic compounds (VOC's) and Polyvinylchloride (PVC).

A common source of formaldehyde lies in pressed wood products like particleboard used for cabinetry, furniture, sub-flooring and shelving. Generally recognised as the highest formaldehyde-emitting pressed wood product, medium density fiberboard contains a higher resin-to-wood ratio than any other Urea Formaldehyde (UF) pressed wood product.

With paints and lacquers, paint strippers, carpeting, cleaning supplies, pesticides, copiers and printers, glues and adhesives, permanent markers, photographic solutions and even air fresheners and dryer sheets emitting VOC's, organisations such as greenseal.org test products and publish lists of safe levels.

Widely used in construction, PVC is the worst plastic from an environmental health perspective, posing a major hazard during manufacture, product life and disposal. Exposure to dioxin (the most potent carcinogen known), ethylene dichloride and vinyl - all toxins that are unavoidably created during production - can result in a profusion of health-related complications ranging from cancer and neurological damage to birth defects and endometriosis. With toxic emissions released long after manufacturing is complete, sourcing good alternatives such as PEX plumbing and linoleum flooring is wise.

## MONITOR

In order to counter silent killers like radon and carbon monoxide, systematic

monitoring of indoor air quality is critical.

The result of radioactive decay found in the soil, water and air, radon (Rn) is a naturally occurring gas whose electrically charged particles readily adhere to suspended dust motes. Easily inhaled, it has the dubious distinction of being the second leading cause of lung cancer after tobacco smoke. Emitted from building products such as granite, rigorous testing is the only sure-fire way to avoid risk.

Odourless and colourless, sources of carbon monoxide (CO) include gas water heaters and stoves, unvented heaters, leaking furnaces and automobile exhausts. Classified by the World Health Organisation (WHO) as one of the most common air pollutants, responsible for hundreds of deaths and thousands of hospitalisations each year, use of carbon monoxide detectors, regular servicing of gas appliances and appropriate ventilation to the outdoors can be life saving measures.

## VENTILATE

Proper ventilation is of particular importance in the Caribbean where high temperatures and humidity can increase concentrations of many indoor pollutants, VOC's and mould spores.

Installation of automatic or sensor-driven exhaust fans that perform between 50 – 100 cubic feet per minute (cfm) in kitchens and bathrooms facilitates dehumidification, controlling moisture by introducing outdoor air to dilute emissions and expelling indoor air pollutants to the outside. Other measures include avoiding carpet in bathrooms, using non-paper faced backer board behind showers, repairing plumbing leaks and ensuring proper drainage away from the home's foundations.

By failing to control, monitor and ventilate our homes, we expose ourselves to serious health-related consequences that impact our lives negatively. In mitigating the risk factors associated with exposure to toxins, we can directly reduce respiratory illnesses, cancers and other health issues, reducing dependence on medication, frequency of doctor's visits and hospitalisation to affect a genuine change in the quality of our lives. Best of all, implementation of such straightforward steps does not demand that we forego our creature comforts but rather, ensures that we are healthy enough to enjoy them fully. @

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