Indoor air pollution

Public attention tends to be focused on outdoor air quality, while the importance of indoor air quality is either underestimated or entirely neglected. Current scientific opinion is that indoor air is frequently far more polluted than outdoor air, even in large industrial cities.

Many people spend most of their time indoors. Children breathe a greater volume of air relative to their body weight than adults, putting them at greater risk of accumulating higher concentrations of pollutants in their bodies.

Formaldehyde

Formaldehyde is a water-soluble, colourless, toxic gas with a distinct odour. It is used in many disinfectants, preservatives and agricultural chemicals, as glue in furniture and panelling and as a fireproof agent in some complex materials. Traces of formaldehyde are also found in household wax, oil, shampoo, toothpaste, beer, wine, wallpaper, paint, tobacco, and even car interiors.

Since formaldehyde never forms a complete chemical bond, it can release gas for years, long after there is any noticeable odour. Its vapours affect the respiratory system, skin and heart.

One way to avoid the negative impacts of formaldehyde on human health is to use zeolites — minerals that have huge absorption capacity. They absorb its vapour, as well as dust, odours, smoke and other air pollutants.
Radon

Radon is a naturally occurring invisible radioactive gas with no odour or taste, formed as a result of uranium or radium decay. It can be found in groundwater and can enter the home through cracks in floors and walls. Radon can cause cancer.

The effects of radon can be avoided by sealing cracks in the home and improving ventilation.

Asbestos

Asbestos is a mineral composite that occurs naturally in certain types of rock formations. It is resistant to fire and corrosion and serves as a good heat insulator. At one time asbestos was considered a miracle material and was used widely.

However, people slowly discovered the health risks associated with breathing in asbestos fibres. Once inhaled, asbestos particles become trapped in the lungs and digestive system, posing serious health threats, including cancer. The effects may not be noticeable for years after exposure.

Despite these dangers, asbestos-containing materials pose little risk to health if properly handled, managed and maintained.