HOME HAZARDS
# Indoor Pollutions

Outdoor air, dust, noise, water pollution affecting life in HOME

**Kitchen smoke**

**Kitchen smoke if the fuel is wood, charcoal, coal, dung & crop waste**

**Cooking gas leak**

**Carbon dioxide release by burning gas stove for cooking**

**Smoke from when food with chemicals cooked**

**Smoke from chemical mosquito repellents**

**Smoke from incense sticks**

**Smoke from chemical camphor**

**Radiation from micro-oven, mobile, TV, computer, etc.**

**Spraying of certain categories of Aerosols**

**Cigarette smoking to both smokers and non-smokers who smoke the smoke let out by the smokers**  It has been proved that passive smoking is more dangerous.

**Chemical Pesticides / Garage Pollution / Paint Waste Pollution**
Sources of Indoor Pollutants

- Chemicals released from modern building & furnishing materials
- Outdoor air pollutants
- Chemicals from cleaning products
- Molds & bacteria
- Combustion gases from fireplaces & woodburning stoves
- Cigarette smoke contains some 4,000 chemicals
- Chemical fumes from paints & solvents
- Animal hair & dander
- Gases including Radon seeping through foundation
- Carbon monoxide fumes from attached garage
Around 3 billion people cook and heat their homes using solid fuels (i.e. wood, charcoal, coal, dung, crop wastes) on open fires or traditional stoves. Such inefficient cooking and heating practices produce high levels of household (indoor) air pollution which includes a range of health damaging pollutants such as fine particles and carbon monoxide.

In poorly ventilated dwellings, smoke in and around the home can exceed acceptable levels for fine particles 100-fold. Exposure is particularly high among women and young children, who spend the most time near the domestic hearth. According to WHO, 4.3 million people a year die from the exposure to household air pollution.
Indoor Air Problems

- Mold
- Viruses
- Bacteria
- Dust mite fecal matter
- Smog
- Cooking odors
- Cigarette smoke & odors
- Lingering odors
- Pet odors & dander
- VOCs & chemicals
- Allergy & asthma triggers
- Sick building syndrome
INDOOR POLLUTIONS
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SAFETY WITHIN THE Home on account of problems that arise within the Home
FIRE ACCIDENTS
ELECTRIC SHOCK
Mosquitoes kill humans 25 times more than humans killing humans. Malaria causes more deaths than all the wars & civil wars.

ExNoRa will fight against mosquito menace through Mosquito Musketeers.

Mosquito Musketeers is the ANSWER.

The Common Enemy

Chikungunya

Over 120 million are affected by Filariasis.

Dengue Fever
Threat from invisible world

- Parasites
- Fungus
- Bacteria
- Virus

Safety
BURGLARY
SECOND-HAND SMOKE

Smoke is tobacco smoke which affects other people other than the 'active' smoker. Second-hand tobacco smoke includes both a gaseous and a particulate phase, with particular hazards arising from levels of carbon monoxide and very small particulates which get past the lung's natural defences. The only certain method to improve indoor air quality as regards second-hand smoke is non-smoking indoor.
## Food Safety First - FROM

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MOLD

a fungus that produces a superficial growth on various kinds of damp or decaying organic matter, a dish or dessert that is formed in or on a mold

Example

- a GELATIN dessert made in a mold
MOLDS & ALLERGENS
These biological chemicals can arise from a host of means, but there are two common classes: (a) moisture induced growth of mold colonies and (b) natural substances released into the air such as animal dander and plant pollen. Mold is always associated with moisture, and its growth can be inhibited by keeping humidity levels below 50%. Moisture build-up inside buildings may arise from water penetrating compromised areas of the building envelope or skin, from plumbing leaks, from condensation due to improper ventilation, or from ground moisture penetrating a building part. In areas where cellulosic materials (paper and wood, including drywall) become moist and fail to dry within 48 hours, mold mildew can propagate and release allergenic spores into the air.
In many cases, if materials have failed to dry out several days after the suspected water event, mold growth is suspected within wall cavities even if it is not immediately visible. Through a mold investigation, which may include destructive inspection, one should be able to determine the presence or absence of mold. In a situation where there is visible mold and the indoor air quality may have been compromised, mold remediation may be needed. Mold testing and inspections should be carried out by an independent investigator to avoid any conflict of interest and to insure accurate results; free mold testing offered by remediation companies is not recommended.
There are some varieties of mold that contain toxic compounds (mycotoxins). However, exposure to hazardous levels of mycotoxin via inhalation is not possible in most cases, as toxins are produced by the fungal body and are not at significant levels in the released spores. The primary hazard of mold growth, as it relates to indoor air quality, comes from the allergenic properties of the spore cell wall. More serious than most allergenic properties is the ability of mold to trigger episodes in persons that already have asthma, a serious respiratory disease.
MOLDS on FOOD
RADON

Radon is an invisible, radioactive atomic gas that results from the radioactive decay of radium, which may be found in rock formations beneath buildings or in certain building materials themselves. Radon is probably the most pervasive serious hazard for indoor air in the United States and Europe, probably responsible for tens of thousands of deaths from lung cancer each year. There are relatively simple test kits for do-it-yourself radon gas testing, but if a home is for sale the testing must be done by licensed person in some U.S. states. Radon gas enters buildings as a soil gas and is a heavy gas and thus will tend to accumulate at the lowest level. Radon may also be introduced into a building through drinking water particularly from bathroom showers. Building materials can be a rare source of radon, but little testing is carried out for stone, rock or tile products brought into building sites; radon accumulation is greatest for well insulated homes. The half life for radon is 3.8 days, indicating that once the source is removed, the hazard will be greatly reduced within a few weeks. Radon mitigation methods include sealing concrete slab floors, basement foundations, water drainage systems, or by increasing ventilation. They are usually cost effective and can greatly reduce or even eliminate the contamination and the associated health risks.
ExNorda will create awareness on SAFETY against Thieving & Burglary inside the home & robbery & mugging on the road.

How safe your HOME against burglary?
GLOBAL DANGERS affect your HOME

Landslide

Tsunami

Cyclones

Flood
Exn Dr Nirmal Basu, GPian
7th Sense Master & Trainer (SINCE 1991)
7th Sense Society (1999), INNOVENTIONS (1999) & 40 more
INNOVENTOR (INNOVATOR+ INVENTOR), (since 1977) of
nearly of 3000 IDEAS, CONCEPTS, SERVICES & PRODUCTS
AUTHOR (since 1964) 14 books & hundreds of articles, stories
& research papers PHOTO-JOURNALIST (since 1964)
NEOLEXIAN (coiner of new words) in 3 languages (since 1980)