

Indoor Gardening - Best Way to Avoid the Hidden Pollutants

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Growing plants indoors is the only true definition of indoor gardening. Any enclosed space, whether an office building, a restaurant, or a private residence, could be used for this.

Importance of indoor air quality

According to the Environmental Protection Agency, we spend around 90% of our time indoors, whether we're sleeping, relaxing at home or working in an office. This time spent indoors exposes us to indoor air pollution.

- furnishings
- carpet
- cushioning
- dry-cleaned clothing
- paint
- synthetic building materials
- cleaning products
- pesticides
- bacteria
- mold
- outdoor pollution that enters

A home or office may also contain additional things that emit volatile organic compounds (VOCs), such as formaldehyde, such as paint on the walls, furniture padding and particle board coffee tables etc.

All of us are subject to some degree of indoor air pollution, and it's probably not a problem. However, it can sometimes make you feel nauseous if the ventilation is poor or if you're a particularly sensitive person likely causing headache, dizziness, nausea, eye, nose or throat irritation, dry cough, dry or itching skin, difficulty in concentration, fatigue, sensitivity to odours, hoarseness of voice, allergies, cold, flu-like symptoms, increased incidence of asthma

attacks and personality changes it is sometimes called sick building syndrome.

Common Indoor Pollutants

Trichloroethylene – Found in printing inks, paints, lacquers, varnishes, adhesives, and paint removers. Symptoms associated with short-term exposure include: excitement, dizziness, headache, nausea, and vomiting followed by drowsiness and coma.

Formaldehyde – Found in paper bags, waxed papers, facial tissues, paper towels, plywood paneling, and synthetic fabrics. Symptoms associated with short-term exposure include: irritation to nose, mouth and throat, and in severe cases, swelling of the larynx and lungs.

Benzene – Used to make plastics, resins, lubricants, detergents, and drugs and found in tobacco smoke, glue, and furniture wax. Symptoms associated with short-term exposure include: irritation to eyes, drowsiness, dizziness, headache, increased heart rate, confusion and in some cases can result in unconsciousness.

Xylene – Found in rubber, leather, tobacco smoke, and vehicle exhaust. Symptoms associated with short-term exposure include: irritation to mouth and throat, dizziness, headache, confusion, heart problems, liver and kidney damage and coma.

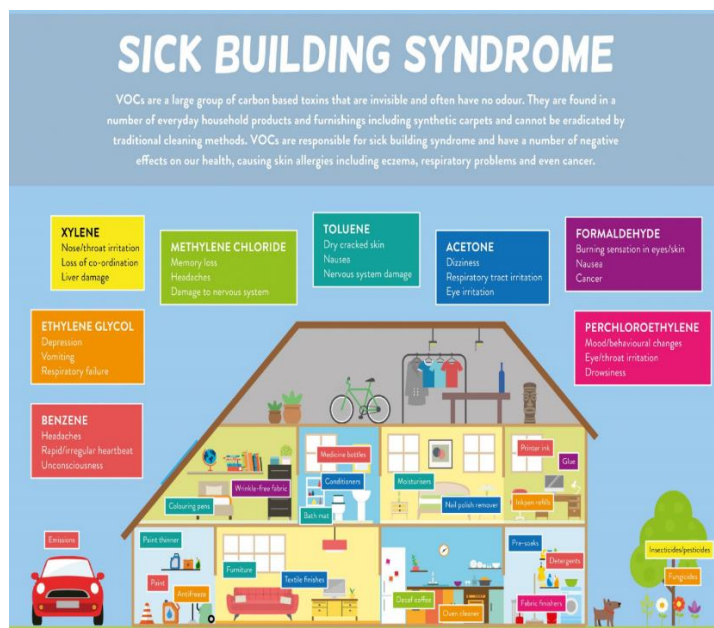
Ammonia – Found in window cleaners, floor waxes, smelling salts, and fertilizers. Symptoms associated with short-term exposure include: eye irritation, coughing, sore throat.

Nitrogen Dioxide (NO₂) – This harmful gas is formed by emissions from vehicles and factories during the burning of fuel. It is high in concentration in regions that are congested with vehicles and traffic. The gas is a respirator irritant, causing specific damage to the cardiovascular and respiratory system. It is known to

cause airway inflammation among healthy individuals.

Sulphur Dioxide (SO₂) - A highly reactive gas that carries a smell which is pungent and irritating, Sulphur dioxide is formed by the burning of fuels in industries and factories. Its presence in the air results in the irritation of the lining of lungs, throat and nose, worsen the symptoms of patients with existing respiratory diseases such as asthma, and other cardiovascular problems.

Suspended Particulate Matter - Suspended Particulate Matter, or SPM, refers to the suspended solid and liquid particles in the air that are too small in size to be seen with the naked eye. Its short effects include irritation of the eyes and the respiratory tract, with the long-term exposure causing asthma and weaker cardiovascular function.



Health benefits of air-purifying indoor plants

Indoor plants can still improve your air quality even though it would take ridiculously massive amounts of foliage to impact VOC levels in your home or workplace.

- reduce irritation to eyes, ears, nose and throat
- prevent or ease coughing and blockage
- lower your stress
- boost your attention capacity

Indoor plant purification raises relative humidity and lowers CO₂ levels. They function as a natural humidifier and assist in eliminating stale air, which can lessen or prevent irritation of your throat, eyes, nose, and even lungs. Foliage does more for people's health than only improve the quality of the air. Stress can be decreased by interacting with your home plants.

Top 10 recommended air-purifying indoor plants for pots

Chrysanthemum



- Chrysanthemum are the perennials plants with attractive blooms.
- They are inexpensive and available at any nursery
- Pollutants removed: ammonia, benzene, formaldehyde, xylene.

Spider plant



- Scientifically known as *Chlorophytum comosum*
- Easiest air-purifying plants to grow in pots as well as hanging baskets they love bright and indirect sunlight
- Pollutants removed – formaldehyde and xylene

Dracaena – *Dracaena* spp.



- Comes in more than 40 different varieties
- Toxic to cats and dogs when eaten
- Pollutants removed- benzene, formaldehyde, trichloroethylene, xylene.

Ficus/weeping fig – *Ficus benjamina*



- Loves bright, indirect sunlight
- Pollutant removed: benzene, formaldehyde, trichloroethylene.

Peace lily – *Spathiphyllum* sp.

- Blooms fragrant flowers throughout summer
- Grows best in shade areas

- Pollutants removed- ammonia, benzene, formaldehyde, trichloroethylene.



Boston Fern- *Nephrolepis exaltata*



- Need to stay moist
- Prefer high humidity and indirect light
- Pollutants removed: formaldehyde, xylene.

Snake plant- *Sanseveria trifasciata*

- Require occasional watering
- Prefer drier- conditions and some sun
- Pollutants removed – Benzene, formaldehyde, trichloroethylene, xylene.



Bamboo palm- *Chamaedorea seifritzii*



- Thrive in full sun or bright light
- Pollutants removed-benzene, formaldehyde, trichloroethylene.

Aloe vera - *Aloe vera*



- Leaves hold a fluid that has anti-inflammatory, antibacterial, wound healing properties
- Pollutant removed- formaldehyde
- If you're looking for a fast cure for burns, you should keep this plant in your kitchen window. Just split a leaf and apply near the burnt area.

Money plant

- Commonly known as golden pothos and devils ivy
- It removes the toxins like xylene, formaldehyde, carbon monoxide, benzene.
- In addition, the plant is said to draw luck, prosperity, and good positive vibes.



Repotting of indoor plants

The best time to repot a plant is in the spring or summer when the plant is at active growth. The first step to be identify whether the plant shows the signs of pot-bound condition and others symptoms like drying out of potting mixture quickly even at cooler parts of the day and the foliage and stems stop growing.

If the above signs are likely then remove the plant from the container and examine the roots. If the roots are circling around the rootball and densely packed that it is difficult to see any potting mix in the bottom third of the root ball then it is necessary to remove the outer section of plant roots, return the rootball to the container with some new potting mix and cut back some of the top growth. Prepare to repot the plant if the intention is to allow it to grow larger.

***** Plant Indoor Plants to Create a Healthy Environment*****

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