

# The NASA Clean Air Study: 8 Toxin-Eating Houseplants

## How these common toxins effect people:



### Benzene

In 1948, The American Petroleum Institute (API) stated "it is generally considered that the absolutely safe concentration for benzene is zero." Even small exposures can result in health effects like dizziness, headaches, rapid heart rate and confusion. Longer exposure can cause cancer and major damage to bone marrow.



### Formaldehyde

A common chemical found in a lot of homes in pressed wood, smoke, and particle boards. Symptoms include sore throat, cough, scratchy eyes and nosebleeds. They can often look like a cold or seasonal allergies, so are left uncaught. Formaldehyde is often found in new homes, you can reduce levels in your home by opening windows as much as possible.



### Trichloroethylene

Trichloroethylene targets the central nervous system and exposure even to a moderate amount can cause sleepiness, headaches and dizziness. Higher levels of exposure can wind up changing the rhythm of your heartbeat and damage your liver and kidney. Exposure can also cause kidney cancer and malignant lymphoma.



### Xylene

Xylene can often be found in leather, rubber, tobacco smoke and vehicle exhaust. It is also often used in paints and inks, that's how it can wind up being introduced to your home or office air. When inhaled, it can cause harm to your nervous system resulting in symptoms like confusion, headache, nausea and drowsiness.



### Ammonia

Ammonia is heavily used in general purpose cleaners because it can provide streak-free shine for glass and stainless steel. So a lot of people are exposed to ammonia by inhaling vapors. It can burn your nose and throat and cause airway and respiratory failure. It also causes adaption, reducing your awareness of it over time.



### Toxic to Pets

Some of the plants listed below are known to be poisonous to dogs, cats and other pets. We've added this yellow explanation symbol to the plants listed below that should be kept away from animals. If you have a pet, double-check the toxicity of plants before bringing them home.

## Toxin-Eating Houseplants:



Barberton Daisy



Bamboo Palm



Kimberly Queen Fern



Spider Plant



Chinese Evergreen



Dwarf Date Palm



Peace Lily



Weeping Fig



**PINOLEVILLE POMO NATION**  
**ENVIRONMENTAL DEPARTMENT**

<http://ppnenvironmental.com>

DESIGN  
Ilena Y. Pegan

#### SOURCES

<http://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/19930073077.pdf>  
[https://archive.org/details/nasa\\_techdoc\\_19930072988](https://archive.org/details/nasa_techdoc_19930072988)  
<https://www.lovethegarden.com/community/fun-facts/nasa-guide-air-filtering-houseplants>