

Facts About Third-Hand Smoke

Protecting Your Property from Damage and Yourself from Liability

There is no longer any question that exposure to secondhand tobacco smoke is dangerous. (Secondhand smoke is the smoke that comes off the end of the cigarette or cigar combined with the smoke exhaled by the person who is smoking.) According to the U.S. Surgeon General report of December, 2010, cigarette smoke contains more than 7,000 chemicals and compounds. Hundreds are toxic and more than 70 can cause cancer. Also, the Surgeon General has stated *for some time* that there is no safe level of exposure to secondhand tobacco smoke.

In addition, air quality scientists are showing that secondhand tobacco smoke can actually move from one unit to another, even in high rise buildings. A recent study published by the American Academy of Pediatrics showed that children living in apartment buildings (where smoking is permitted) with parents who don't smoke showed evidence of exposure to tobacco smoke.

Apartment owners and condominium boards have the legal right to regulate the use of tobacco products in units, common areas inside and outside and on balconies and patios. So what else is new? How about THIRD-HAND SMOKE?

What is Third-hand Smoke?

Units that have been "smoked in" have an unmistakable odor long after the tenants have moved out. The odor is an indication of the presence of third-hand smoke. Third-hand smoke consists of the chemicals which remain in a room after the smoking has stopped.

The chemicals in secondhand smoke are made up of many types of gasses and particulate matter. Some of the particulates like tar and nicotine will cling to walls, ceilings and other surfaces. Gasses and also particulates will be absorbed into carpets, drapes, and other fabrics including clothing and furniture. These chemicals will stain and discolor the walls, appliances, window coverings and even the windows.

- A scientific study in 2002 showed that these chemicals can "outgas" back into the air and even re-combine to form harmful compounds that stay at high levels long after the smoking has stopped.
- Third-hand smoke can be a health risk to new residents who move into units that have been smoked in. Researchers from San Diego State University found third-hand smoke on surfaces and in the dust in the air even after the units had been vacant for



two months and had been cleaned and repainted. The researchers also found levels of nicotine on the fingers of new residents who had moved into the units that had been smoked in.

- Another study published in February, 2010, showed that third-hand smoke can cause the formation of chemicals that can cause cancer. The nicotine in tobacco smoke reacts with nitrous acid, (an indoor pollutant commonly found in homes with gas-burning appliances), to form cancer-causing chemicals called tobacco-specific nitrosamines.
- According to Hugo Destailats, a chemist at the Lawrence Berkeley National Laboratory's Indoor Environment Department, "These (nitrosamines) are among the most broadly acting potent carcinogens present in unburned tobacco and tobacco smoke." He has suggested that there really may be no safe way to smoke indoors. Because nicotine remains on surfaces for long periods, the cancer-causing chemicals continue to be created over time, and can be inhaled, absorbed, or ingested.
- Still another study from the Berkeley Laboratory in August, 2010, found that nicotine from tobacco smoke can also combine with ozone to form tiny particles that can be a greater risk to persons with asthma than nicotine by itself.

The University of California Tobacco Related Disease Research Program has announced a Special Research Initiative on third-hand smoke. Since tobacco smoke toxins remain harmful when breathed or ingested long after the active smoking ends, third-hand smoke may prove to have significant health risks similar to the risks of secondhand smoke.

When secondhand smoke drifts into a neighboring unit on a regular basis, it becomes third-hand smoke.

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