How long does thirdhand smoke last?

The Short Answer

Thirdhand smoke is the chemicals left behind when someone smokes tobacco. Thirdhand smoke is unhealthy for people and pets. It can stick around for a long time in homes and cars. It gets into your body through your lungs, skin, and mouth. Getting rid of it is really hard and can cost a lot of money.

Thirdhand smoke can stay on surfaces for years after the people who smoked stopped smoking or moved out. Because it can stay for years, researchers have found high levels of thirdhand smoke in apartments even when current residents do not smoke or allow smoking in their homes. In some of these homes, the levels of thirdhand smoke were so high that they were similar to levels in homes where people actively smoke indoors.

The Long Answer

Thirdhand smoke is the chemical residue from tobacco smoke. It is also called “tobacco smoke residue” or “stale tobacco smoke.” The chemicals in thirdhand smoke are toxic to humans, especially children. It can linger for years in dust and on household surfaces. It can also become embedded in carpets, furniture, clothes, and building materials. It is difficult and expensive to remove.

In homes where tobacco has been smoked regularly over many years, thirdhand smoke residue is likely to be embedded in materials throughout the home. These pollution reservoirs can be very persistent. For instance, studies at the Thirdhand Smoke Resource Center have found high levels of thirdhand smoke on surfaces more than 5 years after the last known cigarette was smoked.

In one case, after a person who had smoked in the home moved out, the home was cleaned and remained empty for months. Still, thirdhand smoke levels on household surfaces were similar to those found in the homes of people who actively smoke.

In a second case, a person with a lifelong one-pack-per-day habit successfully quit. Over five years later, thirdhand smoke levels on their household furniture were similar to levels commonly found in the homes of people who actively smoke.

Toxic thirdhand smoke residue is widespread and persistent. One study measured thirdhand smoke on surfaces in 220 apartments in San Diego. The researchers found thirdhand smoke in every apartment, even though most (88%) of the residents did not use any tobacco products. This is likely because previous residents smoked in the units or neighbors smoked in nearby units, and thirdhand smoke can stick around for years.

Altogether, these examples and studies show that toxic thirdhand smoke residue can persist for years after the smoking stops.

Although it can be challenging and expensive to remove existing thirdhand smoke pollution, there are steps you can take. To prevent the build-up of thirdhand smoke in your home, do not allow anyone to smoke in or around you, your home, or your vehicle.

Do you have more questions about the toxic legacy of tobacco smoke, how it affects human health, and what we can do about it? Learn more here.

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Sources:

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