Thirdhand Smoke Resource Center

What does it mean when we smell stale tobacco smoke?

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 if you inhale, swallow, or touch the chemicals. Getting rid of it is really hard and can cost a lot of money.

If you smell stale tobacco smoke, thirdhand smoke is in the air. What you smell are the toxic chemicals that are released into the air from the carpets, walls, and furniture. As soon as your nose picks up the odor, the polluted air gets into your lungs. From there, the toxic chemicals get into your blood and to every part in your body.

However, thirdhand smoke can still be around even if you don't smell stale tobacco smoke. There may be too few chemicals in the air to smell, or the chemicals are always odorless.

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.

Have you ever walked into a room and smelled the scent of stale tobacco smoke? Or maybe smelled it as someone walked by? The smell of stale cigarette smoke--even when no one is smoking--is a sign of thirdhand smoke. As we breathe in, odor receptors in our noses recognize the chemicals in thirdhand smoke and trigger a signal in our brains that allows us to notice stale tobacco smoke.

When we smell stale tobacco smoke, it means that thirdhand smoke pollutants have been released into the air from the surfaces where they accumulated. As we breathe this polluted air, we are bringing thirdhand smoke pollutants into our bodies. Thirdhand smoke pollutants contain chemicals that can irritate many of our organs (including the nose, throat, lungs, liver, (including the nose, throat, lungs, liver, harm normal cell functioning,

damage DNA, and cause cancer in humans. Recent studies are finding similar impacts from thirdhand aerosols from e-cigarettes.

Even when we cannot smell tobacco smoke, thirdhand smoke can still be present. Our sense of smell is a good warning system, but we can only smell an odor when the amount of a chemical is above the level that our noses can detect. In addition, some of the chemicals in thirdhand smoke are odorless; we cannot smell them no matter how much is present.

So, while the smell of stale tobacco smoke can be a good indicator of thirdhand smoke, we can still be exposed to these harmful chemicals even if we cannot detect them.

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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