Thirdhand Smoke Resource Center

What should I ask before buying a home to avoid purchasing a thirdhand smoke polluted house?

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.

To better your chances of buying a home free of toxic thirdhand smoke pollution, follow these steps.

1. **Talk with your real estate agent**

    - Make sure your real estate agent knows you will only consider a smokefree home.

2. **Ask questions**

    - Did the previous occupants ever smoke in the home?
    - Did the previous occupants let others smoke in the home?

3. **Inspect the home**

    - Do you smell stale tobacco smoke or excessive fragrance that could be covering up an odor?
    - Do you see any stains on the walls or burn marks on the carpeting, floor, or other surfaces?

4. **Consider the asking price**

    - Does it seem “too good to be true?”

If you answered “yes” to any of these questions, consider buying a different home or make your offer contingent on a home inspection and contractor estimate of renovation.

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.

When looking for your new home, it is important to determine if a house is polluted with thirdhand smoke chemicals. Take these steps to help you determine if the sellers have allowed smoking inside the home or on the property.

Talk with your real estate agent

Before viewing any homes, make sure your real estate agent knows you will only consider a smokefree home. This way, your agent can save you time and show you only homes that likely do not contain thirdhand smoke residue.

Ask questions

Ask the sellers' agent about the sellers' tobacco and vaping use as well as use by previous residents. Be sure to ask about use inside the home as well as anywhere on the property (i.e., yard, patio, and garage).

- Did the previous occupants smoke or vape in the home?
- Did the previous occupants let others smoke or vape in the home?
- Did the previous occupants or others smoke or vape anywhere on the property (e.g., yard, porch, patio, garage)?
- To the best of the sellers' knowledge, did prior occupants smoke in the home or on the property?

If the real estate agent does not know the answers, ask them to check with the sellers and get back to you with an answer. Although asking is essential, it's important to recognize that sellers may not be legally required to disclose previous smoking history, and they may not know about the previous occupants' smoking history.

If the sellers or previous residents smoked or vaped inside, thirdhand smoke is likely to be in the home. Even if they smoked outside, they could have carried thirdhand smoke residue into the home on their hands, skin, hair, and clothes. In addition, the longer and more frequently someone smoked in or around a home, the more thirdhand smoke residue there will be.

Inspect the home

Look for signs that someone smoked in the home. These signs include the smell of stale tobacco smoke; nicotine stains on walls; burn marks on rugs, flooring, or other surfaces; and other evidence of smoking, such as ashtrays and discarded cigarette butts on the property.

- Observe for stains around electrical outlets and light switches as well as behind pictures on the walls.

- Close the doors and windows, turn off fans, and turn on the heating system to check for stale tobacco odor.
- Note the presence of strong fragrances that may be used to mask the smell of stale tobacco. Ask why the seller is using them. Schedule a second visit when fans and fragrances are not in use.
- Inspect the property for signs of smoking outside, such as ashtrays or discarded cigarette butts.

Consider the asking price

- Be skeptical if the asking price seems "too good to be true." The selling price of homes that contain thirdhand smoke is often lower than homes that do not contain thirdhand smoke. A seller might agree to a lower listing price to make sure the home sells quickly.

No matter what you have observed in the home, make sure your purchase offer is contingent on a home inspection that includes an assessment of tobacco or vape use in the home and on the property.

If there are signs of thirdhand smoke, you can consider walking away from the deal or obtaining contractor estimates for renovation to remove the thirdhand smoke pollution. In many cases, it is difficult and expensive to remove the toxic thirdhand smoke chemicals from a home.

Once you find your smokefree home, be sure to thank your real estate agent for helping you protect your health and the health of those who will live in the home with you.

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.

Updated: July 2025

Sources:

DeCarlo PF, Avery AM, Waring MS. Thirdhand smoke uptake to aerosol particles in the indoor environment. *Science Advances*. 2018;9:4(5):eaap8368. doi: 10.1126/sciadv.aap8368

Mahabee-Gittens EM, Merianos AL, Quintana PJE, et al. Nicotine on children's hands: Limited protection of smoking bans and initial clinical findings. *Tobacco Use Insights*. 2019;12. doi: 10.1177/1179173X18823493

Matt GE, Quintana PJE, Zakarian JM, et al. When smokers move out and non-smokers move in: Residential thirdhand smoke pollution and exposure. *Tobacco Control*. 2011;20(1):e1. doi: 10.1136/tc.2010.037382

Quintana PJE, Lopez-Galvez N, Matt G, et al. Cotton pillow samplers for assessment of thirdhand smoke in homes of smokers and nonsmokers with children. *Journal of Environmental Quality.* 2024;3(1). doi: 10.20517/jeea.2023.28

Quintana PJE, Matt G, Chatfield D, et al. Wipe Sampling for Nicotine as a Marker of Thirdhand Tobacco Smoke Contamination on Surfaces in Homes, Cars, and Hotels. *Nicotine & Tobacco Research.* 2013;15(9):1555-1563. doi: 10.1093/ntr/ntt014