

# California's New Landmark Thirdhand Smoke Disclosure Law

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**For decades**, tobacco control policies have focused on smoking behavior, secondhand smoke, and, more recently, youth vaping.<sup>1,2</sup> However, emerging evidence highlights the overlooked risks of thirdhand smoke: the chemical residue from tobacco combustion or vaping aerosols that sticks to surfaces, dust, and building materials. Authored by Assembly Member Liz Ortega and signed into law on October 3, 2025, California Assembly Bill 455 (AB 455) marks the world's first law requiring disclosure of thirdhand smoke contamination in residential real estate transactions.<sup>3</sup> This Viewpoint reviews the legislation's provisions, the evidence motivating it, and its broader implications for public health and tobacco control.

## Background on Thirdhand Smoke

Thirdhand smoke is formed when tobacco smoke and vaping aerosols interact with indoor environments. Residues stick to and embed in carpets, drywall, upholstery, and heating, ventilation, and air conditioning systems, persisting for years even after smoking stops.<sup>4</sup> These residues contain nicotine, carcinogenic nitrosamines, heavy metals, and other pollutants, more than 20 of which are recognized under California's Proposition 65 as causing cancer, birth defects, or reproductive harm.<sup>5</sup>

Exposure pathways include inhaling reemitted thirdhand smoke pollutants from reservoirs, ingesting contaminated dust, and absorbing chemicals through the skin. Children, older people, and immunocompromised individuals face increased risks. Supported by the California Tobacco-Related Disease Research Program since 2010, the Collaborative Research Consortium on Thirdhand Smoke has helped establish scientific evidence of its toxic chemical composition, persistence, widespread exposure, and health hazards.<sup>4,5</sup>

Health effects associated with thirdhand smoke include DNA damage, respiratory problems, increased cancer risk, and weakened immune function. Unlike secondhand smoke, which dissipates through ventilation, thirdhand smoke can remain for years in contaminated materials, and exposure may occur long after smoking has stopped. Additionally, thirdhand smoke can be transported into clean environments (eg, neonatal intensive care units, schools) on skin, hair, or clothing or through personal items such as furniture or toys.

## Key Provisions of AB 455

First, AB 455 defines thirdhand smoke in California legal statute:

1. *Thirdhand smoke* is the toxic chemical residue left behind by tobacco smoke. It accumulates in carpets, walls, and furniture; becomes embedded in building material; and persists for years after smoking stops.
2. Thirdhand smoke-polluted buildings expose occupants to more than 10 chemicals listed in California's Safe Drinking Water and Toxic Environment Act of 1986 for their developmental toxicity and as causing cancer and reproductive harm.

Second, AB 455 mandates disclosure in residential real estate transactions. Specifically, sellers of single-family homes who have actual knowledge of smoking or vaping inside the property or of thirdhand smoke residue must disclose this information in writing to prospective buyers. This required disclosure applies to traditional cigarettes, cigars, pipes, and electronic nicotine delivery systems.

Third, AB 455 mandates consumer education. The law requires the California Department of Toxic Substances Control (DTSC) to update the *Homeowner's Guide to Environmental Hazards* by adding a section on thirdhand smoke. To offset the costs of updating the guide, the DTSC will assign the task to the Center for Tobacco and the Environment at San Diego State University, which houses the Thirdhand Smoke Resource Center ([thirdhandsmoke.org](http://thirdhandsmoke.org)), the dissemination arm of the Collaborative Thirdhand Smoke Research Consortium. The DTSC will review the proposed update to ensure it effectively educates and informs.

Fourth, AB 455 provides some legal remedies. While failure to disclose does not void a sale, sellers who willfully or negligently fail to disclose may be liable for damages under California Civil Code §1102.13.

## Legislative Context

California has taken a leading role with many tobacco control and prevention policies, including bans on workplace smoking and restrictions on flavored tobacco. AB 455 updates California's Health and Safety Code, Civil Code, and Business and Professions Code by incorporating tobacco control measures into housing policy, a vital area of consumer protection and environmental concern.

The bill received bipartisan support, highlighting a growing recognition that thirdhand smoke contamination is not just a theoretical risk but a tangible environmental threat with health and economic impacts. The absence of organized opposition suggests that requiring disclosure, unlike imposing smoking bans, presents a less contentious path for tobacco control and prevention, as it promotes consumer transparency rather than restricting individual choices.

## Public Health Significance

In 2006, California's Air Resources Board recognized environmental tobacco smoke as a toxic air contaminant because of its role in causing illness and death.<sup>6</sup> AB 455 redefines involuntary exposure to tobacco smoke and vaping aerosols as an environmental hazard, similar to asbestos, radon, or lead paint. This shift emphasizes that smoking and vaping leave a toxic legacy for others to bear, shifting the focus from individual choices to environmental health.

The law's integration into real estate transactions has several implications for tobacco policies and the social and behavioral norms around tobacco use. By educating buyers, sellers, and real estate agents, participants in real estate transactions become aware of the

long-term consequences of tobacco use indoors and the hidden health hazards associated with it. Remediating a home contaminated with thirdhand smoke residue can add significant costs, making it harder to sell, decreasing its value, and thereby discouraging indoor smoking. Vulnerable groups, such as first-time buyers, families with children, and lower-income buyers, disproportionately benefit from disclosure, education, and remediation. The effect of remediation costs on housing prices is currently unknown.

### Potential Challenges

While AB 455 has the potential to raise awareness of the long-term effects of indoor tobacco use and shift norms around indoor smoking and vaping in all indoor settings, there are several potential challenges. First, the law depends on “actual knowledge” of sellers, and hidden contamination might go unnoticed without testing for thirdhand smoke residue. Second, legal remedies are limited to civil damages, placing the burden on buyers to prove harm. Third, the scope of AB 455 is currently limited to single-family homes, leaving multiunit dwellings and rentals unaddressed.

### Broader Implications for Tobacco Control and Prevention

AB 455 sets a precedent that could have a ripple effect nationally and globally. By codifying thirdhand smoke as a recognized hazard, it opens several pathways to expand tobacco control and prevention efforts as part of broader tobacco endgame strategies. First, one

natural regulatory extension is the inclusion of multiunit properties and lease agreements. Second, the legal recognition of thirdhand smoke contamination may influence liability, insurance, and real-estate finance, creating additional incentives for adopting smoke-free indoor policies. Third, tobacco endgame campaigns will benefit from increased awareness of the persistent and toxic legacy of commercial tobacco, even in communities with low smoking rates. Although smoking rates are declining, the toxic legacy of indoor tobacco use poses environmental hazards for years. Fourth, research by the tobacco industry itself shows that smoking indoors leaves behind persistent toxic residue.<sup>7</sup> Producer responsibility and litigation could help recover some costs related to mitigation and cleanup caused by commercial tobacco companies' failure to inform consumers of the dangers of indoor tobacco use.

### Conclusions

AB 455 represents a novel intersection of consumer protection, tobacco control policy, and environmental health. By recognizing thirdhand smoke as an environmental hazard that requires disclosure, California has expanded the scope of tobacco regulation. Future research should evaluate the law's effects on housing markets, indoor smoking bans in residential environments, smoking rates, and consumer awareness. If successful, AB 455 may herald a new wave of policies treating tobacco not only as a personal health risk but also as a persistent environmental pollutant.

#### ARTICLE INFORMATION

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