

Incense Use in Multi-Unit Housing: Commonly Asked Questions

What is Incense?

Incense is a substance that is burned to emit an odor. Incense comes in many different forms: joss sticks, coils, rope, powders, paste, rocks, charcoal, and smudge bundles. All types of incense are meant to be burned. In fact, the word incense comes from the Latin word *incendere* meaning "to burn." Some forms of incense are lit and left to burn, while others are lit, extinguished, and the hot embers release the fragrance.

Incense is used for a variety of purposes: to obscure undesirable odors, to provide a pleasant odor for aesthetic enjoyment, and for religious purification, sacrifice and other ceremonial practices.

What are the Ingredients in Incense?

Incense has two primary ingredients: an aromatic material, usually a plant-based substance which provides the scent, and a combustible base. The combustible base holds the fragrant materials together and causes the incense to burn. When incense is lit, the combustible material ignites, and the fragrant



Joss Sticks

material is emitted in the resulting smoke. Various types of plants like wood bark, flowers, herbs and seeds can be used for the aromatic material. Charcoal, wood powders and mucilage developed from plants are ingredients that commonly make up the combustible component of incense.

What are the Components of Incense Smoke?

Incense comes in a variety of different forms and scents, so the fragrances emitted in incense smoke will vary depending on the type. In addition to the fragrance emission, studies have shown that particulate matter (small pieces of air pollution), hazardous gases like carbon monoxide and volatile organic compounds are found in incense smoke.² A number of cancer causing chemicals like benzene have also been found in incense smoke.³

What Do Research Studies Say About the Health Impact of Incense Smoke?

People who use incense have an increased risk of getting cancers of the upper respiratory tract. ⁴ This includes the mouth, sinus, throat, and larynx.

Incense burning produces significantly more particulate matter than cigarette smoke; incense generates 45 mg/g burned, as compared to 10mg/g for cigarettes.⁵ This means that burning **incense emits 4 times more particulate matter into the air than cigarettes**.

Indoor concentrations of particulate matter from burning incense has been found to far exceed **outdoor** air quality standards specified by the US EPA's National Ambient Air Quality Standards. ⁶

What Do Experts Say About the Impact of Incense Smoke?

"[People who] embrace incense as part of their daily lifestyles have to consider this has a real potential risk for cancer." ⁷ ~Dr. Len Lichtenfeld, deputy chief medical officer of the American Cancer Society

"Anything that affects air quality negatively is not a good thing. Burning in general and the release of smoke, these things are certainly to be avoided. At the very least, chemical irritants will set off asthma and that is reversible. Cancer is not reversible." 8

~Dr. Len Horvitz, pulmonary specialist at Lenox Hospital in New York City

"Incense is sold without a warning label, and given the high prevalence of use and the often involuntary nature of the exposure, clarifying the role of incense smoke as a carcinogen is important from a public health perspective."

~Dr. Jeppe Friborg, researcher In the Department of Epidemiology Research, Statens Serum Institut

"From an indoor air quality and fire hazard perspective, I think it makes sense to ban incense as well as cigarettes." 9

~ Martha Hewett, former director of research at the Center for Energy and Environment



Incense Cones









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What are the Potential Risks of Incense Use in Multi-Unit Housing?

The sole purpose of incense is to be burned. Having lit and smoldering materials of any kind invites the potential for a fire.

✓ Health Impact

Incense smoke exposure could exacerbate respiratory conditions like asthma, 10 cause skin irritations, and has been linked to several illnesses. 11 Prolonged exposure may also increase contact with harmful cancer causing chemicals, hazardous gases and particulate matter.^{2,3} Additionally, incense smoke, like other air fragrance tools, could mask odors that indicate unhealthy housing conditions like mold, secondhand smoke, sewage backups, and gas leaks. 12



Incense Burner

✓ Property Damage

Depending on the type and length of use, soot and burn damage is a potential outcome for indoor incense use.

✓ Exposure of Non-Incense Users

An apartment building is one building that is divided into multiple units; there are many spaces in between walls, floors, ceilings, and gaps around pipes, electrical conduits and other structural devices. Research conducted by the Center for Energy and Environment has shown that air, and contaminants in the air, can easily move between apartment units. 13 Pollutants like incense smoke can travel through these small spaces into other units. Residents who do not burn incense in their own units could still have incense fragrance and particles drift into their unit from somewhere else in the building.

Is Incense Smoke Covered Under Minnesota's Clean Indoor Air Law?

Under the Minnesota Clean Indoor Air Act (Act) "smoking" means inhaling or exhaling smoke from any lighted cigar, cigarette, pipe, or any other lighted tobacco or plant product. Smoking also includes carrying a lighted pipe, cigarette, pipe, or any other lighted tobacco or plant product intended for inhalation. 14 The Act prohibits smoking in indoor common areas of rental apartment buildings, such as laundry rooms, entrances, hallways, party rooms, and rental offices. It does not address or prohibit the use of plant-based incense in individual units.

What are Some Options for Regulating Incense Smoke in Multi-Unit Housing?

Property managers can legally choose to restrict or prohibit incense use in apartment buildings; however, the restriction should be imposed uniformly (i.e. the same policy should be applied to all residents). Property owners and managers can suggest incense substitutions that do not involve combustion such as fresh cut herbs and flowers, oil diffusers and potpourri. As with any policy change, a property owner or manager should consult with his or her attorney before implementing the policy on their property.



Special thanks the Public Health Law Center (PHLC), for it's contribution to this fact sheet. PHLC provides legal consulting services to the Live Smoke Free Public Health multi-housing program. This fact sheet should not be considered legal advice or a substitute for obtaining legal advice from an attorney who can represent Law Center you. If you have specific legal questions, we recommend that you consult with an attorney familiar with the laws of your jurisdiction. To learn more about PHLC, you can visit them at www.publichealthlawcenter.org.

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