



Secondhand Cannabis Smoke

Smoke is Smoke

Secondhand cannabis smoke is a complex chemical mixture of smoke emitted from combusted cannabis and the smoke that is exhaled by the user.¹ It contains tetrahydrocannabinol (THC), the chemical responsible for most of cannabis's psychological effects, and many of the same toxic chemicals in smoked tobacco.²

Early research shows that breathing in secondhand smoke from cannabis has similar effects on the cardiovascular system (*i.e.*, heart, arteries) as inhaling secondhand smoke from tobacco products, such as cigarettes.³ One study showed inhalation of secondhand cannabis smoke makes it harder for arteries to expand, decreasing blood flow throughout the body. This suggests that there are similar adverse cardiovascular effects as from tobacco smoke.

Additionally, secondhand cannabis smoke has many of the same cancer-causing chemicals as secondhand tobacco smoke. More research is needed to determine if these chemicals in cannabis smoke have a similar effect on chronic disease development as they do in tobacco smoke.⁴

Ventilation Does Not Protect from the Harmful Effects of Secondhand Smoke

The American Society for Heating, Refrigeration, and Air Conditioning Engineering (ASHRAE), the national standard-setting body for indoor air quality, affirms that HVAC systems and air cleaning technologies cannot eliminate the health risks caused by secondhand smoke, including cannabis smoke.^{5,6} The only way to eliminate the health hazards of secondhand smoke—from tobacco or cannabis or emissions from electronic smoking devices—is with a 100% smoke-free environment. The following evidence was used to corroborate this conclusion:

- Conventional air cleaning systems can remove large particles, but not smaller particles and gases found in secondhand smoke.
- Current heating, ventilating, and air conditioning systems alone do not control secondhand smoke exposure. These systems may distribute the secondhand smoke throughout an indoor area.
- Even separately enclosed, separately exhausted, negative-pressure smoking rooms do not keep secondhand smoke from spilling into adjacent areas throughout a building.

Recommendations

- Never allow cannabis smoking around people who should not be around secondhand smoke, including children, pregnant women, people with chronic diseases, and people who do not want to be exposed to it.
 - In addition to exposing them to the health risks of secondhand smoke, youth exposure to substance use in any setting normalizes substance use.
- The only effective strategy to ensure the health and safety of the public, including first responders who may need to enter a building, is the adoption of 100% smoke-free and vape-free policies.

References

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