Monitoring Devices and Tests to Detect Smoking or Vaping

There are devices and kits that can help provide a minimum standard of proof that marijuana or tobacco use is occurring or leaking into other rooms or parts of a building when paired with other pieces of evidence. To make sure that leases and policies regarding monitors do not violate fair-housing laws, try finding alternative solutions to compliance issues and seek legal advice prior to utilizing devices or tests. Many more devices have entered the market since this article was first published, so please check online and consult this article as well.

Disclaimer: this information is meant only for educational purposes and should not be construed as legal advice or a guarantee that any of these devices are a foolproof way to identify secondhand smoke exposure or that they satisfy the requirements necessary to demonstrate in a court of law that smoking has taken place in a specific location.

Passive Nicotine Monitors

These devices are the best tools for detecting whether smoking or secondhand smoke is taking place.

Replace Monitor: This monitor must be installed for a month to detect secondhand smoke. It has been used in certain court cases and Repace provides a report on nicotine levels and recommendations. The monitor must be purchased and returned with the analysis for a total of $650. Visit: repace.com

FreshAir Sensor: Whenever tobacco smoke is detected, this monitor sends out email alerts. It has been used as an enforcement tool to show proof of smoking in hotels and on airplanes. To program it, you need an Android device and a Wi-Fi connection. Testing for secondhand smoke exposure entering a unit is not the device's intended use. There is a component for testing marijuana. The manufacturer now requires a minimum purchase of 50 devices, though prices vary. Visit: freshairsensor.com

Triton 3D Sense Hundreds of schools, hotels and landlords around the world have implemented this device, which can detect loud noises marijuana and cigarettes smoking. Multiple devices must be purchased for apartments and run about $750 a unit. Visit: tritonsensors.com

Monitors with Lasers: purpleair.com   habitatmap.org knowsmoke.com (thirdhand smoke)

Particle Tracing Monitors

These devices detect very small particles, known as "PM2.5," which are not specific to secondhand smoke. Cooking in an apartment can produce just as much smoke as smoking cigarettes, and a basic particle monitor cannot tell the difference between the two. There is some doubt as to whether using these devices for enforcement purposes would be upheld in court because they detect other PM2.5 sources. Nonetheless, both researchers and housing providers have made use of them.

TSI SidePak: This is a more advanced monitor that can detect other particles but requires some training or practice to operate. For details and cost, visit: tsi.com/products

Dylos Monitor: This monitor makes use of a laser particle counter created to satisfy the demands of testing in a home or office environment. It offers reports, counts individual particles, responds instantly to changing conditions, and stores history data for up to 30 days. They have been used by housing providers and come in various models. Certain models offer a date stamp and can be linked to a computer. The device can be purchased for between $200 and $475. Visit: dylosproducts.com

Other Devices and Tests

Homeaircheck Kit: This device gathers air samples for specific chemical compounds and looks for secondhand and thirdhand smoke in your house. The collector can be set up in a unit or a hallway. Air samples must be taken between two and six hours and turned in within 14 days. If a resident wants to demonstrate that smoke is entering their apartment, this monitor might be more useful. The cost of the rental and report is $230. Visit: http://homeaircheck.com

Cotinine Nicotine Tests: Cotinine is a byproduct of nicotine that is ingested directly or through exposure to secondhand smoke. Saliva or urine are used in testing, but they may not be the best methods for residents or housing providers to demonstrate secondhand smoke exposure because, unless the person exposed is bedridden or isolated, they can still inhale secondhand smoke on the street or somewhere else. These tests are offered online by several businesses for under $10.

Tobacco and Marijuana Smoke Residue Tests: These kits can be used to check a property for nicotine or marijuana residues that is left by past occupants. They run $95 each. Visit: emsltestkits.com

Vape Detection Devices: Particulate and sensor detectors are the two primary varieties of vape detectors. A sensor is used by particulate detectors to identify the presence of tiny particles released during vaping. Sensor detectors employ a sensor to identify the presence of chemicals released during vaping. Numerous businesses offer them for sale online.

Information about GASP and secondhand smoke | gaspforair.org
Smoke-free housing listings and resources | mysmokefreehousing.org
Information on secondhand marijuana smoke | smokeissmoke.com