



May 27, 2022

## WHAT YOU NEED TO KNOW ABOUT Cannabis Lab Testing

### PRO POINTS

- **Lab testing requirements for the cannabis industry are advancing** as states move to address public health concerns in the absence of federal regulations.
- **States test marijuana for heavy metals, microbes and other substances.** Thirteen states test for aspergillus, a type of mold, after it was linked to rare infections in medical marijuana patients in California.
- **Lab testing requirements vary widely from state to state,** but policymakers are increasingly comparing notes and trying to develop sector-wide standards.

### HOW WE GOT HERE

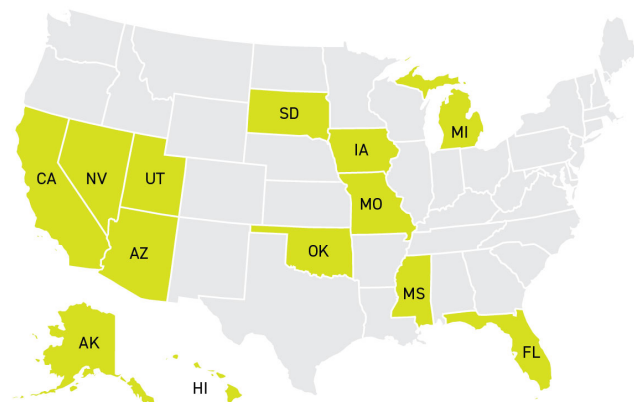
State programs created in the early days of legal medical marijuana were largely unregulated and dominated by caregivers and home growers who maintained small-scale operations. It was an era when testing the products for contamination wasn't even a consideration.

But the advent of adult-use legalization — which brought more consumers and scrutiny to the market — revealed a lax culture around safety in the industry. A 2015 Denver Post investigation into Colorado's adult-use market found high levels of pesticides. Without federal oversight of the cannabis industry from the EPA and FDA, Colorado in 2015 became the first state government to enact standards on testing marijuana for solvents and other contaminants. Since then, the vast majority of states that have legalized marijuana have adopted lab testing requirements for cannabis products.

Still, those standards vary widely. While most programs require some level of pesticide testing, the number pesticides and the amounts that would trigger a failed test vary significantly. The same goes for other common contaminants like heavy metals and microbes.

### 13 states test medical marijuana for aspergillus

Before testing requirements were implemented, aspergillus mold sickened leukemia patients in California who used medical marijuana to relieve the symptoms of their cancer treatment.



Source: Medicinal Genomics



The public health concerns are particularly acute when it comes to severely ill medical marijuana patients. When a California doctor observed his leukemia patients developing rare lung infections five years ago, he thought it might be connected to their use of medical marijuana. While researchers couldn't definitively link tainted weed with the sickened patients, a study found microbial contaminants in marijuana like aspergillus, which causes lung infections.

Testing regimes vary depending on environmental factors and the regulatory structure of state cannabis programs. And limited research due to decades of federal prohibition means even good actors can unwittingly fail contaminant testing. Some testing facilities themselves have also been caught up in controversy, facing allegations of corruption and skewed financial incentives to fudge numbers to please their clients.

### **WHAT'S NEXT**

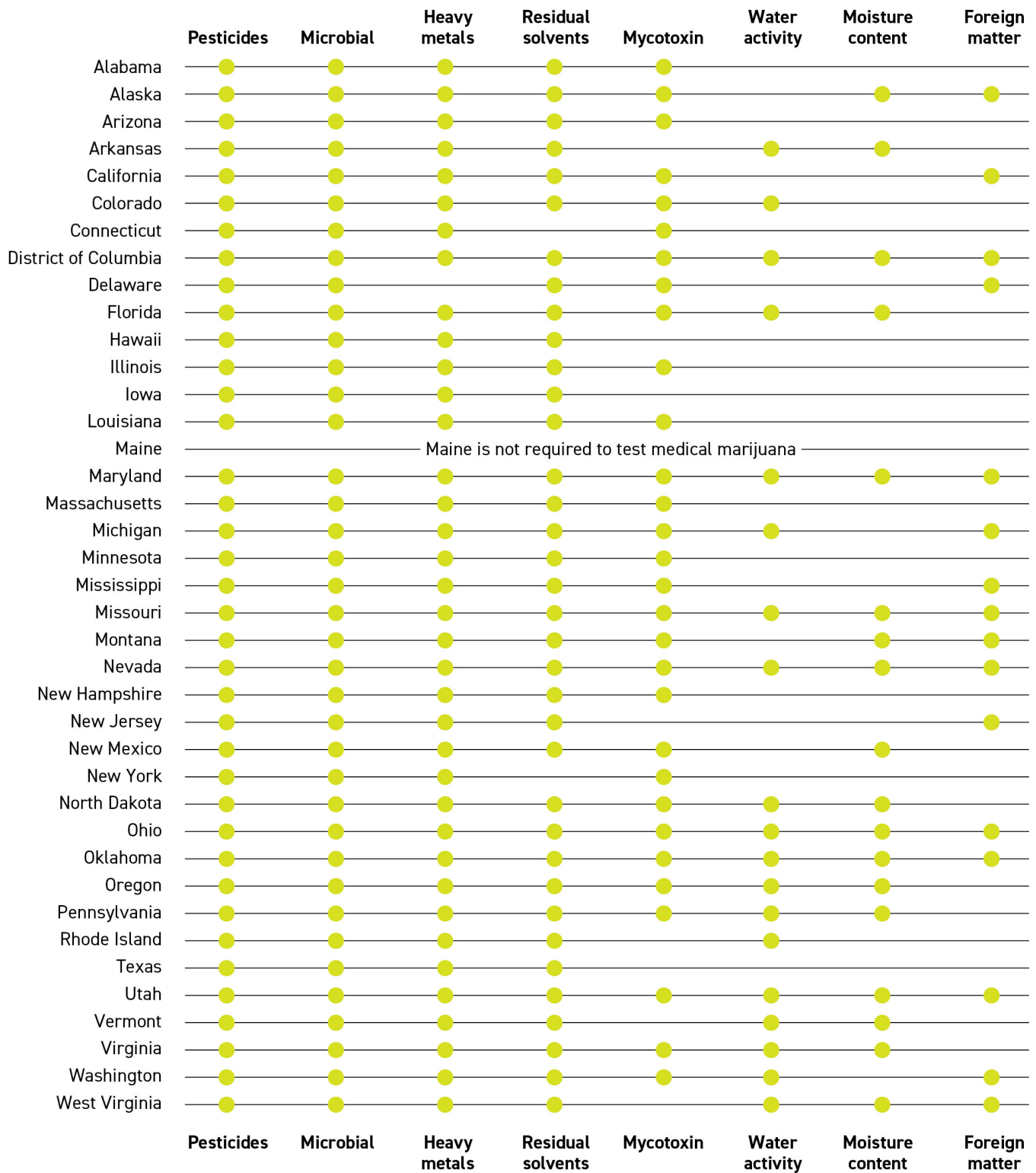
Many states are moving to improve their cannabis testing regulations. In the wake of the 2019 vaping crisis, when dozens of deaths were linked to using either marijuana or nicotine vapes, Colorado regulators added vape emissions rules. That requirement was meant to launch in January 2022 but got delayed due to a lack of lab capacity. Regulators still hope to roll out emissions testing this year to address concerns about metals used in vaping devices, which, over time, can leach into the cannabis, evading some of the more traditional detection methods.

The Cannabis Regulators Association (CANNRA) is working to share information between states and further develop testing standards. Cannabis lab professionals and more traditional standard-crafting groups like ASTM International are working to harmonize testing measures in preparation for federal legalization.

A common refrain in the cannabis industry is that a producer who sends weed to five different testing labs will get five different results back. State regulators hope to standardize requirements and testing methods to address those pitfalls.



## Cannabis lab testing requirements of medical marijuana



Source: POLITICO reporting



## POWER PLAYERS

- **Gillian Schauer, executive director of CANNRA:** Schauer is the first director of the nonpartisan cannabis regulator association aimed at facilitating collaboration between state cannabis policymakers. She has consulted for federal and state health agencies and teaches at the University of Washington's School of Public Health. CANNRA has convened a Special Committee on Analytical Testing and Product Safety to work on the issue.
- **Dominique Mendiola, senior director of Colorado's Marijuana Enforcement Division:** Mendiola heads Colorado's cannabis regulatory agency, the first in the nation to make rules requiring cannabis vaporizer emissions testing. The agency was an early leader in implementing lab testing standards.
- **Schuyler Pruyn, project manager at the U.S. Food and Drug Administration:** Pruyn is a pharmaceutical scientist at the FDA's Center for Drug Evaluation and Research. She was the lead author on a recent paper documenting the wide disparities in medical cannabis testing requirements in state programs.
- **David Eisenberg, president of Anresco Laboratories:** Eisenberg serves as chair of the cannabis working group for the American Council of Independent Laboratories, which promotes the standardization of cannabis testing while working with federal lawmakers on cannabis regulatory proposals.