

Batch Size & Consumer Safety

Across all cannabis markets in the US, Nevada has the smallest maximum batch size that can be sent for testing at 5 lbs. This does very little to protect consumers, is costly for operators and regulators, and is an ineffective way to ensure product safety.

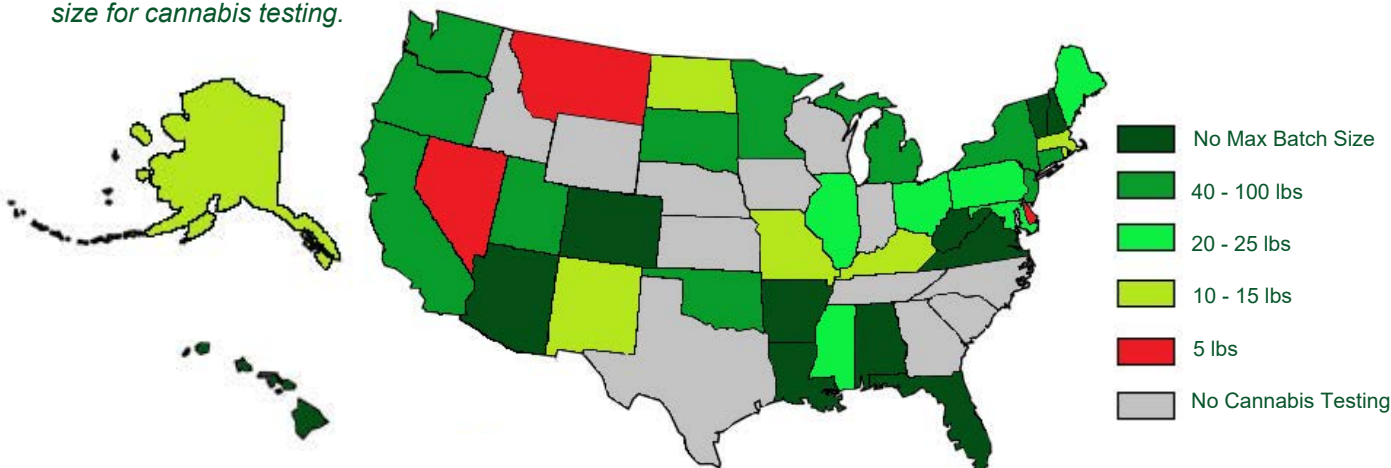
Despite Nevada's max batch size being the smallest, there are multiple states that do a better job at "Consumer Protection and Product Safety" than Nevada, according to the Americans for Safe Access' 2022 report on medical cannabis access. Each of the states with a better score on "Consumer Protection and Product Safety" has a higher maximum batch size than Nevada. ^[1]

Small Batch Sizes Do Not Protect Consumers

- Americans for Safe Access' 2022 report of medical cannabis access scored Nevada 148 / 200 for "Consumer Protection & Product Safety".^[1]
- Despite Nevada having the smallest max batch size of any market, 10 other states scored better in this area. Each of these 10 states has a larger max batch size than Nevada. ^[1]
 - Maryland - 169 / 200 ^[1] - max batch: 20 lbs
 - Pennsylvania - 165 / 200 ^[1] - max batch: 20 lbs for premium/popcorn; 50 lbs for shake/trim, 60 lbs for fresh/frozen
 - Connecticut - 160 / 200 ^[1] - max batch: 40 lbs
- A peer reviewed study of state cannabis markets published by the FDA, recommended ways for the industry to improve consumer protections and product safety. ^{[2][3]}
 - The FDA recommendations centered around Good Manufacturing Practices, clear product specifications for cannabinoids / terpenes, and consistent limits for contaminants and pesticides. ^{[2][3]}
 - None of the researchers' recommendations on how to improve consumer protections and product safety pertained to batch sizes. ^{[2][3]}

The Majority of Cannabis Markets Have a Max Batch Size More Than 25 lbs:

60% of states have a max batch size above 25 lbs. Additionally, 13 states have no maximum batch size for cannabis testing.



[1] <https://www.safeaccessnow.org/sos22>

[2] Pruyn SA, Wang Q, Wu CG, Taylor CL. Quality Standards in State Programs Permitting Cannabis for Medical Uses. Cannabis Cannabinoid Res. 2022 Dec;7(6):728-735. doi: 10.1089/can.2021.0164. Epub 2022 Mar 28. PMID: 35363042.

[3] <https://www.fda.gov/media/93113/download>



Regulators Should Look to Similar Industries

Regulators in other industries that are similar to cannabis, have spent a long time crafting and improving regulations aimed at protecting consumers and ensuring product safety. Rather than trying to reinvent the wheel, cannabis regulators should look to the prior work of their regulatory peers in the industries of agriculture, botanical drugs, industrial hemp etc.

No industry, outside of cannabis, limits batch sizes for testing based solely on weight. In other similar industries, batch sizes are determined by harvest lot, with robust methodologies for determining representative samples.

Small Batch Size Benefits Labs Not Consumers:

- BOTEC Report is the primary study advocating for smaller batch testing sizes
- BOTEC Report was first authored in 2013 ^[4] for Washington (state) by Dr. Mark Kleiman, then CEO of BOTEC and others
 - This was over a decade ago when medical cannabis testing was in its infancy
 - The section "*Sampling Cannabis for Analytical Purposes*" was authored by Steep Hill Lab ^[4]
- Washington now defines 'Harvest' as "*the marijuana plant material derived from plants of the same strain that were brought into cultivation at the same time, grown in the same manner and physical space, and gathered at the same time.*" ^[5]
- Washington's max quantity for cannabis testing is now 50 lbs ^[6]

Cannabis Product Safety Is Best Ensured In Other Ways:

- Good Manufacturing Practices (GMPs) are the international safety standard for consumer goods:
 - ASTM International recommends adhering to existing Good Manufacturing Practices ^[7]
- According to the World Health Organization, GMPs are used as the worldwide safety standard for the production of medical products, pharmaceuticals, and biologicals including vaccines ^[8]
- ASTM International has created a Standard Guide for GMPs for Cannabis & Infused Products ^[9]

• [4] <https://lcb.wa.gov/publications/Cannabis/BOTEC%20reports/1e-Sampling-Lots-Final.pdf>

• [5] <https://app.leg.wa.gov/WAC/default.aspx?cite=314-55-010>

• [6] <https://app.leg.wa.gov/wac/default.aspx?cite=314-55-101>

• [7] <https://www.astm.org/jte20230618.html>

• [8] <https://www.who.int/teams/health-product-policy-and-standards/standards-and-specifications/norms-and-standards/gmp#:~:text=GMP%20defines%20quality%20measures%20for,the%20production%20of%20pharmaceuticals%20and>

• [9] <https://www.astm.org/d8557-24.html>

