PROPOSED CHANGE TO AUDIT TESTING RULE

OLCC COMMISSION MEETING

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WHAT IS THE PROPOSED RULE CHANGE?

- OLCC has had audit testing authority since the inception of the marijuana program
  - But major gaps included lack of clarity on:
    - What happens if a discrepancy between original test and audit test exists
    - Whether OLCC can require licensed labs to provide samples directly for testing

- Proposed rule change resolves these gaps by:
  1) Requiring labs to retain samples for a minimum period of time, and to provide to OLCC for audit testing if requested
  2) Creating structure related to how big of a difference in potency testing is “big enough,” and what happens as a result
WHY DO WE NEED A RULE?

- The current market conditions create a very competitive environment, and THC potency numbers are critical to getting shelf space.

- There has been a significant uptick in complaints (from labs about other labs, and from producers/processors about other producers/processors) related to “gaming” of potency testing.

- Fidelity of testing is a major feature of the legal, regulated market – consumers should pay for what they’re getting, and have confidence in its accuracy.

- This new rule is a tool in addition to, not instead of, existing compliance tools to hold labs and other licensees accountable on sampling & testing.
WHY DON’T CURRENT RULES SOLVE THE PROBLEM?

- ORELAP accreditation ensures technical proficiency, but not an adequate tool to prevent compliance issues
  - Labs undergo proficiency testing to prove they can detect required analytes – but they know when they are being tested
- Very difficult cases to prove, including who is at fault; multiple ways potency can be “gamed”
  - Fundamental problem is the incentive structure and licensees “voting with their feet” – labs getting the most business are those with the highest numbers, regardless of accuracy
Recent “round robin” audit testing of usable marijuana found concerning results – highest original tests had the largest audit testing “drop off” (solid line = original compliance test, dots = round robin results)
DETAILS OF THE RULE CHANGE

• New proposed rules (OAR 845-025-5760) would establish a round robin testing program

• Round robin testing could not begin until after Jan 1, 2023 (when rules become effective), but all compliance tests done on/after Dec 1, 2022 would be eligible to be checked under this program

• Audit testing that results in statistically significant difference compared to original compliance test could be required to be relabeled by OLCC

• No penalty or violation associated with “failing” the audit testing
  • If evidence of fraud or non-compliance is found (by either lab or client licensee), violations could be pursued – this program is in addition to, not instead of, current rules

• Goal is to flip the incentive structure from “get the highest result possible” to “get the most accurate result possible”
WHAT IS A T-TEST?

- T-test is a statistical method to determine when a difference between two groups is “real” vs. due to random variation.

- Proposed rule establishes a threshold of 99% statistical confidence – in other words, if the compliance test was accurate and representative of the true mean potency value, only 1% of samples would have that large of a difference.
  - 99% confidence interval means it’s much more likely that the original compliance test does not reflect the true mean potency of the batch.

- T-test is calculated based on:
  1) The size of the difference between the original potency test and the “round robin” average.
  2) The variation (“spread”) between the labs participating in the round robin.
Example 1: significant difference between round robin and original compliance test (two-sided one-sample t-test where the original compliance test is “mu,” the known specific value)

<table>
<thead>
<tr>
<th>Round Robin Results</th>
<th>Original Compliance Result</th>
<th>Round Robin Avg:</th>
<th>Round Robin Std Dev:</th>
<th>Number of Round Robin Results:</th>
<th>Std Error of Mean</th>
<th>df:</th>
<th>t-statistic:</th>
<th>p-value:</th>
<th>Significant Difference at 99% level</th>
</tr>
</thead>
<tbody>
<tr>
<td>23%</td>
<td>35%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-8.79426</td>
<td>0.003098</td>
<td></td>
</tr>
</tbody>
</table>
**Example 2:** *not* a significant difference between round robin and original compliance test

<table>
<thead>
<tr>
<th>Round Robin Results</th>
<th>Original Compliance Result</th>
<th>Round Robin Avg:</th>
<th>Round Robin Std Dev:</th>
<th>Number of Round Robin Results:</th>
<th>Std Error of Mean</th>
<th>df:</th>
<th>t-statistic:</th>
<th>p-value:</th>
<th><em>NOT</em> a significant difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>31%</td>
<td>35%</td>
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<td></td>
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<td></td>
<td></td>
<td>-3.85528</td>
<td>0.030831</td>
<td></td>
</tr>
</tbody>
</table>
OLCC’S MISSION

Support businesses, public safety, and community livability through education and the enforcement of liquor and marijuana laws.