

Complete Test Results

In order for cannabis test results to be considered complete, and therefore be assessed for irregularities, there needs to be evidence of the following:

Proper homogenization and sampling techniques

- **Homogenization** is a process that ensures the amount of THC or any other component in the cannabis product is evenly distributed throughout a batch and in any given sample sent for testing.
- A **representative sample** is a sample that accurately reflects the characteristics of the larger batch of cannabis product. The sample must be taken from many different areas of the batch and the minimum sample size required must be sent to a cannabis testing facility for analysis. For example, OCP requires a representative sample from a batch of concentrate to be 6 grams, so a 1-gram sample would not be representative and could not be used to infer the condition of an entire batch.

Consistent testing dates

• A batch of cannabis or cannabis products being sent for multiple rounds of testing should have **consistent testing dates.** Any product that sits for several months is likely to undergo changes in concentrations of various analytes. Storage conditions could also have a significant impact on concentrations of analytes.

Chain of custody protocols

- **Chain of custody protocols** help ensure the integrity of the testing program by improving visibility into the sample collection process in a way that allows testing facilities and OCP to troubleshoot possible causes of unexpected results.
- A **chain of custody form** documents the possession of the samples at the time of receipt by a cannabis testing facility. This record, at a minimum, includes the type of sample and number of containers submitted, the authorized individual who collected the sample, the date and time of collection, preservation information, and requested analyses.

Proper sample submission

• Samples must be submitted as **official adult use samples** to be subject to any of the requirements in the testing rules for adult use cannabis including quality assurance and quality control.

Variation in Test Results

A cannabis product can have varying test results for a number of reasons, including:

- Improper homogenization and sampling techniques, which is the major cause of variation.
- Natural variation in the analytical process, which goes up to 5% in a single testing facility.
- The **pass/fail threshold** for a given analyte. An analyte with a failure threshold set at 1000 ppb, for example, would pass testing with a result of 980 ppb but then fail with a result of 1080 ppb even though those are relatively close results.
- The cannabis testing facility's **reporting limit** for including an analyte as a detection on the certificate of analysis (COA), which is determined by each testing facility individually depending on the technology used for the analysis and the validation procedures for each analyte.

Certified Cannabis Testing Facilities

For a testing facility to accept and analyze cannabis samples in Maine's Adult Use Cannabis Program, they must be:

- Licensed by Maine's Office of Cannabis Policy (OCP).
- Certified annually by Maine's Center for Disease Control & Prevention (CDC).
- Accredited by an independent, third-party accreditor using ISO/IEC 17025:2017 standards.