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Methamphetamine Sampling Guide

This information is provided as a guide based on the NIOSH 9111 standard for collecting samples for methamphetamine contamination analysis. ALS NZ strongly encourage samples to be collected by a competent third-party to ensure accurate and reliable results. **Unless sampled *and* tested by accredited facilities, the results may not comply with NZS8510:2017.**
"Results are only as good as the sampling technique" is a well-used adage in any form of testing. ALS NZ is IANZ accredited for the testing only of methamphetamine samples.

Sampling Equipment

The New Zealand Standard NZS8510:2017 (referred to as NZS8510) for methamphetamine analysis is based on the NIOSH 9111 standard which is widely accepted as the benchmark for sampling and analysis for methamphetamine and its precursors (https://www.cdc.gov/niosh/docs/2003-154/pdfs/9111.pdf).
This method consists of swabbing a 100 cm2 area with 8 or 12-ply gauze wipes. Methanol is the primary solvent used for methamphetamine recovery; therefore, it is important the swabs provided are still moist when collecting the samples.

Four Analysis Options

1. Individual Analysis of Discrete Samples:
   Each discrete sample analysed individually giving the most detailed report.
2. Laboratory Composite of Discrete Samples:
   Two to Ten discrete samples are combined into one laboratory analysis. ***Cannot*** be directly compared to the NZS8510 values. However, these samples can be re-tested individually upon request.
3. Individual Analysis of Field Composite Samples:
   Five swabs from five locations within a house/dwelling can be combined in field. This is classed as one sample for analysis. ***Cannot*** be directly compared to the NZS8510 values. A second site visit would be required for further/detailed analysis.
4. Laboratory Composite of Field Composite Samples:
   Two Field Composite tubes (up to 10 swabs) are combined within the laboratory to give an indication of methamphetamine contamination. ***Cannot*** be directly compared to the NZS8510 values. These field composite samples can be re-tested individually upon request. However, a second site visit would be required for detailed analysis.

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Table 1. Overview of which sampling methods are required for different assessments

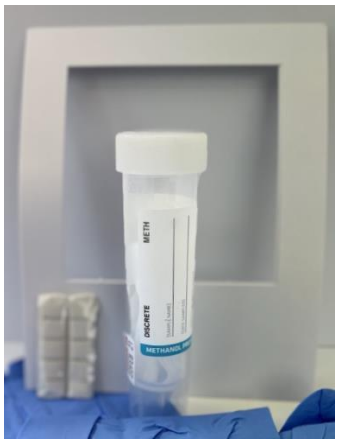
	Screening Assessment	Detailed Assessment	Post-Decontamination	Direct Comparison to NZS8510
Discrete- Individual Analysis	✓	✓	✓	✓*
Discrete- Lab Composite Analysis	✓	Upon re-test of the individual samples	✓	x
Field Composite – Individual Analysis	✓	x	✓	x
Field Composite – Lab Composite Analysis	✓	x	✓	x

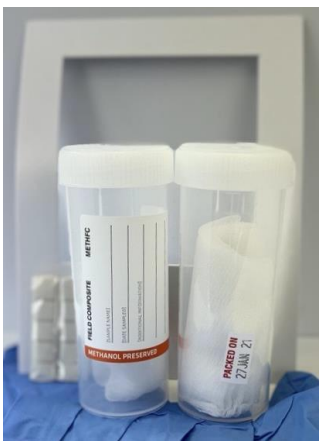
*Direct comparison to the NZS8510 is only feasible when using a 100 cm2 area as stated in the methodologies.

Sampling Kits Supplied by ALS NZ

1. Discrete Kit: An individual tube and swab used for individual analysis. Up to 10 samples can be combined as a laboratory composite. This contains a single tube with a methanol-soaked 12-ply gauze swab, a sampling template with a 10 cm x 10 cm "sampling window" and tacks to secure it to the wall, and a clean pair of nitrile gloves.
2. Field Composite Kit: Between 2 to 5 samples collected from the field are composited into one tube for an overview of contamination. Up to two field composite samples (10 swabs in total) can be combined as a laboratory composite. This kit contains a single tube with 5 x methanol-soaked 12-ply gauze swabs, a second tube for the swabs to be transferred to after sampling the surface,5 x sampling templates with a 10 cm x 10 cm "sampling window" and 10 x tacks to secure them to the wall, and a clean pair of nitrile gloves.

Figure 1. Photo showing a discrete kit (left) and a field composite kit (right).





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