

Sampling Seized Drugs for Qualitative and Quantitative Analysis



WHAT IS AN AAFS STANDARD FACTSHEET?

The AAFS produces clear, concise, and easy-to-understand factsheets to summarize the contents of technical and professional forensic science standards on the OSAC Registry. They are not intended to provide an interpretation for any portion of a published standard.

WHAT IS THE PURPOSE OF THIS STANDARD?

Seized drug evidence often consists of large submissions. It may not be feasible to test everything submitted as part of the evidence. The analysis conducted is often applied to a sampling of the evidence.

This standard guide covers minimum considerations for the sampling of seized drugs for qualitative tests (that identify the substance present), and quantitative tests (that determine how much of the substance is present).

The principal purpose of sampling is to answer relevant questions about a population by examination of a portion of the population. By developing a sampling strategy and implementing appropriate sampling schemes, a forensic science service provider (FSSP) will minimize the total number of required analytical determinations.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

Adherence to these standards establishes consistency amongst FSSPs, promotes efficient use of resources, and encourages general acceptance of sampling practices amongst the criminal justice system.

The standard provides direction to the forensic drug analyst community regarding seized drug testing.

FSSPs providing forensic seized drug services are encouraged to meet this standard.



HOW IS THIS STANDARD USED, AND WHAT ARE THE KEY ELEMENTS?

Guidelines for developing an appropriate sampling strategy that meet relevant legal and scientific requirements are described in this standard. The scope of sampling includes both statistical (probability-based) and non-statistical approaches to multi-unit populations.

If an inference of the whole population is to be drawn from the results generated from testing a sampling of the evidence, then the sampling plan must be either statistically based or have an appropriate statistical analysis completed with limits of the inference documented.

Population determination, type and method of sample selection, and when appropriate, sample reduction prior to analysis, are all part of the sampling scheme. Sampling information shall be included in FSSP reports and the language shall be clear in explaining the probability-based sampling, or if the testing applies only to the units tested.

This is a standard guide. Additional procedural steps beyond those required in the standard may be necessary.

FSSPs that cannot meet this standard internally may use external resources to meet the requirements (e.g., outsourcing, partnerships).

