

The Analytical Scope and Sensitivity of Forensic Toxicological Testing of Blood in Impaired Driving Investigations



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?

Toxicology testing is an essential part of impaired driving investigations. The results may be used as evidence in criminal and civil litigation and may impact potential substance abuse intervention and treatment.

This standard establishes the various substances that a forensic science service provider (FSSP) must be able to identify in blood (scope of testing), as well as the appropriate level of testing (sensitivity) that is required.

The requirements are adapted from the more comprehensive guidelines published through the work of the National Safety Council's Alcohol, Drugs, and Impairment Division.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

A standardized approach to this testing may contribute to more consistent and equitable prosecutions of impaired drivers.

Adherence to the standard provides more comparable data for the traffic safety community to better characterize the scope of the impaired driving problem and better educate the public on the risks.

FSSPs providing forensic toxicology services are encouraged to meet this standard.



HOW IS THIS STANDARD USED, AND WHAT ARE ITS KEY BENEFITS?

Requirements for analytical testing of blood for impaired driving investigations are specified in the standard. This includes tests for alcohol (ethanol) and other drugs that are commonly associated with impaired driving and/or have a known potential to cause impairment.

Adherence to the standard promotes the performance of appropriate toxicological testing in blood when investigating impaired driving. The thresholds or minimum concentrations are not intended to correlate to impairment or per se limits.

This is a standard of practice. Additional tests beyond those required in the standard may be necessary. Regional drug trends and case history should be considered to determine if additional drugs or substances should be included in the scope of testing.

The standard focuses on blood testing since it is currently the most common and informative sample utilized in these investigations. Oral fluid testing is another appropriate specimen that is increasing in use for impaired driving testing. Urine is considered a less appropriate sample.

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

