# Section Five
# Quality Assurance

## 5.9 Testing Guidelines and Reporting Criteria

### 5.9.1 BACKGROUND

To best utilize the resources available to support the ISP-FS toxicology discipline, the degree of analysis pursued should be guided by all available information. It may not always be necessary and/or appropriate to confirm all drug compounds present. With urine analysis, when a subject has admitted to use of prescription and/or over-the counter drugs that may impair driving, confirmation of all drugs present may not serve to strengthen pending charges. With drugs-of-abuse, confirming the presence of all drug compounds may not be necessary, depending on the circumstances. For instance, for Probation and Parole cases, prescription pharmaceuticals are most likely not a consideration. This method also covers reporting criteria.

### 5.9.2 SCOPE

This method addresses the factors to consider when determining the extent of analysis a toxicology case sample requires. It is intended to provide guidance to analysts; however, the decision to pursue testing remains at the discretion of each analyst. The goal of these considerations is for the efficient utilization of resources in order to provide timely analysis results to user agencies. This method covers reporting criteria to ensure consistent reporting in the lab system and to ensure limitations are properly expressed.

### 5.9.3 PROCEDURE

5.9.3.1 General

5.9.3.1.1 When available, the type of case associated with a toxicology sample should be determined.

5.9.3.1.2 The extent of analysis should be based on background information and the charges pending.

5.9.3.1.3 If no background information is provided, it is at the discretion of the analyst to perform only basic testing.

5.9.3.1.4 When an EIA screen result indicates the preliminary presence of a drug or drug class, unless current drug therapy is in agreement, confirmation of EIA results must be pursued if the confirmation of the compound(s) has the potential of providing an additional source of impairment for DUID.

5.9.3.1.5 Blood and Urine samples submitted for determination of drugs of abuse and other impairing substances should

be tested up to the point considering the criteria considered under 5.9.3.1 through 5.9.3.4, in essence justifying any potential charge in question. The extent of testing is at the discretion of each analyst; however, the following situations and examples should be factored into the evaluation process.

5.9.3.1.6 If the drug in question is recovered in the extraction procedure for another compound, it may be confirmed provided quality assurance requirements are met.

5.9.3.2 Testing Guidelines: Post-Blood Alcohol or Breath Testing Analysis

5.9.3.2.1 When the ethanol concentration is 0.10g/100cc, or greater, further testing for additional drugs, in either blood or urine, should not be pursued unless justified by case related circumstances. This is in consideration that the legal limit for ethanol is 0.08 grams per 100 cc blood.

5.9.3.2.2 If a breath test result is listed on the toxicology submittal form, and no indication of a problem with the test is noted, volatiles analysis should not be pursued unless the agency is contacted and it is determined that either the breath test was invalid or extenuating circumstances are involved.

5.9.3.2.3 Extenuating circumstances may include the following:

- Fatality or injury accidents.
- Death investigations.
- In the case of crashes where the subject is the driver and is deceased and further tox testing is requested, testing will be performed on samples that have a blood alcohol content of less than 0.20 grams per 100 cc of blood.

5.9.3.2.4 The submitting officer or agency is responsible for providing justification for additional testing. Justification could take the form of a note on the submittal form, memo, e-mail or letter outlining the situation or a case report.

5.9.3.2.5 If the ethanol concentration is 0.10 g/100cc or lower, future testing for other impairing drugs will not be pursued if the additional testing is not requested on the *Toxicology Evidence Submittal Form.*

5.9.3.3 Testing Guidelines: Proceeding After EIA Screen

5.9.3.3.1 When current prescription drug therapy has the ability to trigger a positive enzyme immunoassay (EIA) response, the presence does not have to be confirmed in all situations.

5.9.3.3.2 **Example One**

Positive enzyme immunoassay (EIA) screen result for methamphetamine and benzodiazepines is indicated. The sample is collected as the result of a suspected DUID. The submittal form indicates symptoms consistent with stimulant use and lists diazepam as current drug therapy. When the methamphetamine confirmation data is processed, nordiazepam is present. The qualitative presence of nordiazepam may be confirmed in this sample. If no benzodiazepine had been present in the extraction to recover methamphetamine, no additional testing has to be pursued for a benzodiazepines class drug.

5.9.3.3.3 **Example Two**

A sample indicates a positive enzyme immunoassay (EIA) benzodiazepine screen. The case is a probation violation. The submittal form lists diazepam as current drug therapy. In this situation, no additional testing should be pursued for a benzodiazepine class drug.

5.9.3.3.4 **Qualifying Statements**

In the above examples, if no analysis for the e.g. benzodiazepines is pursued, a qualifying statement must be placed on the analysis report.

| |
|---|
| Preliminary testing indicates the presence of a ***Benzodiazepine class compound*****.** Confirmatory testing was not pursued because the ***Benzodiazepine Alprazolam*** is said to be part of current prescription drug therapy. |

5.9.3.4 Testing Guidelines: Prescription Drugs Not Covered by EIA Screen

5.9.3.4.1 When a prescription drug compound is detected in a general extraction procedure, the confirmation of the drug's presence is not required if other drugs present have the potential to justify the pending charge.

5.9.3.4.2 **Example One**

Positive enzyme immunoassay (EIA) screen results for methamphetamine and opiates. The sample is collected as the result of a suspected DUID. The submittal form indicates symptoms consistent with stimulant and narcotic analgesic use. Effexor (venlafaxine) is listed as current drug therapy. When the methamphetamine confirmation data is processed, venlafaxine is present. It is at the discretion of an analyst of whether or not to run a venlafaxine standard and confirm its presence.

5.9.3.5 Enzyme Immunoassay Positive for Several Drugs-of-Abuse

5.9.3.5.1 When positive EIA screen results are indicated for several drugs of abuse, all involved drug compounds need not be confirmed.

5.9.3.5.2 **Example Three**

EIA screen is positive for amphetamine, methamphetamine, opiates, and cocaine metabolite. Initial confirmatory analysis indicates the presence of amphetamine, methamphetamine, codeine, morphine and 6-monoacetylmorphine. No cocaine or ecgonine methyl ester is detected. After consideration of all available information, it is at the discretion of the analyst whether or not to pursue the qualitative confirmation of benzoylecgonine.

5.9.3.6 Confirmation of Metabolites When Parent Drug is Detected

5.9.3.6.1 For qualitative analysis, when a parent drug compound is detected, the confirmation of the presence of associated metabolites is not required.

5.9.3.6.2 **Example**

General basic extraction indicates the presence of propoxyphene. The confirmation of the presence of norpropoxyphene is at the discretion of the analyst.

5.9.3.7 Reporting criteria

5.9.3.7.1 When a drug is confirmed and meets the confirmation criteria outlined in the method, the report will list Drugs Confirmed: any drugs confirmed will be listed.

5.9.3.7.2 When no drugs are confirmed in a sample, the report will list Drugs Confirmed: None

5.9.3.7.3 When EIA screening results are positive but confirmatory testing is not done, the following comment will be added to the report: Preliminary testing indicated the presence of a class drug, confirmatory testing not pursued because _____.

5.9.3.7.4 For positive benzodiazepine and opiate screens in blood where these drugs were not seen in the confirmation, the following comment will be added to the report: Preliminary testing indicated the presence of benzodiazepine-class compounds, however no benzodiazepine-class compounds were confirmed. This may be due to current limitations in the types and concentrations of benzodiazepines that can be confirmed by ISP Forensic Services.

5.9.3.7.5 When a drug is indicated in a confirmatory test but does not meet the criteria for identification in the analytical method, at the analysts' discretion the following statement may be included.
Inconclusive for _____, as it does not meet ISP Forensic Services toxicology criteria for identification. This is due to _____.

Example: Inconclusive for zolpidem, as it does not meet ISP Forensic Services toxicology criteria for identification. This is due to mass spectral differences between sample and reference material.

5.9.3.7.6 Reporting listed Rx therapy will be at the analyst's discretion, but is recommended for cases where it could alleviate confusion of where a drug came from. For example if Oxazepam was detected in urine, the comment could read: Prescription drug therapy is said to include Valium (diazepam), oxazepam is an active metabolite of diazepam.

# *Revision History*

## Section Five
**Quality Assurance**

### 5.9 Testing Guidelines

| Revision No. | Issue Date | History |
|---|---|---|
| 0 | 03-09-2005 | Original Issue |
| 1 | 05-07-2007 | Updated format |
| 2 | 07-28-2008 | Updated Volatiles Analysis Criteria, 5.9.3.2. Reformatted. |
| 3 | 11-11-2011 | Removed support of drug possession as an extenuating circumstance, changed wording on confirming metabolites when parent drug is detected. |
| 4 | 9/11/12 | Updated 5.9.3.2.3 to remove a DRE exam as an extenuating circumstance, and added new criteria of a 0.20 or less for dead drivers. |
| 5 | 1/7/2013 | Added reporting criteria, removed an example from 5.9.3.3 because it was more clearly covered in 5.9.3.5 and they contradicted each other. |