



Physical Evidence Bulletin

Toxicology

Blood or Urine Samples for Forensic Toxicological Analysis

Purpose	The Physical Evidence Bulletin (PEB) is a guideline intended for law enforcement agencies to follow in order to submit evidence to BFS Laboratories. Physical Evidence Bulletins are not intended to be used in lieu of training in the collection of evidence.
Overview	The Bureau of Forensic Services (BFS) Toxicology Laboratory provides analytical services to law enforcement agencies throughout the State of California in regions where local forensic laboratory services are not available. Assistance is also provided to other county and agency laboratories in situations that are beyond their capabilities. Requests for toxicology services include cases involving driving under the influence of drugs where the measured alcohol level is at or below 0.08% (Vehicle Code violations), 11550 Health and Safety Code violations, and Non-Violent/Violent Felonies (Penal Code violations).
Evidence submission guidelines	The minimum quantity of sample recommended to perform drug screening and confirmation analyses and still provide sufficient quantity for referee analysis at the defendant's discretion is 5 milliliters for both blood and urine. If an alcohol analysis is requested, an additional 3 milliliters should be collected for a total of 8 milliliters.
Collection, marking, and packaging	<p>Blood and urine samples should only be submitted in the sample containers approved by the California Department of Justice, Bureau of Forensic Services. In most cases, blood is the preferred sample. With the exception of alcohol, the present pharmacological state of an individual cannot be assessed solely by the finding of a drug in a urine sample. If there is a significant time period (greater than 12 hours) between the incident and collection of a sample, a urine sample may be a better sample. Urine is the preferred sample in sexual assault cases.</p> <p>NOTE: If alcohol is suspected, please refer to the Blood and/or Urine Alcohol Physical Evidence Bulletin for guidelines pertaining to the collection, handling, and preservation of blood and urine as required by Section 1219 and 1219.1 of Title 17 of the California Code of Regulations.</p>

The guidelines for the collection of blood samples for toxicological analysis are summarized below:

- The requesting officer should witness the withdrawal of the sample. When the officer witnesses the actual withdrawal of the blood, it may eliminate the need for the phlebotomist to appear as a witness at trial.
- The collection tube should be inverted after collection at least five times to ensure mixing of the preservative and blood.
- The person drawing the blood (i.e., phlebotomist) should fill out and initial the label and affix it firmly to the blood collection tube.
- The officer should initial the label and place the sample in the evidence envelope.
- The officer should immediately complete the information on the evidence envelope and seal securely.
- Appropriate steps to ensure integrity of the sample should be taken:
 - Once the packaging (i.e., evidence envelope) is sealed, it is recommended that it not be opened until analysis by the laboratory.

The guidelines for the collection of urine samples for toxicological analysis are summarized below:

- An authorized member of the law enforcement agency, preferably the arresting officer, should supervise the collection of the samples.
- Clean containers with tight fitting screw caps and a dry preservative are recommended for collecting urine samples. BFS laboratories can provide sample containers with 750 milligrams of dry preservative (sodium fluoride) added, evidence envelopes, and mailing containers.
- Invert urine container several times to mix urine with preservative.

Marking blood and urine containers

The **label** for the blood/urine collection container should contain at least the following information:

- Full name of subject.
- Date blood/urine collected.
- Initials of person collecting blood/urine.
- Initials of witnessing officer.

Packaging blood/urine collection containers

The blood/urine collection container should be sealed in an evidence envelope marked as follows:

- Full name of subject.
- Subject driver's license number.
- Submitting agency.
- Geographical location where blood/urine sample was collected; i.e., name and /or address of hospital, jail, or other facility.
- Name of person collecting blood/urine sample.
- Date of Birth.
- Date and time the blood/urine sample was collected.
- Signature of witnessing officer.

- Other information such as agency or laboratory number, offense charged, anatomical location from which blood was drawn, or any special instructions may be added.

NOTE: Blood mailing kits including blood collection tubes, envelopes, labels and urine mailing kits including urine sample vials, envelopes and labels are available upon request.

Cautions

- Secure urine container caps tightly.
 - Label containers and envelopes correctly.
 - Latex gloves or the equivalent should be worn when handling blood, urine, or other physiological fluids.
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Limitations

- Items received that are not properly sealed will be returned to the submitting agency for re-sealing prior to acceptance into the laboratory.
 - Felony non-driving cases (i.e., homicide, sexual assault, etc.) are subject to comprehensive toxicological analysis and may require more time to complete than routine casework. A request can be made by the District Attorney's office or law enforcement agency through the regional DOJ Criminalistics Laboratory for the analysis of samples from living suspects/victims of violent crimes. BFS does not perform toxicological analysis on deceased subjects (post-mortem analysis).
 - Analysis is limited to drugs of abuse and many pharmaceutical drugs that affect the central nervous system. Samples will not be analyzed for poisons (i.e., arsenic, lead, cyanide, etc.) due to the lack of specialized equipment necessary for these analyses.
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For Further Information and Additional Resources

Please contact your regional BFS laboratory with any further questions that you may have.

For a list of regional laboratories please go to:

http://ag.ca.gov/bfs/pdf/bfs_brochure.pdf or <http://ag.ca.gov/bfs/>

If alcohol is suspected, please refer to the Urine and Blood Alcohol Physical Evidence Bulletins for specific requirements for the submission of samples.

To locate the most current Physical Evidence Bulletins please go to:

<http://ag.ca.gov/cc/reference/reference.php#peb>

Note: This revised PEB combines the older version of PEB 8 (Toxicological Analysis in Driving Under the Influence Cases) and PEB 28 (Toxicological Analysis to Determine Use of Controlled Substances.) PEB 28 has been deleted.