



# Physical Evidence Bulletin

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## Toxicology

### Blood or Urine Samples for Forensic Toxicological Analysis

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<b>Purpose</b>	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.
<b>Overview</b>	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 and Felonies (Penal Code violations)). Testing of cases with alcohol levels above 0.08% (Vehicle Code violations) requires Toxicology Laboratory management approval.
<b>Evidence submission guidelines</b>	The minimum quantity of sample recommended to perform drug screening and confirmation analyses and still provide sufficient quantity for reference 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.
<b>Collection, marking, and packaging</b>	<p>Blood and urine samples should only be submitted in the sample containers approved by BFS. In most cases, blood is the preferred sample. 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><b>NOTE:</b> 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, anticoagulant, 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 and time 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.
- Subject's date of birth
- Submitting agency.
- Submitting agency case number
- Offense charge
- 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 and time the blood/urine sample was collected.

- Signature of witnessing officer.
- Other information such as anatomical location from which blood was drawn, or any special instructions, such as requested or suspected drugs 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. Please contact your local BFS Regional laboratory.

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**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 biological fluids.
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**Limitations**

- Due to current staffing shortages, all toxicology casework will undergo targeted screen and confirm analysis. Please contact the Toxicology Laboratory if a specific drug is suspected and requires testing.
  - 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. Please contact the Toxicology Laboratory for a copy of the approved drug list.
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**For Further Information and Additional Resources**

Please contact the Toxicology laboratory with any further questions that you may have.

For a list of regional laboratories please go to:  
<http://oag.ca.gov/bfs/services>

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:  
<https://oag.ca.gov/bfs/peb>

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