

Solano County District Attorney

Bureau of Forensic Services

**EV-1.02**



Revision 2.1

Approval: Lab Director

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***Physical Evidence Bulletin: Blood Alcohol***

***Uniform Standards for Withdrawal, Handling, and Preservation of Blood  
Samples for Forensic Alcohol Analysis***

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## INTRODUCTION

In accordance with Vehicle Code Section 23158, the California Department of Highway Patrol, in cooperation with the Department of Health and the Department of Justice, has adopted uniform standards for withdrawal, handling and preservation of blood samples prior to analysis. As with all biological specimens, certain precautions must be taken. Blood sample collection kits are provided by the laboratory.

### 1. SAMPLING, COLLECTING AND PRESERVING

Blood samples obtained from persons involved in traffic accidents or traffic violations shall be collected, handled and preserved as required by Section 1219 and 1219.1 of Title 17 of the California Code of Regulations.

Blood samples are collected by venipuncture from living individuals as soon as feasible after the alleged offense and only by persons authorized by Section 23158 of the California Vehicle Code (licensed physician and surgeon, registered nurse, licensed vocational nurse, duly licensed clinical laboratory technologist or clinical laboratory bioanalyst, unlicensed laboratory personnel regulated pursuant to Sections 1242, 1242.5, and 1246 of the Business and Professions Code, or certified paramedic acting at the request of a peace officer). Alcohol or other volatile organic disinfectants **MAY NOT BE USED** to clean the skin where a specimen is to be collected. Only aqueous disinfectants (e.g. benzalkonium chloride (“Zephiran”) or povidone-iodine (“Betadine”)) may be used to disinfect the skin before venipuncture.

Sterile dry hypodermic needles and syringes or clean dry vacuum-type containers with sterile needles may be used. No reusable equipment may be used. The blood sample drawn will be deposited into a clean, dry container (commercially prepared blood collection tube) which is closed with an inert stopper. Sample containers cannot be reused.

Tubes for collecting blood must contain an anticoagulant and a preservative. The blood sample container that should be utilized for blood collection is a commercially prepared gray-stoppered tube that contains 20mg of potassium oxalate and 100mg of sodium fluoride. Any other containers or tubes may not be conducive to laboratory methods for blood alcohol or toxicology analysis and will be considered non-standard containers. Occasionally, hospital drawn blood samples may be submitted in non-standard containers. Any submission utilizing a non-standard container will be notated on the final report.

The tubes provided in the kit hold a volume of 10 mL, which is the preferred volume of blood sample for analysis. The minimum quantity of blood required to perform duplicate determinations by the laboratory and still provide sufficient quantity for referee analysis by the defendant is 3 mL (approximately one teaspoon). Any submission containing less than the minimum quantity may still be analyzed and will be notated on the final report.

The blood sample collection kits provided by the laboratory contain two blood tubes, one of which may be retained for referee analysis by the subject.

### 2. PACKAGING

Maintenance of identity and integrity of the sample, required by Section 1219 of Title 17 of the California Code of Regulations, shall include the following procedures:

2.1. The label for the blood tube shall contain at least the following information:

- 2.1.1. Full name of subject
- 2.1.2. Initials of person drawing blood
- 2.1.3. Date and time of blood draw
- 2.1.4. Name or initials of witnessing officer

SUBJECT'S NAME _____
INITIALS OF PERSON _____
DRAWING OF BLOOD/OR WITNESS TO URINE _____
DATE _____ TIME _____
WITNESSING OFFICER _____

**BLOOD TUBE LABEL**

2.2. The blood tube(s) shall be sealed in the "BLOOD SAMPLE FOR ALCOHOL/DRUG ANALYSIS" envelope. The envelope should be filled out completely and include at least the following information:

- 2.2.1. Full name of subject
  - 2.2.2. Submitting agency and agency case number
  - 2.2.3. Geographical location where blood sample was drawn; e.g., name and/or address of hospital, jail or other facility
  - 2.2.4. Name of person drawing blood sample
  - 2.2.5. Date blood sample drawn
  - 2.2.6. Time blood sample drawn
  - 2.2.7. Signature of witnessing officer
  - 2.2.8. Chain of custody for all persons handling the evidence
- 2.3. Other information such as driver's license, offense charged, anatomical location from which blood sample was drawn, or any special instructions may be added.
- 2.4. Blood kits including BLOOD SAMPLE FOR ALCOHOL/DRUG ANALYSIS envelope, security tape, two blood tubes, labels, protective blood tube containers and absorbent pad are available on request.



Solano County  
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Laboratory Barcode  
Only

**BLOOD SAMPLE FOR ALCOHOL/DRUG ANALYSIS**

Alcohol  
 Drugs (Amphetamines, Opiates, Cocaine)  
 Other (Please list): \_\_\_\_\_

**Breath results:** \_\_\_\_\_      **Device:**  PAS    7110    9510

**Agency:** \_\_\_\_\_      **Arrest Location**  
 Agency Case No.: \_\_\_\_\_       City Limits  
 Offense(s): \_\_\_\_\_       Unincorporated Area  
 Offense Date: \_\_\_\_\_      Name of City: \_\_\_\_\_

Subject's Name (Last, First, M) \_\_\_\_\_ Driver's License \_\_\_\_\_ Date of Birth \_\_\_\_\_

Person Drawing Blood \_\_\_\_\_ Location of Withdrawal \_\_\_\_\_ Date and Time Blood Drawn \_\_\_\_\_

Investigating Officer (Print) \_\_\_\_\_ Badge No. \_\_\_\_\_  
 Witnessing Officer Signature \_\_\_\_\_

**CHAIN OF CUSTODY:**

Received From:	Received By:	Rec. Date/Time

**FOR LABORATORY USE ONLY:**

Sealed _____	Unsealed _____	Other: _____	#Vials: _____
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PLACE EVIDENCE SEAL HERE

Arresting Officer should seal with tape provided in kit and initial/date across the seal

**INSTRUCTIONS TO THE PHYSICIAN, NURSE TECHNOLOGIST, BIOANALYST, PHLEBOTOMIST, OR PARAMEDIC DRAWING BLOOD FOR ALCOHOL DETERMINATION:**

- Obtain the permission of the subject to draw blood by venipuncture.
- Cleanse the area to be punctured with a nonvolatile, non-alcoholic disinfectant (Benzalkonium chloride or Povidone-Iodine, etc.)
- Label the vials of blood (not the plastic safety container) with the labels provided giving: Full name of subject, Date, Time and name of individual drawing the blood.

**INSTRUCTIONS TO POLICE OFFICERS ON COLLECTING BLOOD SAMPLES FOR ALCOHOL ANALYSIS:**

- Submitting officer must witness consent of the subject and the collection of the blood sample.
- Initial the vial label.
- The information required on the outside of this envelope is to be completed in full by the officer.
- The blood samples are to be placed in this envelope and sealed with the enclosed seal.
- Transport or arrange to transport the envelope to the laboratory (Monday through Friday 8 A.M. to 5 P.M.). If mailing, place envelope in provided box and seal with second enclosed seal.

**NOTE:** This kit is not to be used for collecting blood samples for determining blood type or HIV status. The enclosed blood samples are for alcohol and drug analysis only.



**ENVELOPE FRONT**

**ENVELOPE BACK**

**SECURITY TAPE**

### 3. PROCEDURES FOR OBTAINING BLOOD SAMPLES

- 3.1. The requesting officer should witness the withdrawal of the blood sample to verify the source and ensure the integrity of the evidence.
- 3.2. The person drawing the blood (e.g., phlebotomist or other authorized person) shall fill out and initial the labels and affix them firmly to the blood tubes.
- 3.3. The samples shall then be given to the officer who, in turn, shall initial the labels and place the samples in the prescribed envelope. The officer shall complete the required information on the envelope and securely seal with the included security tape.
- 3.4. Appropriate steps to ensure integrity of sample shall be taken:
  - 3.4.1. Once the envelope or other container is sealed, it must not be opened except for analysis in the laboratory.
  - 3.4.2. Each person having possession of the sealed envelope shall sign the space provided for recording the "Chain of Custody".

### 4. POST MORTEM SAMPLES

The laboratory does not routinely analyze post mortem samples.

## 5. ANALYSIS

The laboratory will determine the best methods to employ in the analysis of submitted evidence items. Methods used will be approved and validated by the laboratory. All samples with a reported blood alcohol concentration less than 0.10 %(w/v) or that have a felony charge will be automatically forwarded to toxicology for additional analysis.

## 6. RE-EXAMINATION

The laboratory does not routinely examine materials that have been previously examined by another laboratory. Re-examination requests should be made in writing by the submitting agency with an endorsement by the prosecuting attorney having jurisdiction in the case.

## 7. EVIDENCE DISPOSITION

Blood samples submitted for analysis will generally be retained by the laboratory for one year; at which time they will be returned to the submitting agency. The laboratory will not be responsible for destruction of evidence.

**For further information on collection of blood for forensic alcohol analysis contact the laboratory directly.**

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