

Solano County District Attorney
Bureau of Forensic Services

EV-1.03



Revision 2.3

Approval: Lab Director

Effective Date: 6/15/2023

***Physical Evidence Bulletin:
Urine Alcohol***

Urine as a Specimen for Alcohol Determination

CONTENTS

<i>Introduction</i>	3
1. Sampling, Collecting and Preserving	3
2. Packaging	4
3. Procedures For Obtaining Urine Specimens	5
4. Postmortem Specimens	5
5. Analysis	5
6. Re-Examination	6
7. Evidence Disposition	6

INTRODUCTION

The degree of alcohol influence is based upon the amount of alcohol in the bloodstream. There is a correlation of alcohol in urine with alcohol in blood at a particular time if the urine has been properly collected. Therefore, urine can be used to determine an equivalent blood alcohol concentration under certain conditions. Urine specimens obtained from persons and submitted to the laboratory for analysis should be collected in accordance with Vehicle Code Section 23158.

As with the handling of all biological specimens, certain precautions must be taken. Urine specimen collection kits are provided by the laboratory.

1. SAMPLING, COLLECTING AND PRESERVING

- 1.1. The following summarizes the important considerations in the collection and preservation of urine specimens for alcohol analysis:
 - 1.1.1. For the purposes of analysis of urine specimens, there are two different types of specimens, the "Void" and the "Sample":
 - 1.1.1.1. The "Void" is the first urine specimen that is produced from the bladder. The subject should be instructed to completely empty their bladder. This specimen is the "Void" and may or may not be collected and sent to the laboratory for analysis (see sections 1.1.6 and 1.1.7). The time of the "Void" should be documented.
 - 1.1.1.2. The "Sample" is the specimen that will be collected at least 20 minutes after the "Void". At least 20 minutes after the "Void", the subject should be instructed to provide a second specimen. This second specimen is the "Sample" that will be collected and submitted to the laboratory for analysis. The time of the "Sample" should be documented.
 - 1.1.2. Collect urine specimen in the urine cup provided in the URINE SAMPLE FOR ALCOHOL/DRUG ANALYSIS envelope (urine kit).
 - 1.1.3. All fields on the specimen labels provided must be filled out and the label placed on the urine cup(s). It is important to carefully note the date and time on the specimen labels and the urine kit.
 - 1.1.4. Specimen containers for collecting urine must contain a preservative to prevent microbial growth. The cups in the urine kit contain 750 mg of sodium fluoride. Any other containers may not be conducive to laboratory methods for urine alcohol or toxicology analysis and will be considered non-standard containers. Any submission utilizing a non-standard container will be notated as such on the final report.
 - 1.1.5. The urine cups provided in the urine kit hold a volume of 80 mL. The recommended minimum quantity of urine to perform duplicate determinations by the laboratory and still retain sufficient quantity for referee analysis by the defendant, if requested, is 10 mL (~1/2-inch-deep in urine cup). If the minimum quantity cannot be collected, the small amount of urine collected may still be sufficient for analysis and should be forwarded to the laboratory.
 - 1.1.6. For non-driving offenses, collect the "Void" in the urine cup provided as well as the "Sample" into a separate urine cup and submit both specimens to the laboratory for analysis. Two urine kits may be used. This is especially true where a significant amount of time has passed between the collection of the specimens and the time of the offense. The first collection is to be circled or marked as "Void" and the second specimen circled or marked as "Sample".

1.1.7. For driving related offenses, only the “Sample” needs to be collected and submitted to the laboratory.

2. PACKAGING

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

- 2.1. The label for the urine cup shall contain at least the following information:
 - 2.1.1. Full name of subject
 - 2.1.2. Initials of person witnessing urine collection
 - 2.1.3. Date and time of urine collection
 - 2.1.4. Name or initials of witnessing officer
- 2.2. Affix the label to the urine cup and ensure that the cap is attached securely. The cap must be securely and tightly attached to the urine cup to prevent leakage.
- 2.3. The urine cups(s) should be sealed in the provided biohazard bag and then shall be sealed in the “URINE SAMPLE FOR ALCOHOL/DRUG ANALYSIS” envelope. The envelope should be filled out completely and include at least the following information:
 - 2.3.1. Full name of subject
 - 2.3.2. Submitting agency and agency case number
 - 2.3.3. Investigating officer name and badge number
 - 2.3.4. Circle “VOID” or “SAMPLE” based on the specimen type submitted
 - 2.3.5. Collection time of both the “Void” and the “Sample”
 - 2.3.6. Signature of person witnessing collection of urine
 - 2.3.7. Chain of custody for all persons handling the evidence
- 2.4. Other information such as subject’s driver’s license and date of birth, offense information, geographical location from which urine specimen was collected, or any special instructions should be added.
- 2.5. Urine kits including URINE SAMPLE FOR ALCOHOL/DRUG ANALYSIS envelope, security tape, urine specimen cup with preservative, specimen cup label, biohazard bag, and absorbent pad are available by request.

Solano County Office of the District Attorney Bureau of Forensics		Laboratory Barcode Only
URINE SAMPLE FOR ALCOHOL/DRUG ANALYSIS		
Type of Drug Suspected (Check box and, if known, indicate):		
<input type="checkbox"/> Stimulants (Cocaine/Amphetamine)		
<input type="checkbox"/> Opiates (Heroin/Codine/Morphone)		
<input type="checkbox"/> Depressants (Benzodiazepines/Bartbitates)		
<input type="checkbox"/> Cannabinoids (Marijuana)		
<input type="checkbox"/> Others (Please list):		
Subject's Name (Last, First, MI)	Driver's License:	Date of Birth
Agency	Agency Case No.	Offense(s)
Investigating Officer (Print)	Badge No.	Offense Date
VOID SAMPLE		
Circle Type of Specimen Submitted	Time of Void	Time of Sample
Witnessing Officer/Person	Date/Time	
CHAIN OF POSSESSION:		
Received from	Received by	Date
FOR LABORATORY USE ONLY:		
<input type="checkbox"/> Sealed	<input type="checkbox"/> Drawn	<input type="checkbox"/> Other

ENVELOPE FRONT

PLACE EVIDENCE SEAL HERE

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

INSTRUCTIONS TO INDIVIDUALS COLLECTING URINE SAMPLES FOR ALCOHOL/DRUG ANALYSIS

1. Submitting officer must witness the consent of the subject to provide a urine sample and supervise the collection thereof. The collection should be handled in such a manner as to ensure the source of the urine and to prevent the substitution of tap water for the sample.
2. **FOR ALCOHOL ANALYSIS** - Have subject void bladder. Wait at least 20 minutes and then have the subject provide a minimum of 10cc of urine in the enclosed specimen cup recording collection time of sample on front of this envelope.
3. **FOR DRUG ANALYSIS** - Collect in the enclosed container a minimum of 10cc of urine from the subject recording collection time of sample on front of this envelope.
3. Secure cap on specimen cup tightly!
4. Label the urine sample bottle with the label provided giving:
 - a. Full name of Subject
 - b. Date, time and initials of person collecting sample
5. The submitting officer should initial the seal on the urine sample.
6. The information on this envelope is to be completed by the submitting officer.
7. The urine sample is to be placed in this envelope and sealed.
8. Transport or arrange to transport the envelope to the Forensic Laboratory (Monday through Friday 8 A.M. to 5 P.M.)

ENVELOPE BACK

SUBJECT'S NAME _____

INITIALS OF PERSON
DRAWING OF BLOOD/OR WITNESS TO URINE _____

DATE _____ TIME _____

WITNESSING OFFICER _____

URINE CUP LABEL

3. PROCEDURES FOR OBTAINING URINE SPECIMENS

- 3.1. The requesting officer should witness the collection of the urine specimen to verify the source and ensure the integrity of the evidence. Special precautions should be taken to prevent contamination or adulteration of the urine specimen.
- 3.2. The person collecting the urine (e.g., officer or other authorized person) shall fill out and initial the label(s) and affix them firmly to the urine cup(s). The caps must be securely and tightly attached to the urine cup to prevent leakage.
- 3.3. The urine specimen(s) shall then be given to the officer who, in turn, shall initial the label(s) and place the urine specimen(s) in the biohazard bag and into 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 urine specimen 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. POSTMORTEM SPECIMENS

The laboratory does not routinely analyze postmortem specimens.

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 results will be converted to an equivalent blood alcohol concentration. All cases with a reported equivalent blood alcohol concentration less than 0.100 %(w/v) or that have a felony charge may be subject to additional toxicology analysis.

6. RE-EXAMINATION

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

7. EVIDENCE DISPOSITION

Evidence will not be permanently retained by the laboratory. Specimens will routinely be returned to the submitting agency after being stored refrigerated in the laboratory for a minimum of 12 months after the date of receipt.

The laboratory generally does not collect or create evidence items for future testing without a specific request. If retention of evidence is required, this request should be made prior to the end of the 12-month period.

For further information on collection of urine for forensic alcohol analysis contact the laboratory directly:

Office of the District Attorney

Bureau of Forensic Services

2201 Courage Dr., Ste. 2119

Fairfield, CA 94533

PH: (707) 784-4400

FAX: (707) 784-6205