

State of California—Health and Human Services Agency California Department of Public Health



EDMUND G. BROWN JR.

Governor

KAREN L. SMITH, MD, MPH Director and State Public Health Officer

March 30, 2017

TO:

FORENSIC ALCOHOL ANALYSIS LABORATORIES

SUBJECT:

NEW REGULATIONS PERTAINING TO FORENSIC ALCOHOL ANALYSIS

The Department of Public Health recently adopted new regulations pertaining to forensic alcohol analysis. The text of all the California Code of Regulations can be viewed online at the Office of Administrative Law website (https://www.oal.ca.gov/). For your convenience, I have attached a document which contains the Title 17 regulations that pertain to forensic and breath alcohol analysis. The new regulations will take effect on April 1, 2017.

If you have questions regarding the new regulations, please email these to fdlb.info@cdph.ca.gov. This will enable us to keep track of the questions. If problems are identified, we will be better able to address these with future revisions to the regulations as determined through the review committee process.

Thank you for your cooperation in maintaining reliable forensic alcohol analysis in the State.

Bob Moezzi, Ph.D., Branch Chief

Food and Drug Laboratory Branch

Enclosures



California Code of Regulations Title 17

Division 1. State Department of Health Services Chapter 2. Laboratories Subchapter 1. Service Laboratories Group 8. Forensic Alcohol Analysis and Breath Alcohol Analysis

Article 1. General

§ 1215. Definitions.

- (a) "Alcohol" means the unique chemical compound, ethyl alcohol. When referencing compounds to be avoided, such as skin disinfectants, alcohol means any organic compound in which an hydroxyl functional group is bound to a saturated carbon atom.
- (b) "Alveolar" refers to the smallest air sacs in the lungs and to that portion of the expired breath which is in equilibrium with respect to alcohol with the immediately adjacent pulmonary blood.
- (c) "Breath Alcohol Testing" means the analysis of a person's expired breath, using a breath testing instrument to obtain a breath alcohol result.
- (d) "Competency Test" means the evaluation of a person's ability to perform work in forensic alcohol analysis prior to the performance of independent testing.
- (e) "Concentration" means the weight amount of alcohol contained in a unit volume of liquid or a unit volume of gas under specified conditions of temperature and pressure. In the case of a tissue specimen, "concentration" means the weight amount of alcohol contained in a unit weight of specimen.
- (f) "Department" means the California State Department of Public Health and its duly authorized representatives.
- (g) "Forensic Alcohol Analysis" means the use of specialized equipment, instruments, and methods to measure the concentration of alcohol in samples of blood, urine, or tissue of persons involved in traffic accidents or traffic violations.
- (h) "Forensic Alcohol Analyst" means a person employed by a forensic alcohol laboratory who is responsible for all aspects of the performance of forensic alcohol analysis.
- (i) "Forensic Alcohol Laboratory" means a place at which specialized equipment, instruments, and methods are used by forensic alcohol analysts to measure the concentration of alcohol in samples of blood, breath, urine, or tissue of persons involved in traffic accidents or in traffic violations; this may be an activity of a

laboratory engaged in activities in addition to forensic alcohol analysis.

- (j) "Laboratory" means an entity capable of assuming the responsibility of fulfilling the requirements of the regulations.
- (k) "Method" means the procedures used by a forensic alcohol analyst to determine the alcohol concentration in a sample or specimen.
- (*l*) "NIST" is an abbreviation for the National Institute of Standards and Technology.
- (m) "NIST Certified Reference Material (CRM)" means a reference material characterized by a metrologically valid procedure for one or more specified properties, accompanied by a certificate that provides the value of the specified property, its associated uncertainty, and a statement of metrological traceability.
- (n) "NIST Standard Reference Material (SRM)" means a CRM issued by NIST that also meets additional NIST-specific certification criteria and is issued with a certificate or certificate of analysis that reports the results of its characterizations and provides information regarding the appropriate use(s) of the material.
- (o) "NIST Traceable" means a commercially produced reference material with a well-defined traceability linkage to existing NIST standards for chemical measurements.
- (p) "Precautionary Checklist" means a guide to assist in the operation of a breath instrument.
- (q) "Proficiency Test" means a test to evaluate the continuing competence of analysts and the performance of a laboratory.
- (r) "Sample" or "Specimen" means a representative portion of blood, urine, tissue, an artificially constituted material, or a portion of expired breath which is essentially alveolar in composition obtained for the purpose of measuring its alcohol concentration.
- (s) "Set" means a group of samples analyzed in a continuous time span.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. New Group 8 (Sections 1215, 1215.1, 1216, 1216.1, 1217, 1217.1 through 1217.8, 1218, 1218.1 and 1218.2) filed 8-10-70; effective thirtieth day thereafter (Register 70, No. 33).
- 2. Repealer of former section 1215 and renumbering of former section 1215.1 to new section 1215, including amendment of section and new Note, filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1215, 17 CA ADC § 1215

§ 1215.1. Definitions. [Renumbered] History

- 1. Amendment of subsections (b), (c), (d) and (e) filed 10-9-70; effective thirtieth day thereafter (Register 70, No. 41).
- 2. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 3. Renumbering of former section 1215.1 to new section 1215 filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1215.1, 17 CA ADC § 1215.1

Article 2. Requirements for Forensic Alcohol Laboratories

§ 1216. Notification Requirement.

- (a) Every laboratory performing forensic alcohol analysis shall provide the Department with the following within 90 days of any change to the information listed in 1-4 below:
- (1) A statement of intent to perform or stop performing alcohol analysis, to include fluid analysis, breath analysis, or both;
- (2) The laboratory's current address, as well as the name, address, and phone number of the laboratory's point of contact;
- (3) A list of current laboratory personnel qualified to do forensic alcohol analysis; and
- (4) A list of current instruments used by laboratory personnel for alcohol analysis.
- (b) Forensic alcohol analysis shall be performed only by persons who meet the qualifications set forth in Section 1216.1 for forensic alcohol analysts.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48.)
- 2. Amendment of section heading and section and new Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1216, 17 CA ADC § 1216

§ 1216.1. Qualifications to Perform Forensic Alcohol Analysis.

- (a) A laboratory meets the qualifications to perform forensic alcohol analysis by:
- (1) Maintaining a quality control program in forensic alcohol analysis procedures as specified in Section 1220.3;
- (2) Meeting the proficiency testing requirements specified in Health and Safety Code Section 100702. Laboratories shall direct approved providers to submit all external proficiency test results as required by Health and Safety Code Section 100702 to the Department. The laboratories shall submit, at a minimum, one test per analyst per year. In addition, laboratory staff shall provide the Department any documentation pertaining to corrective actions with respect to proficiency tests.
- (b) A trained forensic alcohol analyst is a person who meets the following qualifications:
- (1) Possesses a baccalaureate or higher degree in a life science or physical science.
- (2) Has two years of analytical experience performing alcohol analysis, and experience in interpreting and correlating the demeanor and behavior of persons who have ingested known amounts of alcohol, or satisfactorily completes a training course approved by the laboratory of employment, such training course to include at minimum the following schedule of subjects:
 - (A) Value and purpose of forensic alcohol analysis;
 - (B) Physiological action of alcohol;
 - (C) Pharmacology and toxicology of alcohol;
 - (D) Laboratory methods of forensic alcohol analysis;
- (E) Instruments and procedures for breath alcohol testing;
- (F) Practical laboratory demonstration of the trainee's ability to successfully perform forensic alcohol analysis;

- (G) Interpretation of results of alcohol analysis, including correlation of alcohol analyses with subjective observations of the demeanor and behavior of persons who have ingested known amounts of alcohol;
 - (H) Court testimony;
- (I) Court decisions regarding chemical tests of alcohol to determine alcohol influence; and
 - (J) Requirements of these Group 8 regulations.
- (3) At a minimum, has successfully completed a competency test comprised of at least 4 samples that must:
 - (A) Have differing, predetermined values;
- (B) Range from 0 to 0.25 percent alcohol concentration;
 - (C) Have values unknown to the test taker; and
- (D) Be analyzed utilizing the laboratory's forensic alcohol method.
- (E) Results must fall within plus or minus 5 percent of the known value if the value is at 0.100% or higher. If the value is lower than 0.100%, the result must be within plus or minus 0.005.
- (4) Persons who have completed 1216.1(b)(2)(A), (D), (F), and 1216.1(b)(3) may conduct analysis of samples for the purpose of determining alcohol concentration.
- (5) The qualification requirements set forth in subdivisions (b)(1), (b)(2), and (b)(3) shall not apply to persons who were qualified by the Department as a forensic alcohol analyst prior to January 1, 2016.
- (c) Every laboratory performing forensic alcohol analysis shall provide to the Department the following for each newly trained forensic analyst:
- (1) A copy of the diploma(s) or transcripts of relevant education. The relevant education includes proof of a baccalaureate or higher degree in any life science or physical science.
- (2) A training summary of the topics outlined in 1216.1(b)(2) with a completion date for each individual performing forensic alcohol analysis for the laboratory;
- (3) Copies of any qualifying tests for each individual performing forensic alcohol analysis for the laboratory;
- (4) Proof of completion of a competency test which follows the requirements articulated in 1216.1(b)(3) for each individual performing forensic alcohol analysis for the laboratory;
- (5) Written notification to the Department alerting it that the individual has successfully completed the training outlined in 1216.1(b)(4), prior to beginning testing.
- (d) Every laboratory performing forensic alcohol analysis shall provide to the Department proof of

completion of a proficiency test as outlined in 1216.1(a)(2) for each analyst performing forensic alcohol analysis for the laboratory.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Sections 100700 and 100702, Health and Safety Code.

History

- 1. Amendment of subsection (c)(1) filed 10-9-70; effective thirtieth day thereafter (Register 70, No. 41).
- 2. Amendment of subsection (b)(2) filed 8-2-72; effective thirtieth day thereafter (Register 72, No. 32).
- 3. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 4. Editorial correction (Register 76, No. 24).
- 5. Amendment of section heading and section and new Note filed 1-26-2017; operative 4-1-2017 Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1216.1, 17 CA ADC § 1216.1

Article 3. Training of Personnel

§ 1217. Training Program Review.

- (a) Any organization, laboratory, institution, school, or college conducting a course of instruction for persons to qualify under section 1221.2(a)(3) shall provide the following to the Department to demonstrate compliance with Title 17, Division 1, Chapter 2, subchapter 1, Group 8, sections 1215 through 1222.1:
- (1) A complete outline of the training which meets the requirements of Section 1221.2;
- (2) A copy of the written examination together with the correct answers;
- (3) A written description of the practical examination;
 - (4) A list of qualified instructors; and
- (5) A description of the qualifications of instructors for the training, which at a minimum, shall mean persons that meet the requirements described under Section 1221.2(a)(4)(A).
- (b) At the discretion of the laboratory, any phase or portion of a training program shall be subject to alteration in an effort to update the program as technological advances are made or if a portion has been judged inappropriate. The changes will be subject to Department notification as outlined in this Section.
- (c) If the Department believes that the laboratory's training program does not comply with these

regulations, the Department shall notify the laboratory in writing within 30 days of the receipt of the materials with its specific concerns. The laboratory management shall respond to the Department in writing within 30 days of receipt of the Department's concerns. Note: Authority cited: Section 100703, Health and

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 2. Repealer of article 3 (sections 1217-1217.8) and section, renumbering of former article 4 (sections 1218-1218.2) to article 3 (section 1217) and renumbering of former section 1218 to new section 1217, including amendment section heading and section and new Note, filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1217, 17 CA ADC § 1217

§ 1217.1. Renewal of Licenses. [Repealed] History

- 1. New subsection (c) filed 4-7-71; effective thirtieth day thereafter (Register 71, No. 15).
- 2. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 3. Repealer filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1217.1, 17 CA ADC § 1217.1

§ 1217.2. Application Forms. [Repealed]

History

1. Repealer filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1217.2, 17 CA ADC § 1217.2

§ 1217.3. Report of Change or Discontinuance. [Repealed]

History

- 1. Amendment filed 10-9-70; effective thirtieth day thereafter (Register 70, No. 41).
- 2. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 3. Editorial correction (Register 76, No. 24).

4. Repealer filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1217.3, 17 CA ADC § 1217.3

§ 1217.4. License Implications. [Repealed] History

1. Repealer filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1217.4, 17 CA ADC § 1217.4

§ 1217.5. Licensing Records. [Repealed] History

1. Repealer filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1217.5, 17 CA ADC § 1217.5

§ 1217.7. Surveys and Proficiency Tests. [Repealed] History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 2. Repealer filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1217.7, 17 CA ADC § 1217.7

§ 1217.8. Fees and Other Procedures. [Repealed] History

1. Repealer filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1217.8, 17 CA ADC § 1217.8

§ 1218. Training Program Approval. [Renumbered] History

1. Renumbering of former article 4 to article 3 and renumbering of former section 1218 to new section 1217 filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1218, 17 CA ADC § 1218

§ 1218.1. Additional Requirements. [Repealed]

History

1. Repealer filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1218.1, 17 CA ADC § 1218.1

§ 1218.2. Contracts. [Repealed]

History

1. Repealer filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1218.2, 17 CA ADC § 1218.2

Article 4. Collection and Handling of Blood and Urine Samples

§ 1219. General.

Samples taken for forensic alcohol analysis shall be collected and handled in a manner in which the identity and integrity of the samples shall be maintained through collection to analysis and reporting.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. New Article 5 (1219, 1219.1, 1219.2, 1219.3), filed 10-9-70; effective thirtieth day thereafter (Register 70, No. 41).
- 2. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 3. Renumbering and amendment of former article 5 to article 4 and amendment of section and Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4). This database is current through 3/3/17 Register 2017,

No. 9

17 CCR § 1219, 17 CA ADC § 1219

§ 1219.1. Blood Collection and Retention.

- (a) Blood samples shall be collected by venipuncture from living individuals as soon as feasible after an alleged offense and processed in compliance with Vehicle Code Section 23158.
- (b) Alcohol or other volatile organic disinfectant shall not be used to clean the skin where a specimen is to be collected. Examples of suitable aqueous

- disinfectants include: aqueous povidine-iodine¹ (Betadine) or aqueous benzalkonium chloride (zephiran chloride).
- (c) Blood samples from living individuals shall be collected using sterile, dry hypodermic needles and syringes, or using clean, dry vacuum type containers with sterile needles. Reusable equipment, if used, shall not be cleaned with or kept in alcohol or other volatile organic solvents.
- (d) The blood sample shall be deposited into a clean, dry container which is closed with an inert stopper.
- (1) Alcohol or other volatile organic solvent shall not be used to clean the container.
- (2) The blood shall be mixed with an anticoagulant and a preservative.
- (e) When blood samples for forensic alcohol analysis are collected post- mortem, all practical precautions to ensure an uncontaminated sample shall be employed, such as:
- (1) Samples shall be obtained prior to the start of any embalming procedure. Blood samples shall not be collected from the circulatory system effluent during arterial injection of embalming fluid.
- (2) Care shall be taken to avoid contamination by alcohol from the gastrointestinal tract directly or by diffusion. The sample shall be taken from a major vein or the heart.
- (3) Postmortem blood samples shall be mixed with an anticoagulant and preservative.
- (f) In order to allow for analysis by the defendant, the remaining portion of the sample shall be retained for one year after the date of collection.
- (1) In coroner/medical examiner cases, samples shall be retained for at least 90 days after date of collection.
- (2) Whenever a sample is requested by the defendant for analysis and sufficient sample remains, the forensic laboratory, law enforcement agency, or coroner/medical examiner's office in possession of the original sample shall continue such possession, but shall provide the defendant with a portion of the remaining sample in a clean container together with a copy or transcript of the identifying information carried on the original sample container.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

1. Amendment of subsection (d) filed 4-7-71; effective thirtieth day thereafter (Register 71, No. 15).

¹ Povidone-iodine

- 2. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 3. Amendment of section and new Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4). This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1219.1, 17 CA ADC § 1219.1

§ 1219.2. Urine Collection and Retention.

- (a) A urine sample from a living individual shall be a sample collected no sooner than twenty minutes after first voiding the bladder.
- (b) The specimen shall be deposited in a clean, dry container which also contains a preservative.
- (c) In order to allow for analysis by the defendant, the remaining portion of the sample shall be retained for one year after the date of collection.
- (1) Whenever a sample is requested by the defendant for analysis and sufficient sample remains, the forensic laboratory, law enforcement agency, or coroner/medical examiner's office in possession of the original sample shall continue such possession, but shall provide the defendant with a portion of the remaining sample in a clean container together with a copy or transcript of the identifying information carried on the original sample container.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. Amendment of subsection (a) filed 4-7-71; effective thirtieth day thereafter (Register 71, No. 15).
- 2. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 3. Amendment of section and new Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4). This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1219.2, 17 CA ADC § 1219.2

§ 1219.3. Breath Collection. [Repealed] History

- 1. Amendment filed 4-7-71; effective thirtieth day thereafter (Register 71, No. 15).
- 2. Repealer filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017,

17 CCR § 1219.3, 17 CA ADC § 1219.3

Article 5. Methods of Forensic Alcohol Analysis

§ 1220. General.

- (a) All laboratory methods used for forensic alcohol analysis shall be subject to standards set forth in this Article.
- (b) Each forensic alcohol laboratory shall have detailed, up-to-date written descriptions of each method it uses for forensic alcohol analysis.
- (1) Such descriptions shall be immediately available to the person performing an analysis.
- (2) Each such description shall include the instrument calibration procedures and the quality control program for the method.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. New Article 6 (1220, 1220.1 through 1220.4) filed 10-9-70; effective thirtieth day thereafter (Register 70. No. 41).
- 2. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 3. Renumbering of former article 6 to article 5 and amendment of section and Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017,

17 CCR § 1220, 17 CA ADC § 1220

§ 1220.1. Standards of Performance.

- (a) Methods for forensic alcohol analysis shall meet the following standards of performance:
- (1) The method shall be capable of the analysis of a reference sample of known alcohol concentration within accuracy and precision limits of plus or minus 5 percent of the value; these limits shall be applied to alcohol concentrations which are 0.100% or higher. If the value is lower than 0.100%, the result must be within plus or minus 0.005;
- (2) The method shall be capable of the analysis of ethyl alcohol with a specificity which is adequate and appropriate for traffic law enforcement.
- (3) The method shall be free from interference from anticoagulants and preservatives added to the sample;
- (4) Blood alcohol results on post-mortem samples shall not be reported unless specifically identified as ethyl alcohol; and
- (5) The method shall give a test result which is always less than 0.01 grams of alcohol per 100 milliliters of blood when living subjects free of alcohol are tested.

(b) The ability of methods to meet the standards of performance set forth in this Section shall be evaluated by a forensic alcohol analyst using a laboratory's proficiency test results and such ability must meet the requirements of these regulations.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 2. Amendment of section and new Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4). This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1220.1, 17 CA ADC § 1220.1

§ 1220.2. Standards of Procedure.

- (a) Methods for forensic alcohol analysis shall meet the following standards of procedure:
- (1) The method shall employ calibration standard(s) which is/are water solution(s) of ethyl alcohol.
- (A) Such alcohol solutions are secondary standards, which, for the purposes of these regulations, applies to prepared or purchased solutions.
- (B) Each forensic alcohol laboratory shall purchase NIST traceable CRMs, or prepare a secondary alcohol standard, establishing the concentration of the prepared standard by using a direct oxidimetric method which employs a primary standard, such as NIST potassium dichromate.
- (C) The forensic alcohol laboratory personnel shall verify the concentration of any new secondary standard used in the method by analyzing the new secondary standard concurrently with a NIST SRM.
- (D) If a purchased secondary standard (CRM) has been certified as analytically verified against a NIST SRM, the verification pursuant to 1220.2 (a)(1)(C) is not required.
- (2) The procedure shall include blank and secondary alcohol standards.
- (A) A blank and secondary standard(s) shall be analyzed concurrently or prior to analysis of subject samples on each day of analysis and on any instrument used
- (B) All blank(s), secondary standard(s), and samples shall be taken through all steps of the method.

- (3) The procedure shall also include analysis of quality control reference samples as described in Section 1220².
- (A) A quality control reference sample shall not be taken from the same lot of alcohol solution which is used as a secondary alcohol standard.
- (4) All samples shall minimally be analyzed in duplicate. Alcohols or other volatile organic solvents shall not be used to wash or rinse glassware used for alcohol analysis. If volatile organic solvents are employed in the maintenance of equipment, the solvents must be thoroughly removed.
- (5) All instruments used for alcohol analysis shall be in good working order.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 2. Amendment of section and new Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4). This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1220.2, 17 CA ADC § 1220.2

§ 1220.3. Quality Control Program.

- (a) Methods for forensic alcohol analysis shall be performed in accordance with the following quality control program:
- (1) For each method of forensic alcohol analysis it performs, each forensic alcohol laboratory shall make or acquire a suitable quality control reference material containing alcohol, a sample of which it shall analyze along with each set of samples; the alcohol concentration in the reference material shall be between 0.08 and 0.20 grams per 100 milliliters of liquid;
- (A) If the quality control reference material is NIST traceable, and has been verified against a NIST SRM, and the quality control reference material is from a different lot than the secondary standards, then 1220.3(a)(2) is not required.
- (2) For each lot of quality control reference material, the laboratory shall determine a mean value of at least 20 replicate analyses to three decimal places, at a rate of no more than 2 analyses per day, with the method used for analysis of samples for forensic alcohol analysis;

² Section 1220.3

- (3) Acceptable limits of variation for the method shall be set as follows:
- (A) The lower limit shall be calculated by subtracting, from the mean value, 0.010 grams per 100 milliliters:
- (B) The higher limit shall be calculated by adding, to the mean value, 0.010 grams per 100 milliliters;
- (4) At least one sample of the quality control reference material shall be analyzed at the beginning and end of each set of samples analyzed for the purpose of forensic alcohol analysis;
- (5) Whenever analysis of the quality control reference material is outside the acceptable limits, the method shall be regarded to be in error, and a forensic alcohol analyst shall take remedial action to investigate and correct the source of error; and
- (6) Until such time as the error has been corrected, as shown by return of the analysis of the quality control reference material to values within the acceptable limits, no samples shall be analyzed for the purpose of forensic alcohol analysis.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 2. Amendment of section and new Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4). This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1220.3, 17 CA ADC § 1220.3

§ 1220.4. Expression of Analytical Results.

- (a) All analytical results shall be in terms of the alcohol concentration in blood, based on the number of grams of alcohol per 100 milliliters of blood with the exception of tissue analysis and breath test results.
- (1) The symbols, grams %, %, and % (W/V), shall be regarded as acceptable abbreviations of the phrase, grams per 100 milliliters of blood.
- (b) Analytical results shall be reported to the second or third decimal place. When reporting to the second decimal place, the digit in the third decimal place shall be deleted.
- (c) Alcohol concentrations less than 0.010% in living subjects may be reported as negative.
- (d) Alcohol concentrations less than 0.020% on postmortem samples may be reported as negative.
- (e) A urine alcohol concentration shall be converted and expressed as a blood alcohol concentration. The

- converted blood alcohol concentration shall be determined by dividing the urine alcohol concentration by 1.3.
- (f) A breath alcohol concentration shall be expressed as the number of grams of alcohol per 210 liters of breath.
- (g) Analytical results for tissue analysis shall be expressed in terms of a weight amount of alcohol in a unit weight of the specimen.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 2. Editorial correction (Register 76, No. 24).
- 3. Amendment of section and new Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4). This database is current through 3/3/17 Register 2017,

17 CCR § 1220.4, 17 CA ADC § 1220.4

Article 6. Requirements for Breath Alcohol Testing

§ 1221. General.

No. 9

Breath alcohol testing shall be performed in accordance with standards set forth in this Article. Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. New Article 7 (Sections 1221, 1221.1 through 1221.5) filed 10-9-70; effective thirtieth day thereafter (Register 70, No. 41).
- 2. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 3. Renumbering and amendment of former article 7 to article 6 and amendment of section and Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1221, 17 CA ADC § 1221

§ 1221.1. Authorized Procedures.

- (a) Breath alcohol testing shall be performed with instruments, accessories, and calibrating units and devices which meet the requirements specified in Health and Safety Code section 100701.
- (b) Such instruments may be used for the testing of breath samples in places other than forensic alcohol laboratories and by persons other than forensic alcohol

analysts only if such places and persons are under the direct jurisdiction, or affiliated with, a governmental agency or forensic alcohol laboratory.

(1) The breath sample shall be collected only after fifteen continuous minutes during which time the subject must not have ingested alcoholic beverages or other fluids, regurgitated, vomited, eaten, or smoked. Note: Authority cited: Section 100703, Health and Safety Code. Reference: Sections 100700 and 100701, Health and Safety Code.

History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- Repealer of subsection (c) filed 12-20-85 as an emergency; effective upon filing (Register 85, No. 52). A Certificate of Compliance must be transmitted to OAL within 120 days or emergency language will be repealed on 4-21-86.
- 3. Certificate of Compliance transmitted to OAL 4-8-86 and filed 5-8-86 (Register 86, No. 19).
- 4. Amendment of section and new Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4). This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1221.1, 17 CA ADC § 1221.1

§ 1221.2. Standards of Procedure.

- (a) Procedures for breath alcohol testing shall meet the following standards:
- (1) For each person tested, breath alcohol testing shall include analysis of 2 separate breath samples which result in determinations of breath alcohol concentrations which do not differ from each other by more than 0.02 grams per 210 liters of breath.
- (2) The instruments shall be checked for accuracy with reference samples which are known water solutions or dry-gasses of alcohol.
- (A) Such determination of accuracy shall consist, at a minimum, of periodic analysis of a reference sample of known alcohol concentration within accuracy and precision limits of plus or minus 0.010 grams % of the true value; these limits shall be applied to alcohol water concentrations and/or dry-gas reference samples of alcohol from 0.08 to 0.30 grams %. The reference sample shall be provided by a forensic alcohol laboratory.
- (i) Such analysis shall be performed automatically on applicable instruments, or manually by an operator as defined in Section 1221.2(a)(5), and the results shall be used by a forensic alcohol analyst to

- determine if the instrument continues to meet the accuracy set forth in Section 1221.2(a)(2)(A).
- (B) For the purposes of such determinations of accuracy, "periodic" means either a period of time not exceeding 10 days or following the testing of every 150 subjects, whichever comes sooner.
- (3) Breath alcohol testing shall be performed using procedures for which the operators have received training, such training to include at minimum the following schedule of subjects:
 - (A) Theory of operation:
 - (i) Value and purpose of forensic alcohol testing;
 - (ii) General processes of absorption, distribution, and elimination of alcohol;
 - (iii) Theory of breath alcohol analysis;
 - (iv) Discussion of the required 15 minute wait period; and
 - (v) Methods of breath alcohol testing.
 - (B) Detailed procedure of operation:
- (i) Procedures of analysis for the specific breath alcohol testing instrument used by the agency.
 - (C) Precautionary checklist:
 - (i) The Precautionary Checklist shall be incorporated into the testing process.
 - (D) Practical experience:
- (i) Each instrument screen prompt shall be discussed and reviewed by the instructor.
- (ii) The operation of the breath instrument shall be demonstrated by the instructor.
- (iii) The instructor shall observe the trainee(s) perform a successful test on the instrument.
 - (E) Written Examination;
- (i) At the completion of the training session, each breath instrument operator trainee will be required to successfully complete a written examination and to achieve a passing score of a minimum of 80%.
- (F) Upon successful completion of the training session and successful completion of both the written and practical examinations, the trainee will be issued a certificate by the laboratory. The certificate will indicate the operator's name, ID/Badge #, agency, and include the instructor's name.
- (4) Training curriculum in the procedures of breath alcohol testing shall be developed by a forensic alcohol analyst. Department notification of the proposed curriculum will follow section 1218.
- (A) The instructors will be, at minimum, certified breath instrument operators with 2 years of practical experience or a forensic alcohol analyst who has

successfully completed the breath instrument training and has at least 6 months of practical experience with the instrument. Training in the Theory of Operation, pursuant to 1221.2(a)(3), shall be conducted by a forensic alcohol analyst.

- (B) The breath instrument operator trainees will receive, at a minimum, 4 hours of instructional training by a certified breath instrument operator.
- (C) If a breath instrument operator trainee has already undergone training to operate an approved breath testing instrument, the trainee may receive instruction as above excluding the portion covering 1221.2(a)(3)(A).
- (5) An operator shall be a forensic alcohol analyst or a person who has completed successfully the training described under sections 1221.2(a)(3) and 1221.2(a)(4), and who may be called upon to operate a breath testing instrument in the performance of his or her duties.
- (6) Records shall be kept for each instrument to show the frequency of determination of accuracy and the identity of any person performing a manual determination of accuracy.
- (A) Records shall be kept for each instrument at a forensic alcohol laboratory showing compliance with this Section.
- (b) A precautionary checklist shall be available for consultation at each instrument location. Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. Repealer of subsection (b) and relettering of (c), (d), (e), (f) and (g) to (b), (c), (d), (e) and (f) filed 4-7-71; effective thirtieth day thereafter (Register 71, No. 15).
- 2. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 3. Amendment filed 12-20-85 as an emergency; effective upon filing (Register 85, No. 52). A Certificate of Compliance must be transmitted to OAL within 120 days or emergency language will be repealed on 4-21-86.
- 4. Certificate of Compliance transmitted to OAL 4-8-86 and filed 5-8-86 (Register 86, No. 19).
- 5. Repealer of former section 1221.2 and renumbering of former section 1221.4 to new section 1221.2, including amendment of section and new Note, filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1221.2, 17 CA ADC § 1221.2

§ 1221.3. Expression of Results.

Results of breath alcohol testing shall be expressed as set forth in Section 1220.4.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 2. Editorial correction (Register 76, No. 24).
- 3. Amendment filed 12-20-85 as an emergency; effective upon filing (Register 85, No. 52). A Certificate of Compliance must be transmitted to OAL within 120 days or emergency language will be repealed on 4-21-86.
- 5. Repealer of former section 1221.3 and renumbering of former section 1221.5 to new section 1221.3, including amendment of section and new Note, filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).
- 4. Certificate of Compliance transmitted to OAL 4-8-86 and filed 5-8-86 (Register 86, No. 19).
- 5. Repealer of former section 1221.3 and renumbering of former section 1221.5 to new section 1221.3, including amendment of section heading and section and new Note, filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1221.3, 17 CA ADC § 1221.3

§ 1221.4. Standards of Procedure. [Renumbered]

Note: Authority cited: Section 436.50, Health and Safety Code. Reference: Section 436.50, Health and Safety Code.

History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 2. Amendment filed 12-20-85 as an emergency; effective upon filing (Register 85, No. 52). A Certificate of Compliance must be transmitted to OAL within 120 days or emergency language will be repealed on 4-21-86.
- 3. Certificate of Compliance including amendment of subsection (a)(2)(A)1. transmitted to OAL 4-8-86 and filed 5-8-86 (Register 86, No. 19).
- 4. Renumbering of former section 1221.4 to new section 1221.2 filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1221.4, 17 CA ADC § 1221.4

§ 1221.5. Expression of Analytical Results. [Renumbered]

History

1. Renumbering of former section 1221.5 to new section 1221.3 filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1221.5, 17 CA ADC § 1221.5

Article 7. Records

§ 1222. General.

Forensic alcohol laboratories shall maintain records which clearly describe and document their activities which are covered by these regulations.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. New Article 8 (§§ 1222, 1222.1, 1222.2) filed 10-9 70; effective thirtieth day thereafter (Register 70, No. 41).
- 2. Renumbering and amendment of former article 8 to article 7 and amendment of section and Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4). This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1222, 17 CA ADC § 1222

§ 1222.1. Forensic Alcohol Laboratory Records.

- (a) Each laboratory which performs forensic alcohol analysis shall keep the following records for a period of at least three years:
- (1) An up-to-date record of persons in its employ who are qualified as forensic alcohol analysts; the record shall include the qualifications of each such person, including but not limited to the records of education, experience and training.
- (2) Breath test results under these regulations, and records of samples analyzed by that laboratory, their results and the identity of persons performing the analyses;
 - (3) Records of the quality control program.
- (4) Records of laboratory performance evaluation in alcohol analysis as shown by results of proficiency tests.

- (5) Records of determinations of accuracy, maintenance, and/or calibration of testing instruments as a laboratory may perform.
- (6) Records of the training provided to persons who operate breath testing instruments.

Note: Authority cited: Section 100703, Health and Safety Code. Reference: Section 100700, Health and Safety Code.

History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 2. Amendment of section and new Note filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4). This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1222.1, 17 CA ADC § 1222.1

§ 1222.2. Breath Alcohol Analysis Records. [Repealed]

History

- 1. Amendment filed 11-24-75; effective thirtieth day thereafter (Register 75, No. 48).
- 2. Editorial correction (Register 76, No. 24).
- 3. Repealer filed 1-26-2017; operative 4-1-2017 (Register 2017, No. 4).

This database is current through 3/3/17 Register 2017, No. 9

17 CCR § 1222.2, 17 CA ADC § 1222.2