

# Title 448 WAC

## STATE TOXICOLOGIST

### Chapters

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### Chapter 448-12 WAC

#### ADMINISTRATION OF BREATHALYZER TEST

##### WAC

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**WAC 448-12-010 Breathalyzer approved.** The breathalyzer is approved by the state toxicologist as a device for the chemical testing of a person's breath for intoxication. Breathalyzers must be checked and calibrated at least once every three months by a maintenance operator approved by the state toxicologist. [Order 4, § 448-12-010, filed 7/9/70; Order 2, § 448-12-010, filed 1/31/69.]

**WAC 448-12-015 Checking of breathalyzer machines.** At least once every three months a maintenance operator must check and calibrate a breathalyzer machine. In making that check the maintenance operator must follow all of the steps provided for in WAC 448-12-020. A record must be kept with the machine and the maintenance operator must record the date of test, control number of the ampoule used, and whether the machine is or is not in proper working order.

If the machine tested is in proper working order, then all ampoules bearing the same specific control number as the ampoule used in the test are suitable for use in the machine. [Order 4, § 448-12-015, filed 7/9/70.]

**WAC 448-12-016 Certifications.** The maintenance operator shall give the custodian of the breathalyzer a certificate that he was a maintenance operator on the date he tested and calibrated the machine and include in the certificate the date of the test, serial number of the machine, the specific control number of the ampoule used in the test, that he performed the test in accordance

with the methods and rules of the state toxicologist, whether the machine was in proper working order, and if the machine was in proper working order then pursuant to WAC 448-12-015 all ampoules bearing the same specific control number as the ampoule used in the testing of the machine are suitable for use in the machine. [Order 4, § 448-12-016, filed 7/9/70.]

**WAC 448-12-020 Administration of breathalyzer test.** Pursuant to RCW 46.61.506 the state toxicologist approves the following method for performing the breathalyzer test. Prior to the administration of a breathalyzer test it must be determined (a) that the subject has had nothing to eat or drink for at least fifteen minutes prior to the administration of the test, and (b) that the subject does not have any foreign substances, not to include dental work fixed or removable, in his mouth at the beginning of the fifteen minute observation period. Such determination shall be made by either an examination of the mouth or a denial by the subject that he has any foreign substances in his mouth.

In conducting a chemical test of breath for intoxication by the use of a breathalyzer the following steps must be taken:

- (1) Warm up machine until thermometer indicates 47° - 53°C.
- (2) See that null meter is centered.
- (3) See that comparison ampoule is in place in left-hand holder.
- (4) Gauge test ampoule and record test ampoule control number.
- (5) Insert and connect test ampoule.
- (6) Turn selector to "TAKE," flush out, and turn selector to "ANALYZE."
- (7) When "EMPTY" light comes on, wait one and one-half minutes. Then center Meter using the balance wheel or knob with light on and selector in "ANALYZE" position.
- (8) Align scale pointer with start line.
- (9) Turn selector to "TAKE," take sample, and turn selector to "ANALYZE." Record time sample was taken.
- (10) When "EMPTY" light comes on, wait one and one-half minutes. Then center meter using the balance wheel or knob with light on and selector in "ANALYZE" position.
- (11) Read answer on scale and record reading. This reading indicates the percent by weight of alcohol in the person's blood, which means the percent on a weight to volume basis. [Statutory Authority: RCW 46.61.506. 80-05-112 (Order 80-01), § 448-12-020, filed 5/6/80; Order 5, § 448-12-020, filed 10/19/72; Order 4, § 448-12-020, filed 7/9/70; Order 2, § 448-12-020, filed 1/31/69.]

**WAC 448-12-030 Instructors.** The state toxicologist shall certify persons found by him to be competent and qualified as instructors and those persons are authorized to administer breathalyzer tests, maintain the equipment, check the suitability of chemicals used in the breathalyzer and also to train and certify on behalf of the toxicologist those persons the breathalyzer instructor finds qualified to administer the breathalyzer test as operators and also as maintenance operators if he finds they are also qualified to maintain the breathalyzer equipment in proper operating order. [Order 4, § 448-12-030, filed 7/9/70; Order 2, § 448-12-030, filed 1/31/69.]

**WAC 448-12-040 Maintenance operators.** The state toxicologist or instructors on his behalf shall certify as maintenance operators individuals that they find competent to administer the breathalyzer test, maintain the breathalyzer equipment in proper operating order and check the suitability of chemicals used in the breathalyzer. A list of persons so certified shall be maintained in the office of the state toxicologist. [Order 4, § 448-12-040, filed 7/9/70; Order 2, § 448-12-040, filed 1/31/69.]

**WAC 448-12-050 Operators.** The state toxicologist or instructors on his behalf shall certify as "operators" persons found by them to be competent and qualified to administer breathalyzer tests for intoxication. A list of persons so certified shall be maintained in the office of the state toxicologist. [Order 4, § 448-12-050, filed 7/9/70; Order 2, § 448-12-050, filed 1/31/69.]

**WAC 448-12-055 Review of qualifications.** The qualifications of operators shall be subject to review by field representatives of the state toxicologist, who shall also have the authority to evaluate periodically the operational condition of any breath-testing equipment in the state of Washington. If an operator fails or refuses to demonstrate that he has the ability to adequately perform his responsibilities as an operator, then the field representative shall have the ability to suspend or revoke the permit on behalf of the state toxicologist. [Order 4, § 448-12-055, filed 7/9/70; Order 2, § 448-12-055, filed 1/31/69.]

**WAC 448-12-060 Permit cards.** The state toxicologist shall authorize the issuance to persons deemed qualified for the respective designation "operator," "maintenance operator" or "instructor" of a wallet-sized card bearing his name and designation. Permit cards shall bear the signature or facsimile signature of the state toxicologist and be dated and may bear the instructor's signature. Such permits shall expire three years after the date on the card or July 1, 1971, whichever date is later in time. [Order 4, § 448-12-060, filed 7/9/70; Order 2, § 448-12-060, filed 1/31/69.]

**WAC 448-12-070 Course approval.** Instructors prior to the conducting of a course for the training or retraining of operators and/or maintenance operators for

breathalyzer tests shall submit to the state toxicologist for his approval the curriculum to be used in the course. If the curriculum is approved, subsequent courses embodying the same curriculum may be conducted without individual approval of each course. [Order 4, § 448-12-070, filed 7/9/70; Order 2, § 448-12-070, filed 1/31/69.]

**WAC 448-12-075 Minimum course requirements.** A minimum course of training for an operator shall include the following: (a) Theory of operation; (b) detailed procedure of operation; (c) practical experience; (d) written examination; (e) practical examination.

A minimum course for maintenance operators shall include, in addition to all of the foregoing, specific instruction in the proper maintenance and testing of the breathalyzer and chemicals used in the breathalyzer, and the maintenance of records on the use and operational condition of each breath-testing device. [Order 4, § 448-12-075, filed 7/9/70; Order 2, § 448-12-075, filed 1/31/69.]

**WAC 448-12-080 Instruction.** Individuals who have attended courses in the operation of the breathalyzer as either operators or maintenance operators, provided such courses were instructed by an instructor certified by the state toxicologist, shall upon certification of attendance and qualification be deemed qualified for the respective designation "operator" or "maintenance operator" as may be appropriate and said persons shall be issued a wallet-sized card by the state toxicologist. [Order 5, § 448-12-080, filed 10/19/72; Order 4, § 448-12-080, filed 7/9/70; Order 2, § 448-12-080, (Grandfather clause), filed 1/31/69.]

**WAC 448-12-090 Address for correspondence.** Individuals seeking certification in accordance with these rules or approval of equipment to administer the breathalyzer test shall direct their requests to the State Toxicologist, Department of Laboratory Medicine, Harborview Medical Center, Seattle, Washington 98104. [Statutory Authority: RCW 46.61.506. 80-05-112 (Order 80-01), § 448-12-090, filed 5/6/80; Order 2, § 448-12-090, filed 1/31/69.]

**WAC 448-12-100 Names of instructors.** Pursuant to WAC 448-12-030 the state toxicologist will maintain a list of persons certified as breathalyzer instructors. These names will be made available to interested parties upon request to the state toxicologist at the address set forth in WAC 448-12-090. [Statutory Authority: RCW 46.61.506. 80-05-112 (Order 80-01), § 448-12-100, filed 5/6/80; Order 5, § 448-12-100, filed 10/19/72.]

#### Chapter 448-14 WAC

#### STATE TOXICOLOGIST STANDARDS FOR ANALYSIS OF BLOOD SAMPLES FOR ALCOHOL

WAC

448-14-010

Criteria for approved methods of quantitative analysis of blood samples for alcohol.

448-14-020 Operational discipline of blood samples for alcohol.  
448-14-030 Qualifications for a blood alcohol analyst.

**WAC 448-14-010 Criteria for approved methods of quantitative analysis of blood samples for alcohol.** Any quantitative blood alcohol analysis method which meets the following criteria is approved by the state toxicologist and may be used in the state of Washington. Analysis of urine for estimation of blood alcohol concentrations is not approved by the state toxicologist in the state of Washington.

The blood analysis procedure should have the following capabilities:

(1) Precision and accuracy.

(a) The method shall be capable of replicate analyses by an analyst under identical test conditions so that consecutive test results on the same date agree with a difference which is not more than 3% of the mean value of the tests. This criterion is to be applied to blood alcohol levels of 0.08% and higher.

(b) Except for gas chromatography, the method should be calibrated with water solutions of ethyl alcohol, the strength of which should be determined by an oxidimetric method which employs a primary standard, such as United States National Bureau of Standards potassium dichromate.

(c) The method shall give a test result which is always less than 0.005% when alcohol-free living subjects are tested.

(2) Specificity.

(a) On living subjects, the method should be free from interferences native to the sample, such as therapeutics and preservatives; or the oxidizable material which is being measured by the reaction should be identified by qualitative test.

(b) Blood alcohol results on post-mortem samples should not be reported unless the oxidizable substance is identified as ethanol by qualitative test. [Order 4, § 448-14-010, filed 7/9/70; Emergency and Permanent Order 3, § 448-14-010, filed 9/23/69.]

**WAC 448-14-020 Operational discipline of blood samples for alcohol.** (1) Analytical procedure.

(a) The analytical procedure should include:

(i) A control test

(ii) A blank test

(iii) Duplicate analyses that should agree to within  $\pm 0.01\%$  blood alcohol deviation from the mean.

(b) All sample remaining after analysis should be retained for at least three months under suitable storage conditions for further analysis if required.

(c) Each analyst shall engage in a program in which some blood samples containing alcohol are exchanged with other laboratories and tested on a blind basis so that precision and accuracy can be evaluated no less than one time per year.

(2) Reporting procedure.

(a) The results should be expressed as grams of alcohol per 100 ml of whole blood sample.

(b) The analysis results should be reported to two significant figures, using the mathematical rule of rounding.

(c) Blood alcohol results on living subjects 0.0009% or lower shall be reported as negative. Blood alcohol results on post-mortem samples of 0.019% or less shall be reported as negative. (See WAC 448-14-010 (2)(b))

(3) Sample container and preservative.

(a) A chemically clean dry container consistent with the size of the sample with an inert leak-proof stopper shall be used.

(b) Blood samples for alcohol analysis shall be preserved with an anticoagulant and an enzyme poison sufficient in amount to prevent clotting and stabilize the alcohol concentration. Suitable preservatives and anticoagulants include the combination of sodium fluoride and potassium oxalate. [Order 4, § 448-14-020, filed 7/9/70; Emergency and Permanent Order 3, § 448-14-020, filed 9/23/69.]

**WAC 448-14-030 Qualifications for a blood alcohol analyst.** (1) Minimum qualifications for the issuance by the state toxicologist of a blood alcohol analyst permit shall include college level training in fundamental analytical chemistry with a minimum of five quarter hours of quantitative chemistry laboratory or equivalent, with a passing grade.

(2) The state toxicologist shall issue a blood alcohol analyst permit to each person he finds to be properly qualified, and he shall hold written, oral or practical examinations to aid him in judging qualifications of applicants. Such permits shall bear the signature or facsimile signature of the state toxicologist and be dated.

(3) The blood alcohol analyst permits are subject to cancellation by the state toxicologist if the permittee refuses or fails to obtain satisfactory results on samples periodically distributed to the permittees by the state toxicologist. [Order 4, § 448-14-030, filed 7/9/70; Emergency and Permanent Order 3, § 448-14-030, filed 9/23/69.]