

Standard Operating Procedure

Breath Alcohol Testing



Idaho Department of Law Enforcement

Bureau of Forensic Services

August, 1994

(Rev. 08/99)

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Glossary

Breath Test: A series of separate breath samples provided during a breath testing sequence.

Breath Testing sequence: A sequence of events as determined by the Bureau of Forensic Services which may be directed by either the instrument or the operator, but not both, and may consist of air blanks, calibration checks, internal standard checks, and breath samples.

Breath Testing Specialist (BTS): An operator who has completed an advanced training class taught by a Criminalist of the Bureau of Forensic Services. BTS certification is valid for 26 calendar months and expires on the last day of the 26th month. (I.D)

Bureau of Forensic Services (BFS): A bureau within the Police Services Division of the Idaho Department of Law Enforcement. The BFS is dedicated to providing forensic science services to the criminal justice system of Idaho. BFS employees are also qualified to perform all duties of a BTS. (I)

Calibration Check: A check of the accuracy of the breath testing instrument utilizing a simulator and ethanol solution(s) provided the BFS or approved vendor(s) and standardized by the BFS. Calibration checks should be reported to three decimal places. (II)

Certificate of Approval: A certificate stating that an individual breath alcohol testing instrument has been evaluated by the BFS and found to be suitable for forensic alcohol testing. The certificate bears the signature of the Bureau Chief, and the effective date of the instrument approval. (I.A)

Changeover Class: A training class for currently certified personnel during which they are taught theory, operation, and proper testing procedure for a new make or model of instrument being adopted by their agency. Breath Testing Specialists attend BTS training which qualifies them to perform BTS duties related to the instrument. (I.E)

Operator Certification: The condition of having satisfied the training requirements for administering breath alcohol tests as established by the BFS. Operator certification is valid for 26 calendar months and expires on the last day of the 26th month. (I.C)

Operator: An individual certified by the BFS as qualified by training to administer breath alcohol tests. (I.C)

Operator Class: A BFS-approved training class for prospective or uncertified breath test operators. (I.C)

Recertification Class: A training class for currently certified personnel completion of which results in uninterrupted continuation of their Operator or BTS status for an additional 26 months. (I.C.1)

Simulator Check (SIM CHK): Is a type of calibration check that is run with each individual breath test. (II.B.2)

Waiting Period: Mandatory 15 minute period prior to administering a breath alcohol test. (III.A)

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Breath Alcohol Standard Operating Procedure List of Revisions

<u>SOP Section</u>	<u>Topic</u>	<u>Date of Revision</u>
II.C.1		March 28, 1995
II.A & C	Delete reference to ALS	June 1, 1995
II.A.3	0.02/0.20 solutions	June 1, 1995
II.C.3.e.(2)		June 1, 1995
III.B.1	Valid breath tests	October 23, 1995
II.A	Alco-Sensor calibration checks	May 1, 1996
II.C	Intoxilyzer 5000 Calibration Checks Effective June, 1996	May 1, 1996
II.A.2	0.003 agreement	June 1, 1996
II.A.2	Operators may run calibration checks	July 1, 1996
II.A.2.b	Re-run a solution within 24 hours	September 6, 1996
II.A.3.a	All 3 solutions run within a 24 hour period	September 6, 1996
II.C.I	All 3 solutions run within a 24 hour period	September 6, 1996
II.A.2.b	Re-running of a solution	September 26, 1996
II.A.3.a	All solutions run within a 48 hour period Reference to "three" removed	September 26, 1996 Oct. 8, 1996
II.C.1	All 3 solutions run within a 48 hour period	September 26, 1996
II.C.2	More than three calibration solutions	October 8, 1996
II.A and II.C	Solution values no longer called in to BFS	April 1, 1997
II.A and II.C	Alco-Sensor and Intoxilyzer 5000 calibration checks	August 1, 1998
I.F	Record Management	August 1, 1999
II.B and II.D	Deleted sections on relocating, repairing, recalibrating, and loaning of instruments from previous revision.	August 1, 1999

I.B, II.A and II.B	Alco-Sensor and Intoxilyzer 5000 calibration checks	August 1, 1999
III.C and III.D	Deleted sections on blood and urine samples for alcohol determination	August 1, 1999

Note: An updated list will accompany any further SOP revisions.

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I: Operator and Instrument Certification

To ensure that minimum standards are met, individual breath testing instruments, operators, and breath testing specialists (BTS) must be approved by the Idaho Department of Law Enforcement, Bureau of Forensic Services (BFS).

- A. Each breath testing instrument** is individually certified by the BFS. The individual instrument approval does not carry an expiration date, but may be subject to reevaluation and/or suspension under circumstances including but not limited to frequent failure of calibration checks, electrical or mechanical damage, an unusual frequency of repairs, or when considered advisable by the BFS.
1. If an instrument's certificate of approval is suspended, the instrument may be recertified after re-evaluation by the BFS.
- B. Each approved breath testing instrument** is approved or disapproved for evidentiary testing based on the results of calibration checks performed as described in Section II.
[Revised, 2/99]
1. If a calibration check produces results within the acceptable range of values, the instrument is approved for evidentiary use for all breath tests associated with that calibration check.
 - a. For Alco-Sensor instruments, a valid calibration check must be performed within 24 hours of a breath test.
 - b. For Intoxilyzer 5000 instruments, a valid calibration check must be performed with every breath test.
 2. If a calibration check produces results outside the acceptable range of values, the instrument may not be approved for evidentiary use for the breath tests associated with that calibration check.
 - a. For the Alco-Sensor instruments, any breath test falling within the overlapping time frame of a valid calibration check may be covered by that calibration check.

C. **Operators** become certified by completing a training class taught by a BFS certified Breath Testing Specialist (BTS). Certification is for 26 calendar months and expires the last day of the 26th month unless renewed. Certification will allow the operator to perform all functions required to obtain a valid breath test. It is the responsibility of the individual operator to maintain current certification; the BFS will not notify operators that their certification is about to expire.

1. Recertification for another 26 month period is achieved by completing a BFS approved recertification class prior to the end of the 26th month.
 - a. If the individual fails to satisfactorily complete the class (including the written and practical tests), he/she must retake the operator class in order to become certified.
 - (1) Current Operator certification is voided, and the individual is not certified to run evidentiary breath tests on the instrument in question until the operator class is completed.
 - (2) Persons who must leave the class unexpectedly may retake another recertification class prior to expiration of their current certification.
2. When certification expires, an operator must retrain by attending the operator class.
3. There are no grace periods or provisions for extension of operator certification.

D. **Breath Testing Specialists (BTS)** are operators who have completed an advanced training class and are BFS-certified to perform instrument maintenance, and provide both basic and recertification training for instrument operators.

1. To obtain **initial** BTS certification, an individual must be currently certified as an operator of that particular instrument. BTS certification is then obtained by completing an approved BFS training class.
 - a. Certification is valid for 26 calendar months.
 - b. If BTS certification is allowed to expire, the individual reverts to certified operator status for 12 calendar months for that instrument. He/she may no longer perform any BTS duties relating to that particular instrument.
 - (1) Operator certification will expire at the end of 12 calendar months but may be continued by completing a recertification class as described in Section I.C.1.

- c. BTS certification is renewable by attending an approved BFS training class. The only exception is described in Section I.E.1.
 - d. The Bureau of Forensic Services may revoke BTS certification for cause.
 - (1) Examples include falsification of records, failure to perform required calibration checks, and failure to meet standards in conducting operator training.

E. Adoption of a new instrument by an agency will require updating any BTS and Operators in that agency.

- 1. A currently certified BTS may become a certified BTS for a new instrument by completing an instrumentation class.
 - a. The new instrument must utilize the same type of technology (fuel cell or infrared) as the instrument for which the BTS holds current certification.
 - (1) If the principle of operation is different, the BTS must complete an operator changeover class as described in I.E.2, followed by a BTS instrumentation class for the new instrument.
 - b. BTS certification will be for 26 months upon completion of the class.
- 2. A currently certified Operator may certify on a new instrument by completing a BFS approved instrument changeover class.
 - a. The operator shall be certified for 26 calendar months after completion of the class.
 - b. Individuals not currently certified as Operators must complete a basic operator class as described in Section I.C.

F. Record maintenance and management. It is the responsibility of each individual agency to store calibration records, subject records, maintenance records, instrument logs, or any other records as pertaining to the evidentiary use of breath testing instruments [Revised, 2/99].

- 1. It is the responsibility of the agency to see that the said records are stored and maintained a minimum of (3) years in accordance with IDAPA 11.03.01.

2. The Bureau of Forensic Services will not be responsible for the storage of such records not generated by the bureau.
 - a. Records may be subject to periodic review by the Bureau of Forensic Services.

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II: Calibration Checks of Breath Testing Instruments

Calibration checks aid the Breath Testing Specialist (BTS) and the Bureau of Forensic Services (BFS) in determining if a breath testing instrument is functioning correctly. Calibration checks are performed using ethanol-water, wet-bath simulator solutions prepared and analyzed by the BFS or an approved vendor. The BFS analyses establish the target value and acceptable range of the solutions used for the checks. The acceptable range is $\pm 10\%$ of the solution target value, or ± 0.01 grams alcohol/210 liters of simulator vapor, whichever is greater. [Revised, 12/98]

A. Alco-Sensor Calibration Checks.

1. Alco-Sensor instruments must be checked **within 24 hours** of a subject test to be approved for evidentiary use. [Revised, 2/99]
 - a. The official time and date of the calibration check is the time and date recorded on the tape by the printer, or in the absence of the printer, the time and date recorded on the log for the calibration check.
2. The Alco-Sensor calibration check is run using a solution or solutions provided by the Bureau of Forensic Services or approved vendor and following the calibration procedure outlined in the Alco-Sensor manual. Calibration checks may be run by a certified Alco-Sensor operator, as well as a BTS. [Revised, 12/98]
 - a. The **simulator temperature** should be between **33.5°C** and **34.5°C** in order for the calibration results to be valid.
 - (1) The operator should check the simulator temperature prior to the calibration check.
 - b. Target values and ranges of acceptable readings are included in a Certificate of Analysis prepared by and available from the BFS. [Revised, 4/97]
 - (1) Solutions may be rerun if the initial values are not within acceptable range. If the results of the repeated check are satisfactory, the instrument is approved for evidentiary use. [Revised, 4/97]
 - (a) If results after a total of three (3) runs for any solution (two tests per run) are still unsatisfactory, contact the appropriate BFS laboratory. The instrument should not be used for evidentiary testing until the problem is corrected and calibration results are within range. [Revised, 4/97]

3. The instrument must give calibration check results falling within the acceptable range for the solution. Unsatisfactory readings for a solution will result in a disapproval of the instrument. [Revised, 5/96]
 - a. An agency may run additional calibration checks at their discretion.
4. Calibration check solutions should only be used prior to the expiration date on the label.
 - a. Solutions will only be used as long as values produced are within the the designated range.
 - (1) Solutions should be changed approximately every 15-20 calibration checks or every month which ever comes first.

B. Intoxilyzer 5000 Calibration Checks.

1. An Intoxilyzer 5000 calibration check consists of using a wet-bath simulator to analyze solutions supplied by the Bureau of Forensic Services or an approved vendor.
 - a. Target values and ranges of acceptable readings are included in a Certificate of Analysis prepared by and available from the BFS. [Revised, 4/97]
 - b. Calibration check solutions should only be used prior to the expiration date as marked on the label.
 - (1) Solutions should only be used as long as values produced are within the designated acceptable range.
 - (1) Solutions should be changed approximately every 100 calibration checks or every month which ever comes first.
2. Intoxilyzer 5000 instruments in evidentiary use must have a calibration check with each subject test. [Revised, 12/98]
 - a. During a breath test a calibration check will be performed as directed by the instruments testing sequence. This calibration check will show up on the print card as a SIM CHK.
 - (1) If the SIM CHK is within the acceptable range for the solution the testing sequence will continue.
 - (2) If the SIM CHK is not within the acceptable range for the solution the testing sequence will abort and no breath samples will be obtained.

3. If the SIM CHK is acceptable the instrument will be approved and the resulting breath samples will be deemed valid for evidentiary use by the Bureau of Forensic Services.
 - a. Calibration check information should be entered in the instrument log.
4. The **simulator temperature** should be between **33.5°C** and **34.5°C** in order for the calibration results to be valid.
 - a. Operators should check the simulator temperature prior to the testing sequence.

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III: Testing Procedure

Proper testing procedure by certified operators is necessary in order to provide accurate results that will be admissible in court. Instruments used in Idaho measure alcohol in the breath, not the blood, and report results as grams of alcohol in 210 liters of breath.

- A. Prior to evidential breath alcohol testing, the subject must be monitored for fifteen (15) minutes.** During this time the subject may not smoke, drink, or chew gum, candy, food, or any tobacco product. Any material which absorbs/adsorbs or traps alcohol should be removed from the mouth prior to the start of the 15 minute waiting period.
1. The monitor should be a certified breath test operator as described in Section I.C.
 - a. The breath test must be administered by an operator currently certified in the use of the specific model of instrument used.
 2. False teeth, partial plates, or bridges installed or prescribed by a dentist or physician do not need to be removed to obtain a valid test.
 3. If in doubt, the operator may elect a blood test in place of the breath alcohol test.
 4. During the waiting period, the monitor must be alert for any event that might influence the accuracy of the breath test.
 - a. If, during the 15 minute waiting period, the subject vomits or is otherwise suspected of regurgitating material from the stomach, the 15 minute waiting period must begin again.
 - b. The operator must be aware of the possible presence of mouth alcohol as indicated by the testing instrument.
 - c. If mouth alcohol is suspected or indicated, the operator must begin another 15 minute waiting period before repeating the testing sequence.
- B. A breath alcohol test normally includes two (2) breath samples taken during the testing sequence and separated by air blanks.**
1. If the subject fails or refuses to provide a second or third sample as requested by the operator, the single test result may be considered **valid**. [Revised, 10/95]
 - a. Refer to III.B.3.c, below.

2. Section 18-8002, Idaho Code, defines "evidentiary testing" as "a procedure or test or series of procedures or tests."
 - a. The operator may repeat the testing sequence as required by circumstances.
 - b. The operator should use a **new mouthpiece** for each series of tests.
3. **A third breath sample** is required if the first two results differ by more than 0.02.
 - a. Unless mouth alcohol is indicated or suspected, it is **not** necessary to repeat the 15 minute waiting period.
 - b. The operator should log test results and retain print-outs for possible use in court.
 - (1) If there is no printout, the log page becomes the legal record of the test results.
 - c. If a subject fails or refuses to provide a second or third sample as requested by the operator, the results obtained are still considered valid by the BFS, **provided** the failure to supply the requested samples was the fault of the subject and not the operator.
 - (1) The operator should note the circumstances in his report.
 - (2) If the second or third samples are lacking due to instrument failure, the operator should attempt to utilize another instrument or have blood drawn.
 - (a) The operator should log all test results, including refusals, and retain all print-outs.
 - (b) If there is no printout, the log page becomes the legal record of the test results.
 - (I) Intoxilyzer 5000 test results may be recovered via the modem.
3. A deficient sample reading does not automatically invalidate a test.

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