

CHAPTER 4.  
**SERVICES OF STATE HYGIENIC  
 LABORATORY.**

## ARTICLE 6.

**METHODS AND STANDARDS RELATING TO  
 CHEMICAL TEST FOR BLOOD ALCOHOL  
 IMPLIED CONSENT LAW**

- Sec.  
 3. Blood analysis.  
 4. Urine analysis.

1. GENERAL.

201. **Scope.**—Methods and standards relating to chemical test for blood alcohol implied consent law.

202. **Authority.**—These regulations are issued under authority of West Virginia Code, Article 6.

203. **Effective Date.**—These regulations became effective July 1, 1975.

204. **Filing Date.**—These regulations were filed in the Office of the Secretary of State, May 30, 1975.

C. 2. BREATH ANALYSIS.

201. **Standards**

Instruments for breath alcohol analysis shall meet the following standards:

- (a) The instrument and any related accessories shall be capable of the collection and analysis of breath specimens which are essentially alveolar in composition.
- (b) The instrument shall be capable of analyzing a blank sample and of analyzing a suitable reference sample, such as air equilibrated with a reference solution of known alcohol content at a known temperature.
- (c) The instrument shall be capable of the analysis of a reference sample of known alcohol concentration within accuracy and precision limits of plus or minus 0.01 grams per cent of the true value. These limits shall be applied to alcohol concentrations which are 0.01 grams per cent or higher.
- (d) The instrument shall be capable, in a controlled experiment, of breath alcohol analysis which results in a determination of a subject's blood alcohol concentration which has correlation with his actual blood alcohol concentration as measured on a blood sample taken at the same time as the breath sample.

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- (e) The instrument shall be capable of breath alcohol analysis which results in a concentration less than 0.01 grams of alcohol per 100 milliliters of blood when alcohol free subjects are tested.
- (f) The "Breathalyzer" distributed by Smith & Wesson Electronics (Stephenson), Eatontown, New Jersey, meets the above standards.

### 2.02. Methods

A general method for extracting breath for alcohol analysis shall include the following:

- (a) Observe the subject for twenty (20) minutes before taking the test to insure that the subject had nothing in his mouth at the time of the test and that he had no food or drink.
- (b) Check the machine to see that it is in proper working order at the time the test is being conducted.
- (c) That the test is given by a qualified operator and in the proper manner.

## SEC. 3. BLOOD ANALYSIS.

### 3.01. Standards

Methods for analyzing blood specimens for ethyl alcohol shall meet the following standards:

- (a) The method shall be capable of separating and quantitating ethyl alcohol from the blood specimen.
- (b) 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 0.01 grams per cent of the true value. These limits shall be applied to alcohol concentrations which are 0.01 grams per cent or higher.
- (c) The method shall be capable of blood alcohol analysis which results in a concentration less than 0.01 grams of alcohol per 100 milliliters of blood when alcohol free subjects are tested.
- (d) The gas-chromatographic method used by the Department of Public Safety Chemistry Laboratory meets the above standards.

### 3.02. Methods

The methods for extracting blood for alcohol analysis shall be as follows:

- (a) The blood shall be drawn by a Doctor of Medicine or Osteopathy or a Registered Nurse or trained Medical Technicians at the place of his employment.
- (b) Sterile hypodermic needles and syringes capable of extracting 10 ml of blood shall be used. Sterile disposable units are recommended.
- (c) The skin shall not be disinfected with alcohol. The use of 1-1000 aqueous solution of mercuric chloride, aqueous benzalkonium chloride

<sup>1</sup> Reference to trade-named equipment does not constitute an endorsement by the Department of Health.

(zephiran), aqueous merthiolate, or other suitable aqueous disinfectants are acceptable.

- b) The container (tube or vial) must be clean and dry, have an inert airtight stopper and hold at least 10 ml.
- c) An anti-coagulant, such as sodium fluoride, citrate, or oxalate, shall be used. The tubes prepared and furnished by the Department of Public Safety contain sodium fluoride powder and also are prepared in compliance with Method 4.

#### 4. URINE ANALYSIS.

##### 01. Standards

Methods for analyzing urine specimens for ethyl alcohol shall meet the standards required for blood analysis. The quantity of alcohol found in the urine shall be divided by the factor 1.3 to determine the quantity of alcohol in the blood.

##### 02. Methods

The methods for extracting urine for alcohol analysis shall be as follows:

- (a) The container must be clean and dry and have an inert airtight stopper and hold at least 10 ml.
- (b) The bladder shall first be voided and discarded. A specimen shall be taken after a wait of twenty (20) minutes. This second specimen shall be submitted for alcohol analysis.