



Colorado Department
of Public Health
and Environment

Evidential Breath Alcohol Testing (EBAT) Program

<p>What is an intoxilyzer:</p>	<p>An intoxilyzer is an instrument for estimating blood alcohol content (BAC) from a breath sample. Results are considered evidential and thus admissible in court. These evidential intoxilyzer instruments are different from the hand held preliminary breath testing (PBT) instruments officers use during road side stops. Once an individual tests positive at a road side stop using the PBT, the evidential intoxilyzer is used, either by bringing the instrument to the driver or by bringing the driver to the instrument. The intoxilyzer is used to collect an official BAC reading that will be used as evidence in a DUI case.</p>
<p>How does an intoxilyzer work:</p>	<p>The intoxilyzers work by exposing breath expelled into a sample chamber to infrared light. An emitter produces a known amount of infrared light which passes through the sample chamber to reach a sensor at the opposite end. Alcohol molecules are known to absorb a certain amount of infrared radiation and so, if alcohol is in the sample chamber, a predictable proportion of the light will not reach the sensor. The machine compares the light sent with the light received in order to calculate an alcohol concentration. The more infrared radiation is absorbed, the more alcohol is in the breath sample.</p>
<p>CDPHE's Role:</p>	<ul style="list-style-type: none"> ● CDPHE <u>validates</u> the intoxilyzer instruments, <u>issues</u> them to law enforcement, and <u>maintains</u> and <u>calibrates</u> the instruments. There are 1-2 evidential intoxilyzer instruments in each law enforcement agency. ● CDPHE <u>provides training</u> to law enforcement on how to use the evidential intoxilyzer instruments, <u>certifies</u> law enforcement as operators and/or instructors, and <u>certifies</u> the law enforcement facilities that house the instruments. <p>In order to maintain the evidential intoxilyzer instruments and ensure that their results meet the standards necessary for evidence, and to ensure standardized training across the state, it is most efficient for the evidential intoxilyzer instruments in the state to be the same and to be managed centrally by the state lab. Accurate calibration of, and education on, multiple instruments would be difficult and increase the possibility for errors which could prevent the conviction of a drunk driver. Therefore, the Department replaces all the instruments at once to ensure uniformity and standardization.</p>
<p>History of Replacement:</p>	<ul style="list-style-type: none"> ● The intoxilyzer 5000 was in use in Colorado from 1998-2012. The total cost to provide intoxilyzers for Colorado was approximately \$1,094,500 in 1998. ● In fiscal year 2012 RFP TM-LSD121208 was issued to replace the intoxilyzer 5000 due to the increasing difficulty in locating parts, the increasing costs to maintain the instruments, and the need to use updated technology. ● RFP TM-LSD121208 was awarded to CMI, Inc in 2012 for \$2,000,000. Approximately \$1.7 million came from federal sources and an estimated \$300,000 came from state funding sources. ● The lifespan of the intoxilyzer 9000 is anticipated to be 10 years before major replacement or updates will need to be necessary. The anticipated cost is \$2.1 million per program estimates.