# Zero Tolerance Alcohol Testing:
## AlcoPro's View on Setting Cut-off Levels for Alcohol Testing
### June 24, 2013

### *Zero Tolerance Policy*
Many programs have a "zero tolerance" policy for alcohol use. Their program policies frequently prohibit the use of any alcohol. Does this mean that any reading on an Alco-Sensor higher than .000 is a positive test and grounds for taking action against a client or employee? While it might seem logical that .000 is the only acceptable negative test result for a zero tolerance policy, AlcoPro recommends that agencies use a threshold of either .010 or .020 as a positive test. We do not recommend taking action on an alcohol test result lower than the threshold levels of .010 or .020.

### *Why not use .000 as a threshold level?*
The industry standard for laboratory drug testing is to set a numerical cut-off level for the drug being detected. If the drug is present at a concentration at, or above, the cut-off level the test is positive. If the drug is not present at or above the cut-off level, the test is negative. Cut-off levels vary from one drug to another. Scientists choose a cut-off level that 1), reliably indicates the presence of the drug and 2), and is at a level that the measuring instruments can reliably detect.

For example, the screening cut-off level for marijuana is 50 ng/ml. A negative drug test for marijuana means that drug was not present at a concentration of 50 ng/ml or greater. A negative drug test does not mean that there was zero amount of drug. A specimen can still contain drug below the cut-off level and be correctly identified as a negative test. A laboratory report simply says "negative" or "positive." We never know if a small amount of drug was present in a specimen or if there was zero amount of drug.

The scientific principles of establishing cut-off levels that apply to drug testing also apply to alcohol testing. However, unlike a laboratory test in which we see only the report of "positive" or "negative," when testing with an Alco-Sensor the operator sees the numerical result and we must make the determination of "negative" or "positive."

### *The case for a .020 threshold level*
We recommend using a .020 cut-off level for employee testing and other evidential alcohol testing applications. A .020 cut-off level is very conservative; there is no question that a person with .020 BAC has consumed alcohol, and there is no question that an Alco-Sensor can reliably detect this amount of alcohol. The U.S. Department of Transportation (DOT) uses this cut-off level in their mandatory alcohol testing programs. A policy that is based on the U.S. Department of Transportation alcohol testing regulation is easily defended.

When using a .020 threshold level, any test result of .019 or lower is considered a negative test.

### *The case for a .010 threshold level*
We recommend using a .010 cut-off level for testing in non-evidential settings, such as alcohol treatment programs. AlcoPro, Inc. believes that .010 is a high enough alcohol concentration to reliably indicate that a person has consumed alcohol. And .010 is within the accuracy limits of the Alco-Sensors. (All three-digit Alco-Sensors have an accuracy of +/- .005. Two-digit Alco-Sensors have an accuracy of +/- .01.)

When using a .010 threshold level, any test result of .009 or lower is considered a negative test. We recommend that agencies do not take action on test results lower than .010.