Position of the IACT, Inc. on Specificity of Evidential Breath Instruments

The International Association for Chemical Testing supports the findings published in the “Report on the Specificity of Breath Alcohol Analyzers” from the National Safety Council's Committee on Alcohol and Other Drugs (CAOD) published on February 22, 2010.

As stated in this report, “in order for a non-ethanol substance to produce a significant response on any breath alcohol testing instrument the substance must:

1. Be a volatile organic compound capable of appearing in the breath of living conscious human being.
2. Be present in sufficiently high concentration to be measured by the instrument after a 15 to 20 minute pretest observation period.
3. Be able to produce a response on the instrument that is indistinguishable from ethanol.”

A total of 64 references have been cited by the CAOD in the 1994, 1999, and 2010 Reports on the Specificity of Breath Alcohol Analyzers. Their findings may be summarized as:

1. Current instrumentation utilizing electrochemical and/or infrared detectors has limited inherent response to potential interferants.
2. Endogenous compounds do not appear in sufficient quantities, or similar wavelengths to be considered potential interferants.
3. Alleged Exogenous compounds should be evaluated individually, but “…the possibility of unrecognized falsely elevated breath alcohol results from these compounds in actual law enforcement practice is remote at best.”

In support of the NSC report, IACT takes the following position:

Given historical and on-going scientific research and provided a pretest observation/deprivation period has been conducted, current evidential breath instruments are not affected by endogenous compounds and the possibility of exogenous compounds affecting a breath test is highly improbable.

A copy of the 2010 CAOD Report is attached along with the Specificity Reference Summary and List.

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