

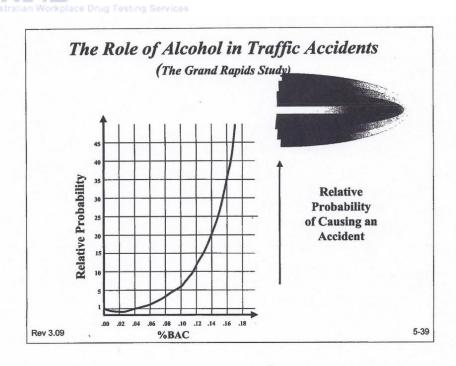
## The Borkenstein Study

As Prof. Borkenstein might say, alcohol occurs almost copiously and has been recognized as an intoxicant for thousands of years. The study of alcohol as an academic exercise, however, can be traced to the late 1700s when J.J. Plenc proposed the chemical identification of poisons.

In the United States, Indiana University's Prof. Rolla N. Harger conducted the first-ever "short course" on chemical tests for intoxication in 1937. Dr. Harger also introduced the Drunkometer, the first stable instrument for testing breath alcohol, in 1938.

In 1954, Professor Robert F. Borkenstein, DSc invented the Breathalyzer, the first practical instrument for testing breath alcohol. Whereas the Drunkometer required re-calibration when it was moved from place to place, the Breathalyzer was highly portable.

In 1964, the Grand Rapids Study with Prof. Borkenstein as study director confirmed that the chances of having an accident increase geometrically as blood alcohol concentration increases. The study also confirmed (among other things) that drivers with blood alcohol concentrations higher than 0.040 percent tend to have more severe, more expensive single-vehicle accidents.



Land Mark Study done by Dr. Borkenstein



As the chart above indicates, drivers with a level of 0.080 BAC/BrAC were found to be 7.5 times more likely to be involved in an accident than a driver at 0.000, but even at 0.020 a slightly elevated risk occurs in some individuals...hence workplace limits of 0.020 BrAC.



