

# Breath Test For Alcohol Called Sure

## --The Doctor Talks

~~Global M. 28.4.38~~  
(By DR. HERMAN N. BUNDESEN.)

Some time ago the newspapers carried a story about a simple, sure test to determine whether or not a person is drunk. All you have



**Dr. Bundesen.**

to do is to take a sample of the breath of the person. This test is very important because many automobile injuries and deaths are caused by intoxicated drivers. If the police could have an easy way of knowing whether a person is under the influence of liquor, it would be easier to convict such persons for the criminal killing they do.

\* \* \*

Then, again, there are times when a driver may have the odor of alcohol on his breath and yet he may not be drunk.

Chemical tests for alcohol present in the blood have been carried out in such countries as Sweden and Switzerland for a number of years. However, it is not always possible to obtain quickly a specimen of blood from any individual. During the period of delay the person's condition may change.

In order to obtain a blood test it is necessary to wait until a physician arrives, so that it may be withdrawn from a vein.

\* \* \*

Probably none of the tests which have been available up to the present time could be made at the scene of the accident, or in the local police station. Therefore, it would be necessary to hold the individual in the police station for hours, or even days, until the report as to whether or not he was drunk would become available.

\* \* \*

The new test gets rid of all these objections. Dr. N. R. Harger and his co-workers, of Indianapolis, have developed a test for drunkenness or intoxication to be made on the suspected individual's breath. The substance used for testing the breath is composed of a mixture of chemicals. These include 55 per cent of sulphuric (sul-fur-ik) acid, a small amount of purple chemical, called potassium permanganate (po-tas-e-um per-man-gan-at). The potassium permanganate reacts quickly with alcohol.

Now, here is the way the test works. The breath of the suspected drunken person is breathed into a tube. His breath passes through the solution of chemical. By comparing the amount of alcohol which one breath contains with the carbon dioxide the breath contains, the doctor is able to calculate the amount of alcohol in the person's blood. It is not necessary to touch the individual to make the test. A tube is held before his mouth and nose and a pump is used to draw the air he breathes out through the testing apparatus.

\* \* \*

Careful tests were carried out by Dr. Harger which showed that there was very close relationship between the amount of alcohol found in the breath and the amount present in the blood.

If an individual just rinses out his mouth with an alcoholic beverage, some alcohol will be present in the breath for a short time afterward. This, however, disappears within about ten minutes. For this reason, at least, ten minutes should elapse between the time alcoholic fluids are taken into the mouth and the time when the breath is collected for analysis.

This chemical test, which can easily be made, may do much to aid in exonerating an individual suspected of being drunk, while, at the same time, it will aid in convicting the drunken driver who is jeopardizing his own life, as well as the lives of many innocent individuals.



August 22nd, 1938.

Memorandum to Hon. Insp. J.F.C.B. Vance -

Please note the attached clipping, and when convenient see me relative to same.

*W.F.C.B.*

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Chief Constable.

WWE/JRF