

BREATH TESTERS UNRELIABLE, STUDY SHOWS

Evaluation of inexpensive, disposable devices for breath testing of blood alcohol concentration shows that the devices often produce high numbers of erroneous results.

The evaluation, conducted by the State Toxicology Laboratory of North Dakota State University (NDSU) and the Insurance Institute for Highway Safety, concluded that most of the devices "produced erroneous readings in practically all of the ranges of actual blood alcohol concentration where tests were administered."

Under field conditions "the results may be expected to be even worse, since this study was conducted under ideal conditions, without many of the problems expected in the field," the report notes.

A total of eight types of disposable screening devices from four manufacturers were evaluated. The devices tested were the AlcoLyser H, AlcoLyser (Iowa type), AlcoLyser 100, Becton-Dickinson Device 1, Becton-Dickinson Device 2, Kitigawa Drunk-O-Tester, Sober-Meter SM-1 and Sober-Meter SM-6.

(The disposable devices tested are not to be confused with the more expensive, quantitative testing instruments — such as the Breathalyzer and Photo-Electric Intoximeter — which use photo-electric and other sophisticated chemical and physical methods, and whose results correlate well with actual blood alcohol concentrations.)

Manufacturers estimate sales of the disposable devices to be half a million units or more per year and say sales are increasing rapidly. Recent highway safety program emphasis on removing the abusive drinker from the driving population has lent impetus to the use of the inexpensive, disposable devices.

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The devices, which range in price from less than one dollar to about two dollars each, are commonly used for pre-arrest screening tests, indicating whether the blood alcohol concentration of a suspect is above or below the legal limit. The devices "have been offered, in some instances, as tests that produce results that can be used as evidence," the report states.

Thirty-one states follow the Department of Transportation highway safety standard 308 which recommends that blood alcohol concentrations not higher than 0.10 per cent by weight be used to legally define the terms "intoxicated" or "under the influence of alcohol." The remaining 19 states have limits higher than 0.10 per cent or have no legal limit.

Each of the disposable screening devices tested consists of a small glass tube, containing an alcohol-sensitive chemical, and a breath-volume measuring device such as a balloon, plastic bag or air pump.

"In this evaluation all of the disposable screening devices were used as simple qualitative tests of the type that indicate whether the blood alcohol concentration of a test subject is greater than or less than 0.10 per cent," the report points out. "Results indicating a blood alcohol concentration greater than or equal to 0.10 per cent were recorded as positive and results indicating a blood alcohol concentration less than 0.10 per cent were recorded as negative."

The report cautions that, "Before a law enforcement agency decides to use a device of this type —and if so, which particular device — it is imperative that the agency and the officers who will administer the test be aware of the results that may be expected, and in particular the two types of erroneous results: false positive readings and false negative readings."

It points out that readings obtained from the disposable devices may indicate that a person is legally intoxicated when his actual blood alcohol concentration is below the legal limit (a "false positive" reading). "If the device is being used for pre-arrest screening, errors of this type could result in arrests at actual blood alcohol concentrations below the recommended maximum legal limit.

"Clearly, both public and judicial acceptance of screening tests would be jeopardized if the screening tests employed were to result in false arrests of large numbers of motor vehicle operators who subsequently would be exonerated on the basis of accurate post-arrest quantitative tests," the report says.

On the other hand, readings from the same devices may indicate that blood alcohol concentrations are lower than the legal limit when, in fact, they are not (a "false negative" reading), thus possibly permitting "suspects who should be arrested (to be) set free. Since some violators would erroneously pass the test . . . this would dangerously limit the effectiveness of countermeasures utilizing such devices for screening tests," the report says.

"The need for a breath screening test for alcohol has been recognized for some time. However, devices producing excessive error, if widely used, will impede progress toward the development of effective countermeasures against the

problem of the abusive use of alcohol as a source of road losses," the study concludes.

Single copies of the study may be obtained without charge from the Insurance Institute for Highway Safety, Suite 300, Watergate Six Hundred, Washington, D. C. 20037.

STATE GROUP RECOMMENDS PRE-ARREST TESTS

A highway safety task force appointed by Wisconsin Governor Patrick J. Lucey has recommended that the state "approve by law the use of a screening test before charging a driver with operating a vehicle while intoxicated."

The 24-member task force told the governor that "we must be able to screen by a chemical test those drivers who commit moving traffic violations and those drivers who are involved in accidents where — in the opinion of the officer — alcohol is a causative factor."

The task force has suggested that a pre-arrest "baggie test" be administered. "If the screening test shows probable evidence of blood alcohol sufficient to arrest, then the person will be taken to a 'Breathalyzer' site where a complete test will be administered," the task force report says.

TOMS OPPOSES HART 'BUMPER BILL'

The acting administrator of the National Highway Traffic Safety Administration has told the Senate Commerce Committee that his agency is "unable to support" pending legislation that would give the safety administration authority to regulate property damage. (See Status Report, Vol. 6, No. 5, March 10, 1971.)

At recent hearings on the property damage bill (S. 976) introduced by Sen. Philip A. Hart (D-Mich.) Douglas Toms said, "We want to emphasize our reluctance to compromise our principal safety mission of reducing fatalities and injuries in order to lessen the monetary costs of minor accidents."

Instead, he said, the Department of Transportation will propose within 30 or 40 days "a program of consumer information on vehicle susceptibility to property damage, crashworthiness and aggressiveness."

Toms used the term "vehicle aggressiveness" to refer to "pedestrian-be-damned" vehicle design described in testimony by Dr. William Haddon, Jr., president of the Insurance Institute for Highway Safety, before the Senate Commerce Committee in May.

Toms said the DOT proposal will give consumers "the basis for a more informed choice in the market place," influence "the establishment of lower insurance premium rates" and establish "incentives in the market place for auto manufacturers to build cars with reduced damage characteristics and increased safety protection."

Toms said the DOT proposal will also "seek authority to acquire insurance industry accident claims on a regular basis." This data "will provide the vital link between crash tests (car-to-car and barrier tests), and computer simulations and real-world accidents," he told the committee.

RECONSIDERING BUMPER RULE:

Toms defended his agency's recently issued bumper standard as doing an "adequate job" of protecting safety related equipment, but under committee questioning said that the safety administration is "in the process now of re-evaluating" the standard. He said the reconsideration is "to see whether or not there would be sufficient economic payoff . . . to raise (rear end test collision requirements) to five miles per hour."

The standard now calls for a rear end barrier crash test of 2.5 miles per hour for 1973 models. (For further details on the bumper standard, see Status Report, Vol. 6, No. 8, April 26, 1971.)

Asked if he was aware of test results introduced in the hearings in May by the Insurance Institute for Highway Safety that showed 1969 model cars passing the DOT rear-end performance requirement set for the 1973 model year, Toms replied that he was "not intimately familiar" with such tests but that he had "heard about them."

Most auto makers have petitioned DOT to weaken its bumper requirements. However, Ford Motor Company, breaking with the industry position, asked that the federal bumper rule be strengthened.

In a May 19 supplement to its initial request for reconsideration of the bumper standard, Ford urged DOT to "establish both pendulum and barrier impacts at five miles per hour both front and rear" for 1974 models. Toms told the committee under questioning that he understood from newspaper accounts that Ford had made such a recommendation but he had not personally seen the Ford statement.

DAVIS JOINS INSTITUTE — Bonnie D. Davis, a research librarian, has joined the Insurance Institute for Highway Safety and will be in charge of its library. A graduate of Winthrop College, she was formerly employed by MITRE Corporation, a non-profit research organization.

TOMS HITS INDUSTRY ON DEFECT NOTIFICATIONS

The acting administrator of the National Highway Traffic Safety Administration has criticized manufacturers for what he calls "inadequate" defect notification letters, some of which "either ignore or misinterpret" portions of the National Traffic and Motor Vehicle Safety Act of 1966.

In letters to 78 manufacturers of motor vehicles and motor vehicle equipment, Douglas Toms said that "many notification letters have been inadequate in attempting to provide the desired incentive in owners to have vehicles repaired."

He noted that many of the defect notification letters make no mention that the notification is required by federal law. "The public would be more inclined to view a safety defect as a safety hazard" if it knows that the notification is required by federal statute, he said. Toms urged manufacturers to make such federal requirements known early in their defect notification letters.

Section 113 of the 1966 act requires manufacturers to notify first purchasers and subsequent warranty holders by certified mail when a safety related defect exists. The act specifies that the notification "contain a clear description of such defect, an evaluation of the risk to traffic safety reasonably related to such defect, and a statement of the measures to be taken to repair such defect." Toms told manufacturers that, "as a minimum, a clear description of the defect should include:

- "A statement of the particular item or items of vehicle equipment affected;
- "The malfunction that may occur;
- "A statement of any operating or other conditions that may cause the malfunction;
- "Precautions the owner might take to reduce the chance that the malfunction will occur before the vehicle is repaired."

He also urged manufacturers to tell owners the "nature and extent" of work needed to correct the defect and how long it will take to do the work.

Attorney Ralph Nader has written Toms that the letter "highlights the importance of clear defect notification letters to owners" and urged that the Toms letter be issued as a mandatory regulation.

Nader also claimed that the Chevrolet Division of General Motors has deceived "its customers about the safety condition of their vehicles, in direct violation of the law" by conducting a "product improvement" campaign to correct five defects on the company's compact Vega model.

Nader said four of the five defects listed in GM's letters to Vega owners "are clearly safety related" and the safety administration should take steps to force GM to conduct a defect notification campaign. He also urged the safety administration "to determine how frequently this strategy is used to avoid defect notification."

INSURERS' "THIRD FORCE" ROLE ANALYZED

The public and insurers share a "virtually identical" concern in reducing losses from the "full range of natural and manmade hazards that damage people and property," and this overlapping of interests means that insurers have the potential to become recognized as a "third force" in environmental problem solving, a group of insurance executives were told recently.

Dr. William Haddon, Jr., president of the Insurance Institute for Highway Safety, described the "third force" opportunity in a speech to the annual meeting of the American Insurance Association. At the same time, he warned that the shared interest of the public and the insurance industry in reducing damage done by "a wide variety of identifiable environmental hazards" is "largely unperceived, in an explicit fashion, by most government officials and by most news media personnel.

"The overall public posture opportunity for this industry is, therefore, not a classical public relations one, as characterized in some other industries, of pushing old and typically defensive positions and seeking consensus on new ones. Rather, it seems to me, it is the opportunity for:

"1. Directing attention at developing, along systematic lines, new insights into those factors that produce losses that unacceptably burden both insurers and society as a whole;

"2. Pushing the results of such factfinding into the private and public processes by which decisions to reduce environmental hazards get made — design and production decisions in the first instance, legislative and administrative rule-making decisions in the second;

"3. Protecting existing loss-reducing policies, particularly in the public sector, from lobbying and other undermining inroads attempted by interests who see themselves threatened as a result and vigorously promoting new ones where needed."

Stressing that today's environmental problems are no more transient than the ones whose damaging impacts first caused insurance companies to come into being — "including, in the early days, marine and fire loss mitigation" — Haddon described the role of insurers in society as being "predominantly that of easing the private and public burdens of situations in which people and their property are damaged by or in interaction with the full range of natural and man-made environmental hazards."

But, he added, "although this fundamental concern with environmental issues has been shown in varying extent by the industry's several components, and has and is being acted on by you in a broad range of specific loss-reduction efforts, I believe it is essential that this common denominator of all insurance activity, considered broadly, be much more explicitly and prominently recognized — lest its implications for future public postures and corporate policies and activities be inadequately considered.

"In addition, I believe that it is essential, in the best interests of everyone involved, that such recognition of the industry's fundamental concern with, and relation to, environmental problem solving also be widely and well understood — indeed, taken for granted — both by the public and by policymakers in government. This is at present far from the case. "

Single copies of the speech may be obtained without charge by writing to Insurance Institute for Highway Safety, Watergate Six Hundred, Washington, D. C., 20037.

SITE PICKED FOR DOT COMPLIANCE TESTING FACILITY

The Department of Transportation has selected a site in East Liberty, Ohio, for construction of its research and testing facility mandated in the National Traffic and Motor Vehicle Safety Act of 1966.

The facility is to be used for testing vehicles to determine compliance with motor vehicle safety standards issued by DOT, investigation into alleged safety defects in vehicles and vehicle equipment, evaluation of test procedures and requirements being considered for proposed safety standards and evaluation of the technical sufficiency of corrective actions specified in manufacturers' safety related recall campaigns.

DOT's pending budget for fiscal 1972 includes provision of \$9.6 million for construction of the Motor Vehicle Compliance Test Facility. The department has indicated it plans to spend \$1.4 million of that during fiscal 1972.

Although construction was mandated by Congress five years ago, the Congress has consistently failed to authorize sufficient funds for construction. Last year it placed a \$100,000 ceiling on the amount DOT could spend for development of such a facility. Transportation Secretary John Volpe at that time told the House Commerce Committee the limitation would be "acceptable."

If Congress approves the \$9.6 million funding this year, the center will be operational by the winter of 1974, according to DOT.

DOT currently contracts all vehicle and equipment testing to private, independent laboratories. In announcing the site selection for the testing center, Volpe said these private laboratories are too heavily engaged in commercial work — some of it for segments of the automotive industry that DOT's program is aimed at regulating — and cannot conduct a full range of compliance tests.

The secretary said DOT vitally needs a central testing location also to reduce costs and possible damage in transporting of equipment and vehicles to the various testing laboratories currently doing the work for DOT.

The test facility is to include a 58,000 square foot laboratory, a 3,200-foot straight test roadway with crash barrier and skid pad, an administration and technical support building, a warehouse and a service station.

NEW NHTSA OFFICE GETS HEAD — Dan Fulmer, executive secretary of the National Highway Traffic Safety Administration, has been named to head the agency's new Office of Consumer Affairs and Public Information. Fulmer will be responsible for overall direction of press and public information and consumer relations programs of the safety administration.

Reporting to Fulmer will be Bobby Boaz, in charge of the agency's public information services, and Gil Watson, in charge of consumer affairs activity. Fulmer will report to Douglas Toms, acting administrator of NHTSA. Temporarily he will continue to act as NHTSA executive secretary.

Fulmer, who has been with NHTSA and its predecessor, the National Highway Safety Bureau, since 1967, is an attorney and former newsman. He has held positions with the Peace Corps and the House Government Operations Committee. The task of his new office, created on May 1 by DOT Secretary John Volpe, is "to promote public awareness and understanding of motor vehicle and highway safety programs in the United States, the nation's stake in these programs, and progress toward meeting lifesaving goals."

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