

Log M-383C



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: MAY 25 1993

In reply refer to: M-93-4

Honorable Terry E. Branstad
Governor of Iowa
State Capitol
Des Moines, Iowa 50319

Representative Robert C. Arnould
Speaker of the House
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Des Moines, Iowa 50319

Senator Michael E. Gronstal
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Recreational boating accidents currently result in the greatest number of transportation fatalities annually after highway accidents. Although the number of fatal recreational boating accidents and fatalities decreased each year from 1985 to 1990, the U.S. Coast Guard indicates that in 1991, the number of fatalities from recreational boating accidents increased to 924 from the 865 fatalities reported in 1990. According to the Coast Guard, the fatality rate—the number of fatalities per 100,000 estimated boats—also increased slightly during the same period. Information from the American Red Cross indicates that about 355,000 persons are injured from recreational boating accidents annually and that more than 40 percent of these injuries require medical treatment beyond first aid. The U.S. Coast Guard estimates that in 1991 there were about 20 million recreational boats on the Nation's waterways, with the number increasing steadily each year. Not only has the number of recreational boats increased, but the speed at which many of these recreational boats operate has also increased. Because of the number of fatalities and injuries and because recreational boating activities can be expected to continue to increase, the Safety Board believes that efforts to improve safety are needed in recreational boating. The Safety Board, therefore, initiated a safety study of recreational boating accidents to determine the circumstances of these accidents and the countermeasures needed to prevent or reduce their number and severity.¹

¹ National Transportation Safety Board. 1993. Recreational boating safety. Safety Study NTSB/SS-93/01. Washington, DC.

For the study, the Safety Board reviewed U.S. Coast Guard data on recreational boating accidents that occurred between 1986 and 1991. The Safety Board also asked 18 States to provide copies of their 1991 fatal accident investigation reports, including witness statements, local investigation reports, and written narratives of the accidents. The Safety Board received 407 fatal accident reports, about 52 percent of the 779 fatal boating accidents that occurred nationally in 1991; 478 persons died in these accidents, about 52 percent of the 924 persons who died in boating accidents nationally in 1991.

A review of the accident data provided by the 18 States indicated that 107 boat operators (76 of whom were fatally injured) were tested for alcohol; that is, 24 percent of the 451 boat operators were tested. Test results were negative for 21 operators, not available for 19 operators, and positive for 67 of the operators. Thus, 76 percent of those tested and for whom test results were available had positive test results.

In addition to the operators who tested positive for alcohol (15 percent), another 101 boat operators (22 percent) were suspected by law enforcement officers of having been drinking while operating a boat.² Consequently, at least 168 of the 451 operators (37 percent) probably had some level of alcohol in their system at the time of the accident.³ However, it is likely that some of the 252 operators in the "unknown" category—those for whom there was no indication on the accident report of having been drinking—also had some alcohol in their system. Thus, 37 percent is probably a conservative estimate of the number of operators who had alcohol in their system at the time of the accident.

In its 1983 study on the role of alcohol/drugs in recreational boating accidents, the Safety Board concluded that as many as 35 to 38 percent of the fatalities in the recreational boating accidents studied were "legally drunk" at the generally accepted blood alcohol concentration (BAC) of 0.10 percent. Prior to that time, boating while intoxicated (BWI) had not gained national attention as a serious safety issue, and only three States (Arizona, Louisiana, and Maryland) had statutes that specifically addressed BWI. As a result of its 1983 study, the Board recommended that the various States and the District of Columbia undertake legislative initiatives to

² In some recreational boating cases, the on-site law enforcement officer may not have the necessary authority or equipment to require a boat operator to undergo a chemical test for alcohol and/or drug use. Several States, therefore, place a box on the accident forms to check if the responding officer observes or suspects from observation, witness statements, or evidence at the scene that an operator has been drinking. Consequently, 101 operators were suspected of having been drinking, but *no information on blood alcohol concentration (BAC)* was available.

³ For purposes of this letter, if either (1) the person had a BAC of 0.02 or greater, or (2) the responding marine or law enforcement officer indicated that the operator had been drinking, the operator was considered to have alcohol in his or her system. It could not be concluded, however, that in all cases the operator was under the influence of alcohol.

addressed BWI. As a result of its 1983 study, the Board recommended that the various States and the District of Columbia undertake legislative initiatives to complete a solid framework to address BWI. In short, the three elements of the Board's safety recommendations called on the various States to:

- Establish a defined level of intoxication to strengthen and improve State marine safety programs to handle alcohol-involved incidents and accidents. (M-83-76)
- Provide for a chemical test of blood, breath, or urine if a recreational boating operator is suspected of being intoxicated. (M-83-77)
- Require toxicological tests of recreational boating fatalities. (M-83-78)

The Safety Board also issued a safety recommendation (M-83-73) to the National Association of State Boating Law Administrators (NASBLA) to work with the States to develop a model enforcement program that would include a defined level of intoxication and toxicological and chemical testing requirements. Although it is illegal in all States to operate a vessel under the influence, 37 States and 2 Territories have passed and/or strengthened BWI laws since 1983. Although these laws vary from State to State, the majority of States define an illegal blood alcohol concentration standard. Some States define behavioral standards in addition to an illegal blood alcohol concentration; some States specify field test methods; and several States have instituted implied consent provisions.⁴

Defining the level of intoxication, conducting chemical tests if a recreational boater is suspected of being intoxicated, and requiring toxicological testing in the event of a fatality have enabled States to document more accurately the extent of alcohol use in recreational boating than they were able to do a decade ago. The Safety Board continues to believe that documenting the extent of the problem is a necessary first step before States can determine the appropriate countermeasures. The Safety Board further believes that all three of the legislative provisions outlined above are necessary to achieve an overall effective program. However, some States have defined the level of intoxication in terms of an illegal blood alcohol concentration but have not adopted a legislative provision allowing a chemical test of blood or urine if a recreational operator is suspected of being intoxicated. If enforcement officials

⁴ "Specified field test methods" means that the general method of determining a blood alcohol concentration, or other standard of intoxication, is prescribed in the law or regulation. "Implied consent" means that the refusal of the boater to submit to a test for intoxication (for example, breathalyzer, blood test, or other) may be introduced in court as evidence of intoxication. In some States, it may be considered a separate offense.

are unable to conduct a chemical test, the extent of the alcohol involvement in recreational boating cannot be accurately determined nor can an upward or downward trend be determined. Other States have attempted to curb alcohol use in recreational boating through various programs but have yet to adopt legislative provisions to define the level of intoxication or to allow for a chemical test. Actions taken by enforcement officials through programs that lack legislative backing are less likely to be effective. Therefore, the Safety Board believes that the remaining States that have not yet enacted the legislative provisions outlined above should do so immediately. Safety Recommendations M-83-76 through -78 are being classified "Closed—Acceptable Action/Superseded" as a result of the new recommendations being issued to the States following the Board's safety study.

Therefore, as a result of the safety study, the National Transportation Safety Board recommends that the State of Iowa:

Enact legislation to address the problem of alcohol use by recreational boat operators by establishing a clear definition of legal impairment in terms of alcohol concentration. (Class II, Priority Action) (M-93-4)
(Supersedes M-83-76)

Also as a result of the study, the Safety Board issued safety recommendations to the U.S. Coast Guard; the National Association of State Boating Law Administrators; the U.S. Department of the Army, Corps of Engineers; and the American Academy of Pediatrics.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "...to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation M-93-4 in your reply.

Chairman VOGT, Vice Chairman COUGHLIN, and Members LAUBER, HART, and HAMMERSCHMIDT concurred in this recommendation.

By: 
Carl W. Vogt
Chairman