

Comment on “Implications of Research for Policy Concerning Low Blood Alcohol Concentration in Traffic Safety”

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Harold Holder nicely summarizes the workshop papers and provides an interesting discussion of the interplay between research and policy in the alcohol area. Noting that lower BAC limits would be justified as policy based on research indicating impairment and increased crash risk with any drinking, Holder offers for discussion four possible scenarios of lower BAC limits with varying levels of enforcement and publicity.

Of course, instituting lower BAC limits does not necessarily reduce the problem of alcohol-impaired driving. And as Holder notes, since research clarifying the effects of a policy cannot be done until the policy is at least partially implemented, and the research takes time to complete, the full impact of a policy may not be known until it is fully established, i.e., after the fact. Fortunately, many alcohol policies are instituted at the state level and thus phased in, and researchers can take advantage of the opportunities for natural experiments that arise from this process.

Holder refers several times to the minimum alcohol purchase age in his discussions of the intertwining of research and policy. I think that the path to this legislation also provides a good comparison — a contrast actually — with the path to 0.08. There were two paths involving minimum alcohol purchase age legislation. Before 1970, most states had laws prohibiting those less than 21 years old from purchasing alcoholic beverages. Ratification of the Twenty-sixth Amendment, which extended the right to vote to 18 year olds, was followed by lowered purchase ages in 29 states during the early 1970s. Research indicated that this legislation resulted in increased involvement of young drivers in crashes, and this was one of the factors that led states that had lowered their alcohol purchase ages to raise them, starting in 1976 and continuing into the 1980s.

Raising the alcohol purchase age was a contentious issue, not unlike 0.08, and this gave rise to all sorts of “research” studies in support of positions. There were studies showing positive effects, no effects, and even negative effects. But from the start, the well-designed studies showed substantial positive effects; the inferior studies were the ones that did not. This was later confirmed by the General Accounting Office review published in 1987 (General Accounting Office, 1987). My point is that in the case of alcohol purchase age legislation, science was ahead of policy, or at least in lock step with it.

The case for 0.08 is less clear-cut. The actual change from 0.10 to 0.08 is small, and reductions in alcohol impaired driving are contingent on affecting people with BACs outside this narrow range. As in the case of the alcohol purchase age, states have changed from 0.10 to 0.08 over time, allowing study, but for quite a while the research evidence was such that the effect of moving to 0.08 was too close to call. However, many of the safety organizations that usually

base their positions on research findings were advocating 0.08 during this period. That is, policy was ahead of science. It is only recently that the effects of 0.08 are becoming clearer, and I don't believe yet that the evidence can be called definitive.

Of course, as Holder notes, a law's effectiveness is greatly determined by how well it is enforced and publicized, which in turn depends on its acceptability, and this will be a determining factor in the success of 0.08 in reducing alcohol-impaired driving.

Since we're now in the process of moving to 0.08 in the United States, the timing is not right for 0.05. Is 0.05 in the future? I've recently spent some time in Australia, where they drink more than we do in the United States, and they seem very accepting of 0.05. I expect that if we voted among ourselves whether we thought 0.05 should be implemented in the United States now or in the future, the vote would be split. Public acceptability would be an issue, in considering a BAC threshold where some people at least are minimally impaired. Police motivation to enforce would be questionable, and, as has been noted, their ability to enforce would be limited. We know that in sobriety checkpoints, a main though underused weapon against alcohol impaired driving, police do not detain most drivers with BACs of 0.05-0.08 or the majority of those with BACs in excess of 0.10 where signs of impairment are more often found (Wells et al., 1997). Police reluctance to use passive alcohol sensors, which can markedly improve their detection capabilities is well known. Convictions could be difficult to come by since the way our criminal justice system operates, convictions generally hinge on demonstrating impairment, despite per se laws.

Holder raises the issue of doing random breath testing as in Australia and here I disagree with his assessment. This isn't an issue of "opposition of citizen rights advocates who argue that mandatory testing without external evidence of impairment by a driver is an infringement of the privacy rights of citizens." It is a fundamental constitutional issue that isn't subject to state law. The U. S. Supreme Court decision held that the minimal stop occasioned by a sobriety checkpoint was reasonable given the state's interest in advancing highway safety. Breath testing is not a minimal stop. It is a full blown search and seizure, taking as it does, a sample of deep lung air, and no court could characterize it as other than a search and seizure. That means there must be either a warrant or probable cause to believe DUI has been committed before a breath test may be required.

This leads me to recommendations regarding BAC policies. First, we have a social movement in progress as more and more states move to 0.08, under the threat of federal penalties. This provides the opportunity to further clarify the effects of this change, an opportunity that should not be missed. Secondly, as Holder notes, the United States has not been a world leader in lower BAC limits, but we can and should carefully monitor the experience of other countries that have reduced the BAC threshold to 0.08, or 0.05, or even 0.02. Third, in an era where 1980s-style attention to the alcohol-impaired driving problem has waned, we need to encourage more vigorous enforcement of the BAC laws we presently have, e.g., changing zero tolerance laws and practices that inhibit enforcement (Ferguson et al., 2000), and greater use of sobriety checkpoints and passive alcohol sensors.

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