

## DECLINE IN DRINKING AND DRIVING IN SWEDEN

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### INTRODUCTION

I am very impressed with all the previous presentations, dealing with the decline in alcohol crashes. I wish that I could present similar declines as everyone else has done. Unfortunately, I can only do so in some respects. Fatalities in Sweden have come down from 1,100 in 1975 to 759 in 1992. Today, it would seem that we have almost reached our goals. Unfortunately, this is most likely due to the recession in the economy, leading to fewer new young drivers and fewer miles, etc.

Sweden has a very high level of road safety in an international comparison. We are at the very top but still not satisfied, of course. The government has set the road safety goals for the year 2000 - the number of fatalities and injuries on the road should decrease by 20% in comparison with the 1988 level. This is a very tough task when you are already very good and have applied most of the readily available and acceptable measures. The same thing applies to alcohol related crashes, Sweden has been very successful over the years. This is recognized by almost everyone but I do not know anyone who knows exactly how successful - not even I and this is a problem when you are asked to describe the situation to an international audience.

### ALCOHOL LEVELS IN ROADBLOCKS AND ACCIDENTS

The only close to real figure as to how frequently drunken driving occurs on our roads dates back to 1975, when there was a random study done all over Sweden. It was found that 0.12 % of the drivers were above the legal limit, which at the time was .05 %. This means that slightly more than one driver out of a thousand was legally drunk.

It has been impossible to get police cooperation to carry out a random roadside survey again. These operations are very costly, especially when you know that you will have to stop 1,000 cars to find one drunken driver.

I could, of course, present the official statistics about drinking and driving here and now, but I choose not to because of the poor quality of the official statistics. The official figures indicate that approximately. 9% of the drivers who are fatally injured are positive for alcohol. We know that this figure grossly underestimates the problem. For the years 1989-92, the proportion of fatally injured car drivers, who were positive for alcohol, was as high as 29%. This is why I choose not to present the official statistics. It is even worst with the injury accidents, because in these accidents the statistics are based on police suspicion and when possible measurements by the police on site. But often the police never see the involved parties because they have already been taken to hospital. Sometimes the ambulance people or the doctors at the hospital report to the police that they suspect that a driver has been drinking but usually they do not. Some years ago, a study found that as little as approximately 50% of the real drunk driving cases involved in injury accidents were known to the police. Over the years there have been changes in the reporting system as well. The process of reporting the use of police resources and the emphasis on drunk driving has varied over time and therefore the figures presented by the police are notoriously unreliable. The statistics therefore reflects not only the real problem but also variations in enforcement. I suspect that the situation might not be altogether different in other countries.

Actually, not even the fatality figures describe the situation 100% accurately. Some drivers survived the accident for a few hours and since the blood or other fluid sampling is made during the autopsy, alcohol metabolism could have reduced their BAC's. They may even have been given blood transfusions. This, of course, means that not even the figure of 29% positive for alcohol is true - it may be somewhat higher.

But to continue with the fatalities - since all victims are autopsied and a central laboratory makes all the analyses we can get results from more than 90% of all victims. Our findings also show that 51% of the drivers in fatal single vehicle accidents were positive for alcohol. As for the sex of the driver, we can draw the same conclusion as everyone else. It is a male problem - 31% of the male drivers and 13% of the female drivers were positive. If we look at age, we find that the greatest proportion of alcohol positive drivers is found between 20 and 24 years of age.

The distribution of BAC's indicates that these drivers have been drinking a lot. A few are found at .01% but the majority is found above .15%. The median BAC is .17%. This means that they have been drinking very often and great amounts and many have also been driving under the influence before. This can be seen from the fact that

a much greater proportion of the drivers who had been drinking than among those who were sober, had lost their licenses before. Thus, we are dealing with a hard core group here. This has consequences for the selection of measures to curb drunk driving. Knowing that we are dealing with the hard core means that we cannot expect a great impact from lowering a low legal BAC limit to a very, very low limit. Therefore, the fact that we cannot see an increase in the number of drivers found positive although the police has stepped up their drunk driving enforcement quite considerably, is very encouraging.

Now, let us look back at what has happened during the last four years with the proportion of drivers who were alcohol positive in fatal accidents. 31% in 1989, 29.7% in 1990 and 29.9% in 1991 have come down to 23.9% in 1992.

We do hope that we are seeing a break in the trend. In 1990, the legal limit was lowered from .05 to .02 %. During 1989 the year that preceded the change, 31% were positive and when 1991 and 92 are combined we find 27% to be positive.

We can also note a slight decline in the mean BrAC in roadblocks. From early 1991 until August of 1993 the mean BrAC has gone from .1 to .09%

In roadblocks, the police seldomly find more than approximately .04 percent of the drivers above the legal limit, even if they are stopping drivers on Friday night. But we also have extreme cases, e.g. in a ski resort where, a couple of years ago, 10% of the drivers were above the legal limit. However, through systematic enforcement, knowing where and when to hit, and by being very visible and also by announcing their activities, the incidence of drunk driving in these areas has been pushed down to .3%. A rather impressive improvement.

We have also studied the attitudes towards issues concerning drunk driving, for a number of years. As an example, we have asked about their views on a zero legal limit. In 1989, there was a lot of discussion about the issue in the media. This is reflected in that people were rather in favor of a zero limit. Then nothing happened for a couple of years. Now again this year we see the acceptance of a zero limit rising.

## CONCLUSIONS

We are, of course, not satisfied when we find a 24% alcohol involvement in our fatalities. Therefore, we must find a means of doing something about it. Alcohol, drugs and road safety has been designated as one of eight areas which will be given priority until the 2000. We will try very hard to get better. We may not have lowered our figures on alcohol involvement in road accidents the way other countries have. I think one of the reasons for this may be what Herb Simpson mentioned earlier, namely the low starting point - the lower the figures, the harder to lower them further. Maybe, our ultimate measure will have to be the introduction of a additive to alcohol which will paralyze the right foot.