

Road Safety in Ireland â Enforcement is the Key

The recently published World Health Organisation strategy document on road safety starts with the startling statistic that over 1.2 million people die each year on the world's roads and, not surprisingly low- and middle-income countries have much higher road traffic fatality rates than high-income countries. Almost half of those who die on the roads are pedestrians, cyclists or users of motorized â two-wheelersâ and this proportion is higher in poorer countries. Road traffic injuries show a steep socioeconomic gradient with those from disadvantaged backgrounds at higher risk than their more affluent counterparts. The economic cost of road crashes is very significant and accounts for 2% of gross national product (GNP) in high-income countries, including Ireland.

Comprehensive and clear legislation, enforced with appropriate penalties and accompanied by public awareness campaigns, has been shown to be a critical factor in reducing road fatalities associated with speed, drink driving and the failure to use appropriate restraints in cars. Globally, road traffic injuries are a leading cause of death among young people aged 18 to 25 years old and the death rates are especially high in males. Contributory factors include overconfidence, less tolerance of alcohol and excess or inappropriate speed. The late-night risk is four times the day-time risk in this age group. A graduated driver licence system provides stepwise access to a full driving licence and has been very successful in New Zealand. A 6 month supervised driver permit is obtained by passing written and oral tests. Following this an 18 month permit is granted and this prohibits driving from 22.00 hours to 05.00 hours and a maximal permitted blood alcohol concentration (BAC) of 0.03 g/dl. Thus after 2 years a full licence is granted. Australia has adopted a similar zero tolerance approach with the addition of reducing the permitted BAC to 0.01 g/dl and by this approach, has reduced the number of crashes and fatalities in this age group by one third. Drinking and driving increases both the risk of a crash and the likelihood that death or serious injury will result. The risk of involvement in a crash increases significantly above a blood alcohol concentration (BAC) of 0.04 g/dl. Other countries with lower BACs (between zero and 0.02 g/dl) for young inexperienced drivers have demonstrated a 25% reduction in crashes.

Research has shown that the perceived risk of being caught is considerably more effective than the severity of the penalty in discouraging driving while under the influence of alcohol. Widespread random breath testing â applied to at least 1 in 10 drivers every year â achieves the highest compliance with laws setting BAC levels. Enforcement should be unpredictable as to time and place (not just holiday periods!) so drivers cannot avoid being tested. Three states in Australia have already reduced the rates of alcohol-related road traffic deaths by 40% with intensive random breath testing covering one third to three quarters of drivers. Enforcement is the most effective at reducing the frequency of BAC exceeding legal limits if it is accompanied by mass media campaigns that increase public perception of the risk of being caught, reduce public acceptance of drinking and driving and increase public acceptance of enforcement. In general, harsh penalties such as imprisonment have not been found to deter people from driving after drinking. More effective is swift and certain punishment after failing a breath test or refusing to submit a test. There is evidence of increasing use among drivers of many psychoactive drugs, both medicinal and recreational and often in conjunction with alcohol. Research on this added factor in road crashes is urgently needed.

We know that speed kills and safe speed thresholds vary according to different types of road, weather and light conditions and that pedestrians have a 90% chance of surviving if knocked down by a car travelling at 30 km/hour and this drops to less than 50% if car speed is 45 km/hour or above. Speed limits on urban roads should not exceed 50 km/hour. We know that wearing a seat belt reduces the risk of fatality by 50-75% in both front and back seat passengers but enforcement is weak in many countries. For children, affordability of child restraints is an issue in many countries but not in Ireland. They are extremely effective and mandatory child restraint laws and their enforcement leads to an increase in their use. Child restraints need to be used in an age-appropriate way. Air bags and seat belt use reduce front passenger and driver deaths by 68%.

A profile of road safety in 178 countries ³ provides interesting comparisons. In Ireland we have made considerable strides over the past 5 years (road deaths now down to 8.5 per 100,000) but still have a long way to go to match top â performing countries such as Sweden (5.2), the United Kingdom (5.4) and Switzerland (4.9). How might we get there? Permitted blood alcohol concentrations are too high in Ireland (0.08) as compared to Sweden (0.02) or Switzerland (0.05). 16-20% of road traffic fatalities in Sweden, Switzerland and the UK involve alcohol as compared to 37% in Ireland. Random breath testing is long-established in Sweden and Switzerland and only relatively recently introduced in Ireland and to serve as a deterrent requires at least a 1 in 10 chance of being stopped and breath-tested on an annual basis. Greater enforcement of speed limits and seat belt use is also required. Switzerland has very high levels of enforcement and consequently the best road safety in the world.

We believe that, in Ireland, we have made significant strides over the past 5 years but we still have a long way to go. Traffic speed and use of seatbelts and age-appropriate car restraints are known to be effective in reducing road deaths. We should focus more on preventing road deaths in the young inexperienced drivers and in greater enforcement of existing BAC limits. A lower BAC level would be beneficial only if accompanied by greater enforcement and this is required right throughout the year.

P Fitzpatrick, AJ Nicholson
Children's University Hospital, Temple St, Dublin 1
Email: Alf.Nicholson@cuh.ie

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