Drink Driving in Ireland

Dr Declan Bedford 13th October 2008 RSA Conference Dublin

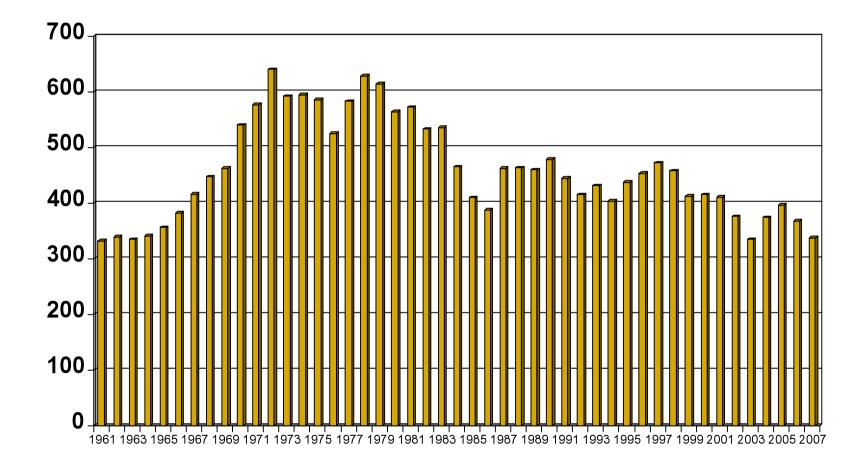
This presentation

- Trends in fatal road crashes in Ireland
- Preliminary results of study into role of alcohol in fatal crashes
- Drivers
- Pedestrians
- Why we need to lower the legal limit to at least 50mg%

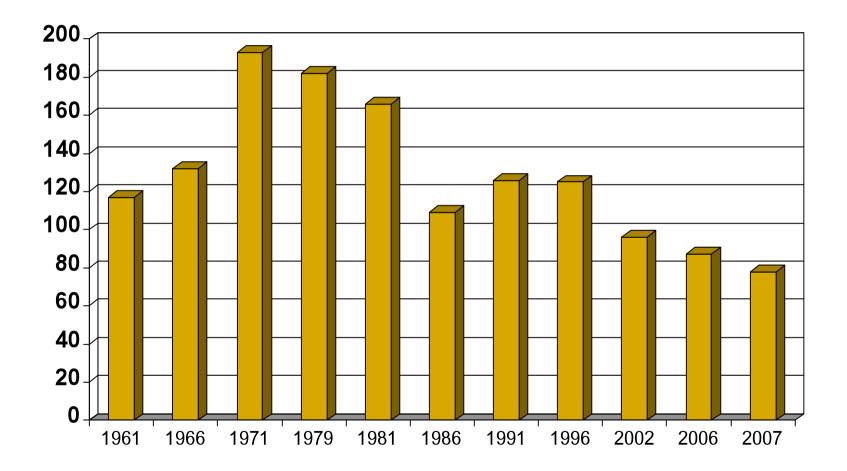
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Deaths on Irish Roads 1961-2007



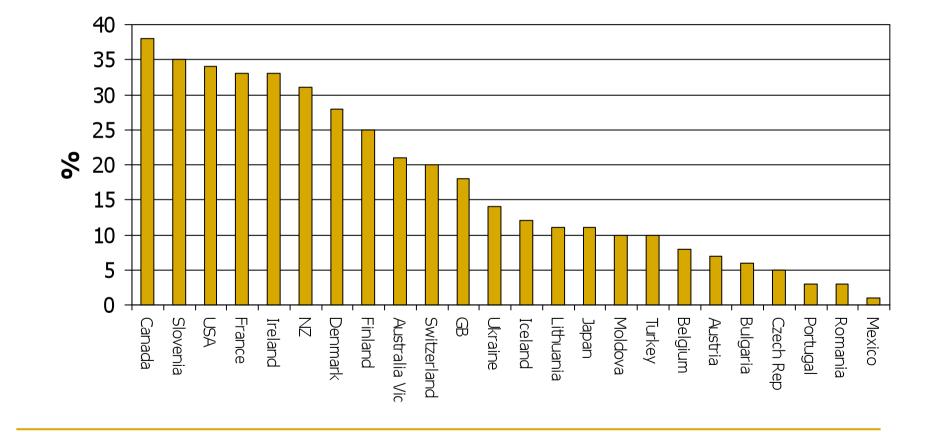
Deaths on Irish Roads 1961-2007 per million population



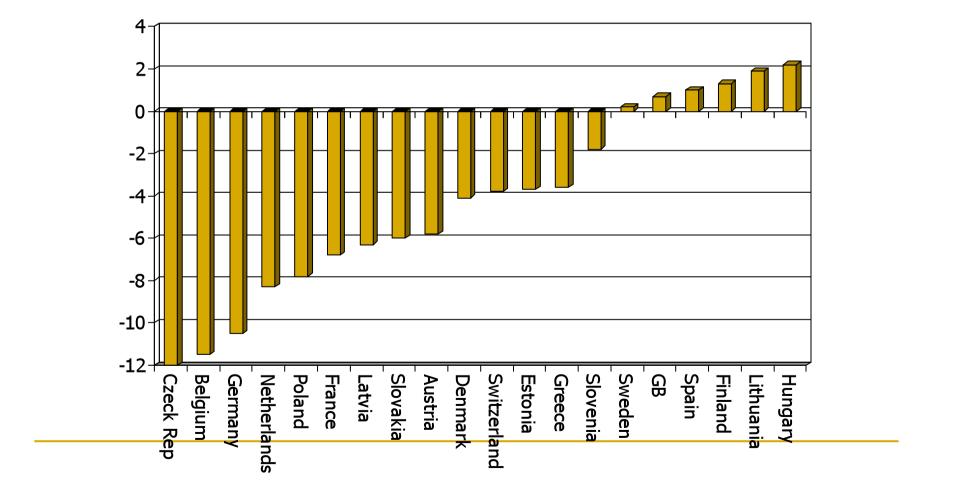
Alcohol Related Road Deaths In Ireland

- No systematic collection of data
- 1975 regional study:
 - 46% killed drivers above legal limit
- 2003 national study:
 - alcohol a factor in 37% of road deaths

Drink Driving as a Factor in Fatal Crashes in Selected Countries (2002,2003 or 2004) (Joint OECD/ECMT Transport Research Centre)



Average yearly % change in road deaths resulting from crashes related to drink driving between 1996-1998 and 2005. (ETSC)



Study Into Alcohol And Fatal Crashes

Methods

- + Files on fatal crashes kept by The National Traffic Bureau of An Garda Siochana
 - † Witness reports
 - Technical examination of sites and vehicles
 - + Post mortem reports including toxicology
 - + Garda Investigations
- + All files for 2003-2005 examined by authors

Legal limit

- + Blood = 80 mg/100ml.
- ⁺ Urine = 107mg/100ml.
- ⁺ Breath = 35ug/100ml.

Alcohol impairs driving ability

"There is no blood alcohol level at which impairment does not occur" *

 Relative risk of a fatal crash is 4-10 times higher for drivers with BACs between 50-79mg% risk compare to drivers with BACs of zero

Definition Alcohol Related Crash

Driver

Blood alcohol level of ≥20mg/100ml (or the equivalent in urine and breath tests) in a driver.

Pedestrian

- Blood alcohol level and the circumstances of the crash
- In any crash other factors such as speed may also be involved

Results of Data 2003-2005

995 crashes killing 1,105 people

Fatal Crashes That Were Alcohol Related

	All Crashes	Alcohol crashes	% Alcohol Crashes
2003	301	110	37%
2004	334	95	28%
2005	360	104	29%
2003-5	995	309	31%

*The decrease is not statistically significant

Deaths In Alcohol Related Crashes

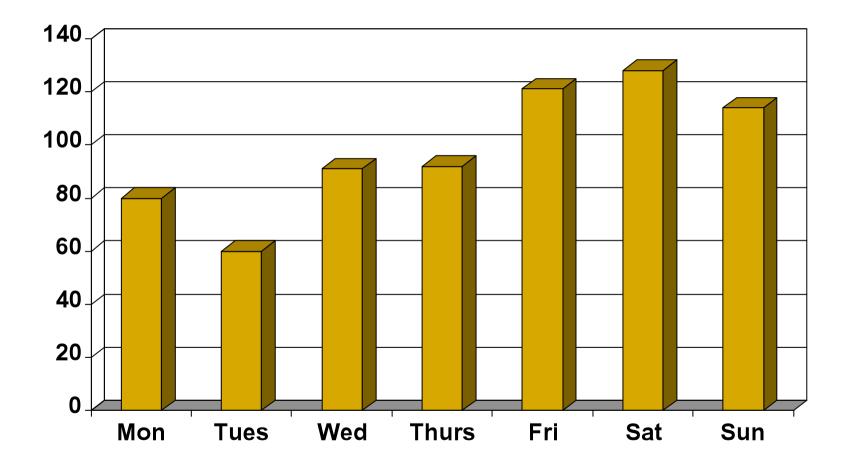
	All Deaths	Alcohol Deaths	% Alcohol Deaths
2003	335	124	37%
2004	374	110	29%
2005	396	118	30%
2003-5	1,105	352	32%

*The decrease is not statistically significant

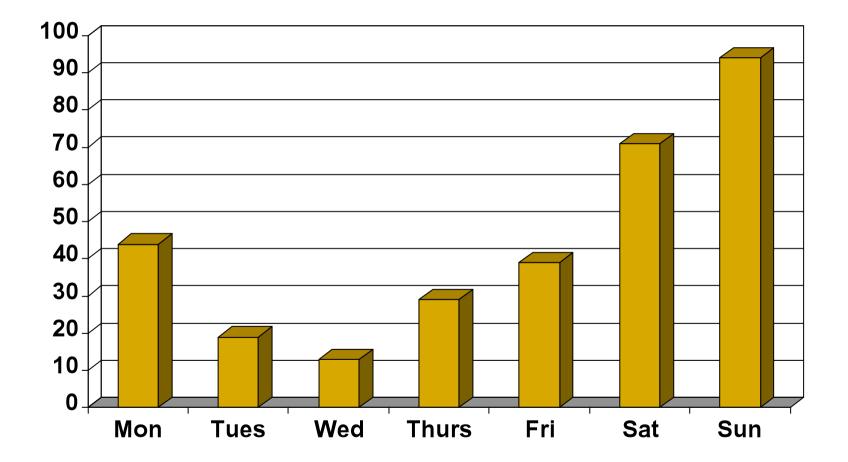
Role of Alcohol in fatal crashes 2003-2005

	2003	2004	2005	3 Year Ave
	%	%	%	%
Alcohol not a factor	30	43	34	36
Alcohol test not available/not done	33	28	38	33
Driver alcohol	29	25	24	26
Pedestrian Alcohol	7	2	4	4
Pedestrian and Driver alcohol	1	1	1	1
Other alcohol	0	1	1	0
Total	100	100	100	100

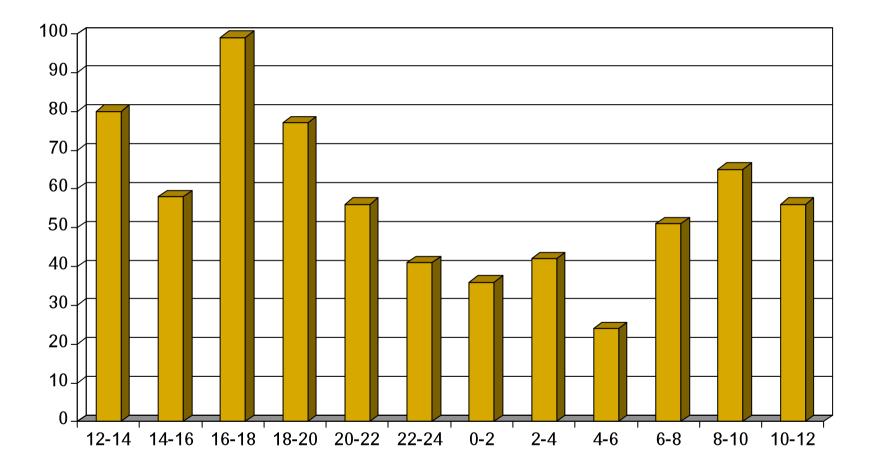
Day Of Week Of Non-alcohol Related Crashes 2003-5



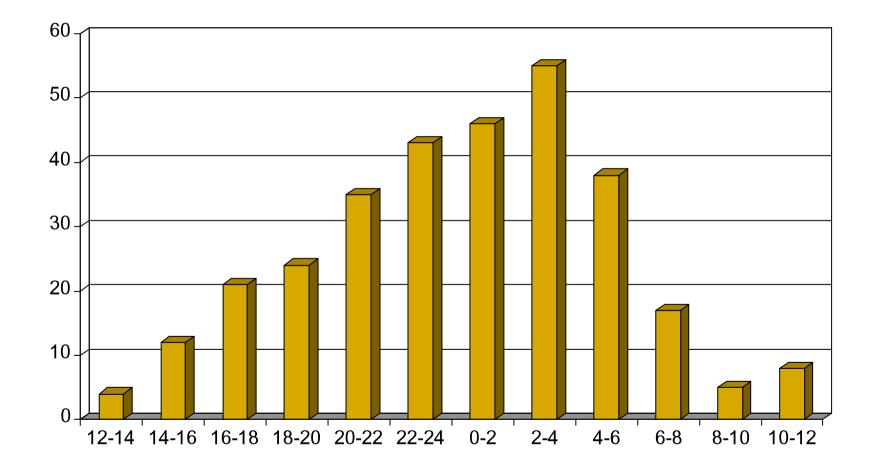
Day Of Week Of Alcohol Related Crashes 2003-5



Time Of Day Of Non-alcohol Fatal Crashes 2003-5



Time Of Day Of Alcohol Related Fatal Crashes 2003-5



Alcohol Related Crashes

- 2 out of every 3 occur between 10PM on Friday night and 8AM on Monday mornings
- 1 in every 2 occur on Saturdays and Sundays

Alcohol Related Deaths

15% in mornings between 04.00 and 08.00

Persons Who Died In Alcohol Related Crashes

	2003	2004	2005	All years
	02	70	7.4	22.4
Drivers	82	78	74	234
Pedestrians/ Cyclists	23	13	24	60
Passengers	19	19	20	58
Total	124	110	118	352

BACs in killed drivers

BAC LEVEL	M	Male		Female		Total	
	No	%	No	%	No	%	
Zero	132	26	33	31	165	27	
Not recorded as done/not							
available	169	34	45	42	214	35	
1-19	7	1	5	5	12	2	
20-49	12	2	6	6	18	3	
50-80	18	4	0	0	18	3	
81-159	50	10	5	5	55	9	
160-239	65	13	9	8	74	12	
240+	50	10	5	5	55	9	
Total	503	100	108	100	611	100	

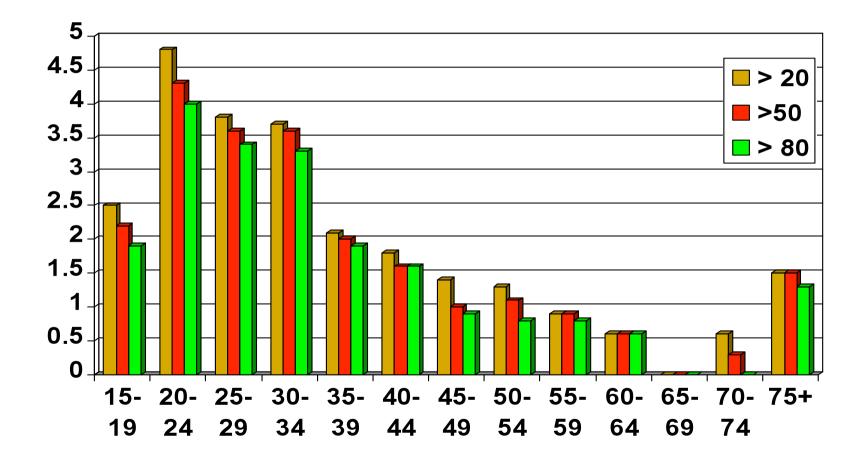
Killed Drivers With BACs Above 80 And 50 Mg%

	2003	2004	2005	ALL YEARS
All killed drivers	188	202	221	611
>80 mg%	32%	30%	28%	30%
>50 mg%	37%	31%	31%	33%
Killed drivers with test result available	138	160	148	446
>80 mg%	44%	38%	42%	41%
>50 mg%	51%	39%	47%	45%

Who are the killed drivers with alcohol?

9 out of 10 are men

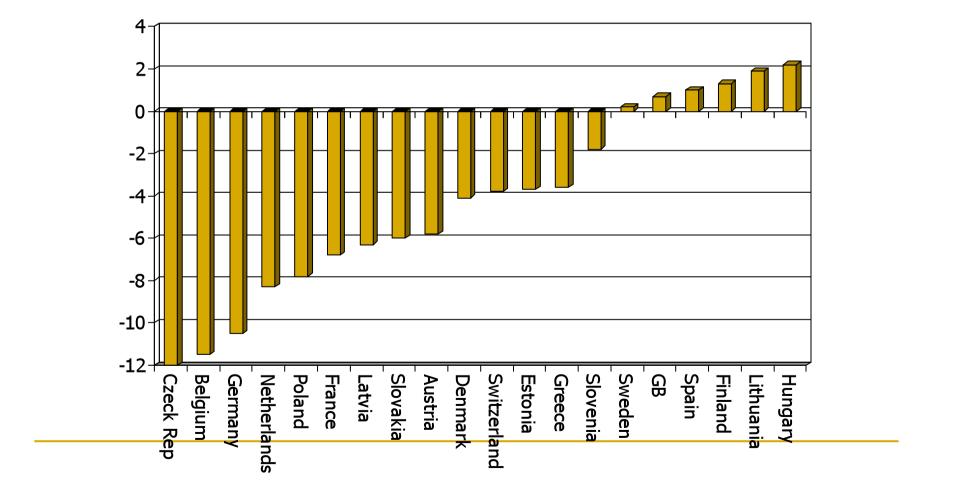
Rate per 100,000 population for killed drivers with BAC \geq 20, >50 and >80 mg/100ml



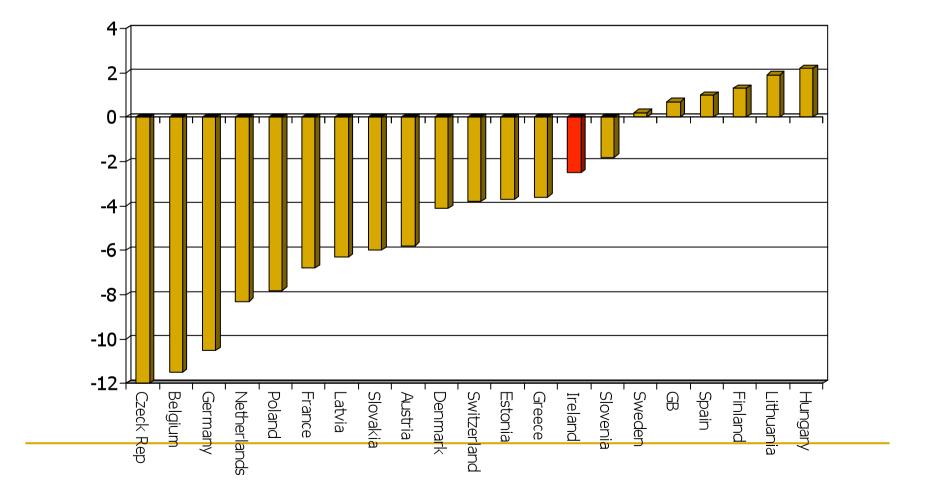
Pedestrians Aged 15 Years And Over

- 187 killed over the 3 years
- 1 in 4 of their deaths related to their own alcohol intake
- 9 out of 10 alcohol related deaths were men
- 1 in 9 had BACs in excess of 240 mg%

Average yearly % change in road deaths resulting from crashes related to drink driving between 1996-1998 and 2005. (ETSC)



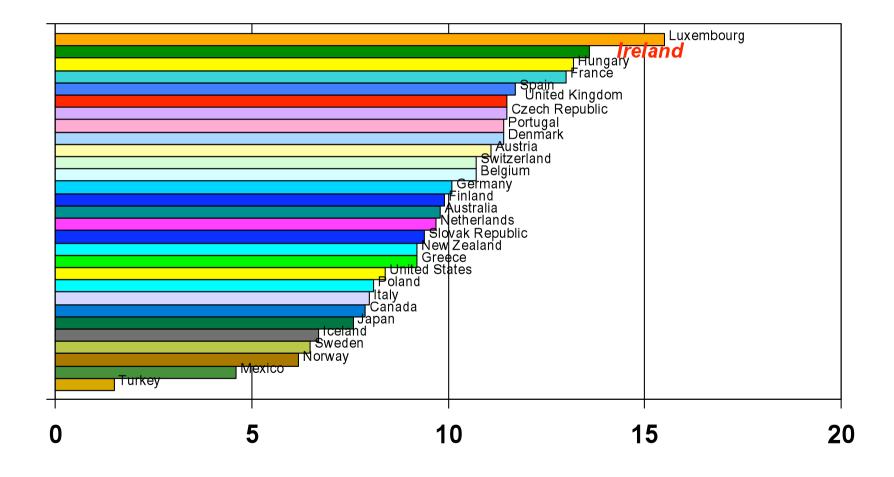
Average yearly % change in road deaths resulting from crashes related to drink driving



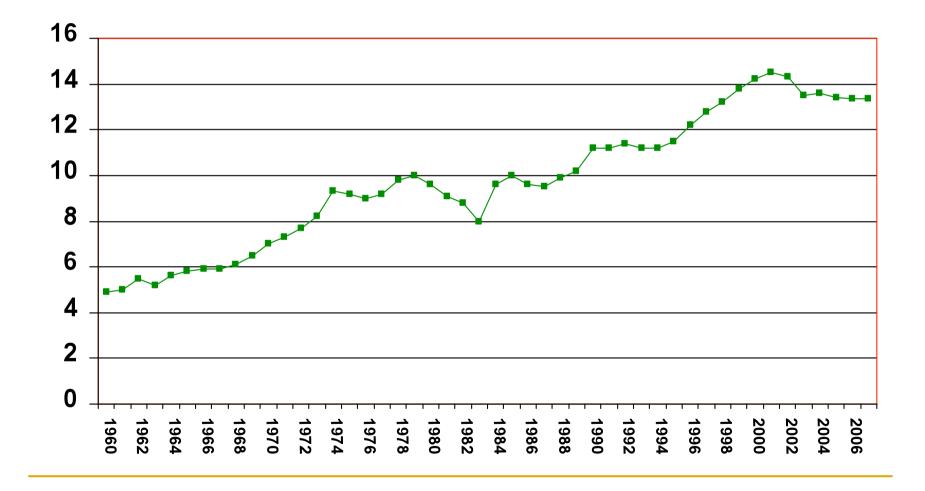
Drink Driving

- Still a serious problem
- Kills at least 120 people a year

Annual Alcohol Consumption, Litres per population 15+



Per capita Alcohol consumption Ireland (age 15+) 1960-2007

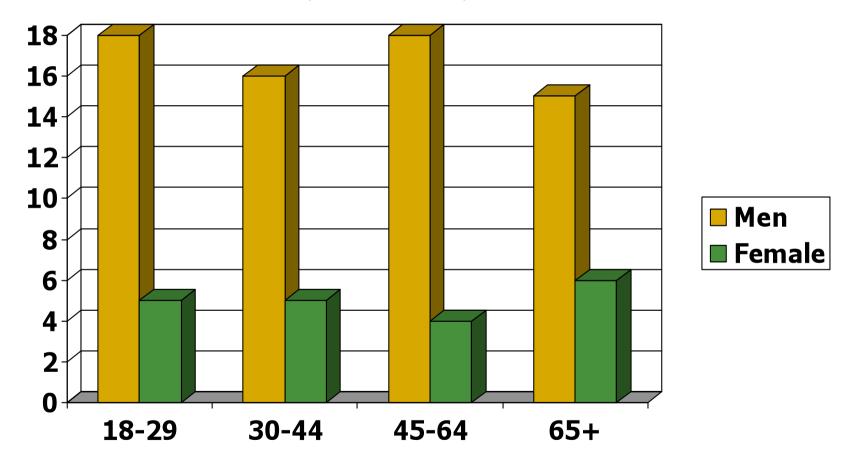


Special Eurobarometer March 2007

5 drinks or more in typical session

Ireland	34%
Finland	27%
UK	24%
EU	10%
Italy	2%

Percentage of drivers, who are drinkers, who drive after drinking 2 or more standard drinks (SLAN 2007)



Targeted action needed because of high alcohol consumption

Road Safety Strategy In Ireland 2007-2012

 Action 76: Legislate for and introduce a reduction in the legal BAC for drivers by 2nd Quarter 2009

Reducing the limit works

- NSW and Queensland 1982-92;
- 80mg% to 50mg%
- Study controlled for weather, seasons, economic and road activity, alcohol consumption and other legislations such as RBT
- Significant reduction in all collision and fatality measures in both states.

Reducing the limit works

NSW

- Serious collisions down 7%
- Fatal collisions down 8%

Queensland

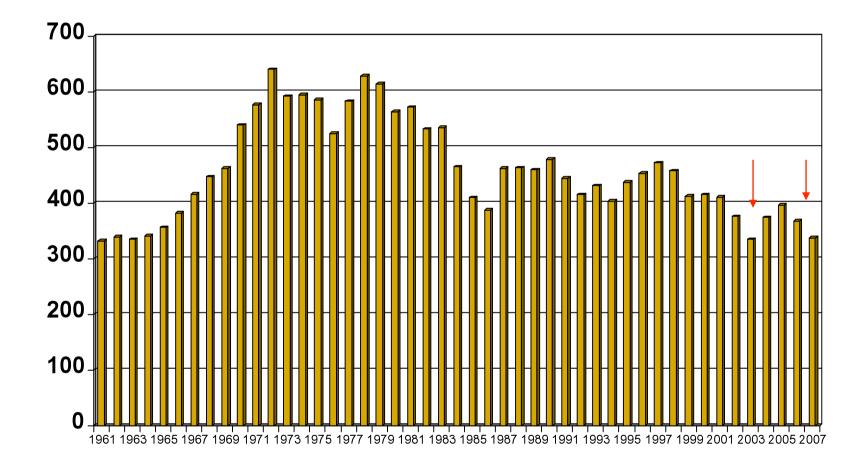
- Serious collisions down
 14%
- Fatal collisions down 18%

Reducing the limit works

- Scientific review (Mann et al, 2001)
 - In most but not all cases beneficial effect on traffic safety measures
- Scientific review (Fell, Voas, 2006)
 - Strong evidence in the literature that lowering the BAC limit from .08 to .05 is effective, and saves lives.

Major initiatives work

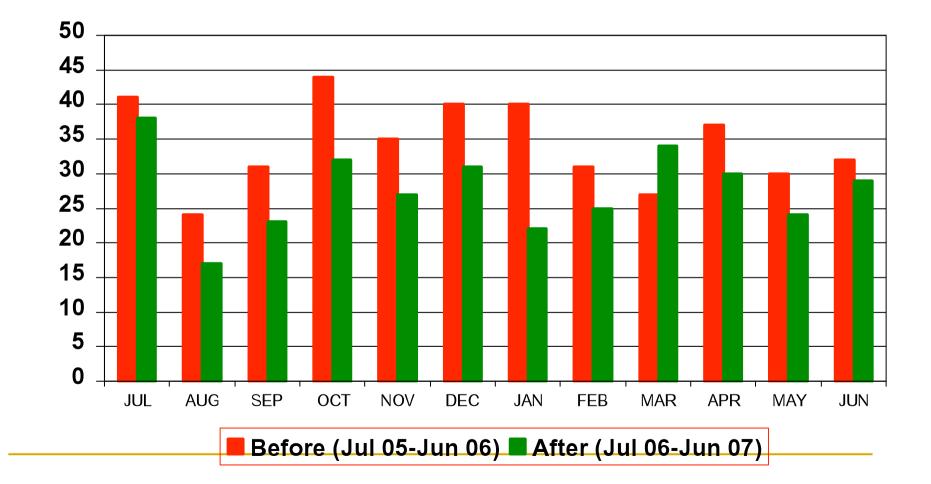
Deaths on Irish Roads 1961-2007



RBT introduced in Ireland in July 2006

An immediate reduction in fatalities

 A reduction in hospital admissions resulting from road crashes The Number Of Road Deaths In Ireland In The 12 Months Before And After The Introduction Of RBT



In the first 6 months after the introduction of RBT*

- 3,430 admissions to hospital from car crashes
- 352 admissions less than the corresponding
 6 months in 2005

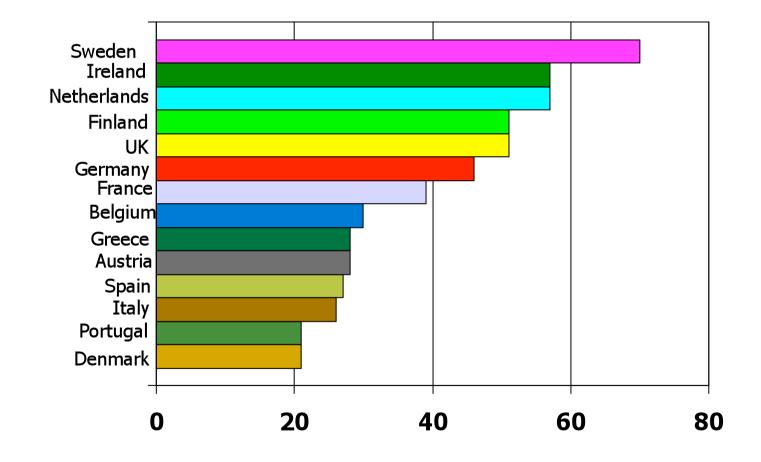
In other areas major national initiatives used to prevent similar number of deaths

- In late 2000 meningococcal C vaccination introduced for children
- Prior to introduction in 1999 and 2000 average deaths per year was 8

There Is Support For Lowering The Limit

- DOHC survey 2002 67%
- Sartre 2004 (where limit 80+)_ 75%
- PARC 2007 99%

Drivers Should Be Allowed No Alcohol At All (Sartre 3)



The legal limit needs to be reduced

- Alcohol even at low levels impairs driving ability
- The evidence has shown that reducing the limit works
- Too many deaths and injuries as a result of alcohol
- Targeted action needed because of high alcohol consumption
- There is support for a reduction

Conclusion

Drink driving is a problem in Ireland

Lowering the Limit

- Will save lives
- Will reduce injury and disability