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# Drink Driving in Ireland

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# 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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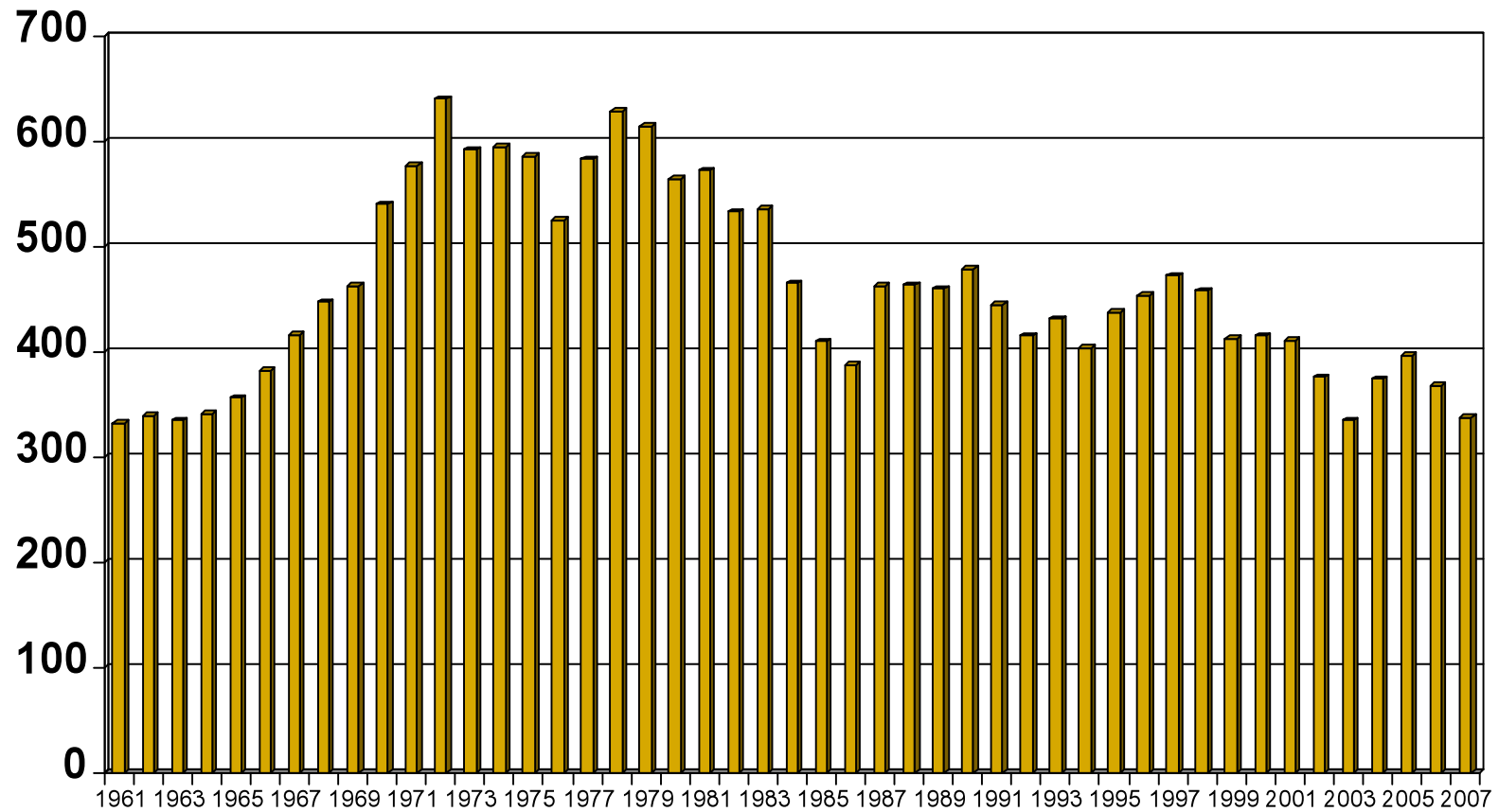
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# Acknowledgements

- Fellow Authors
    - Nuala McKeown
    - Ann O'Farrell
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  - Staff of the Traffic Bureau in Garda HQ
    - Josephine Healy
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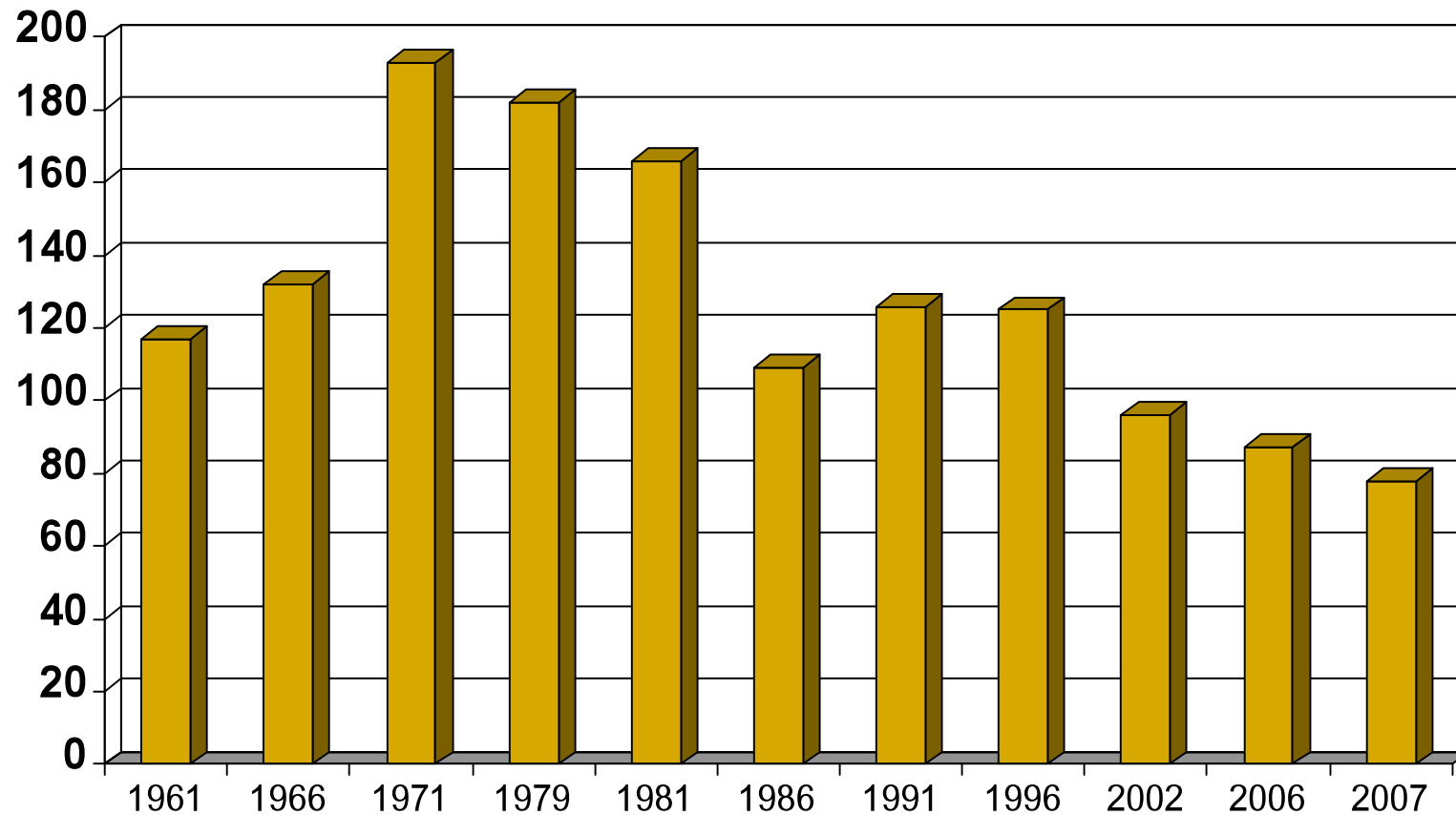
# Deaths on Irish Roads

## 1961-2007



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# Deaths on Irish Roads 1961-2007 per million population



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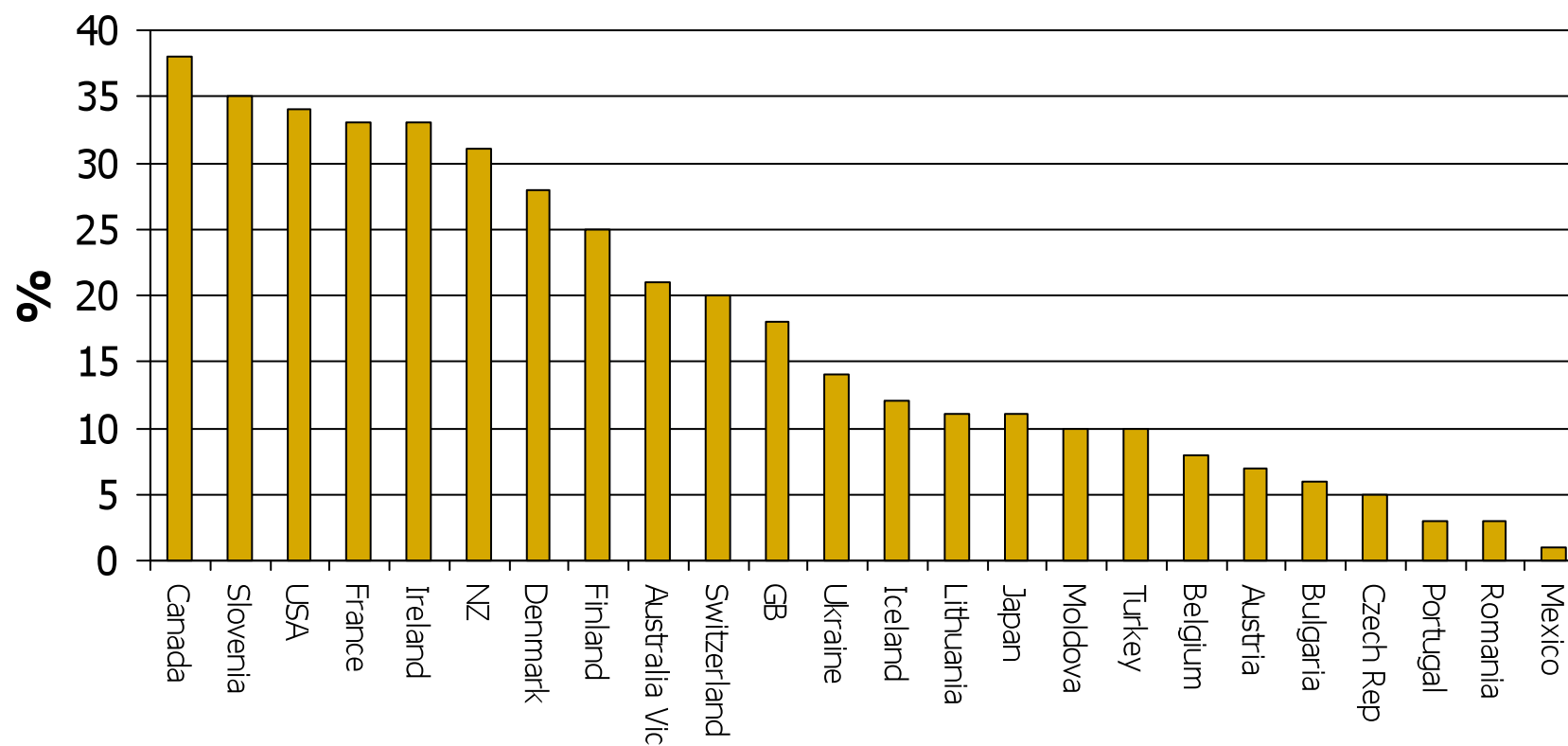
## Alcohol Related Road Deaths In Ireland

- 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
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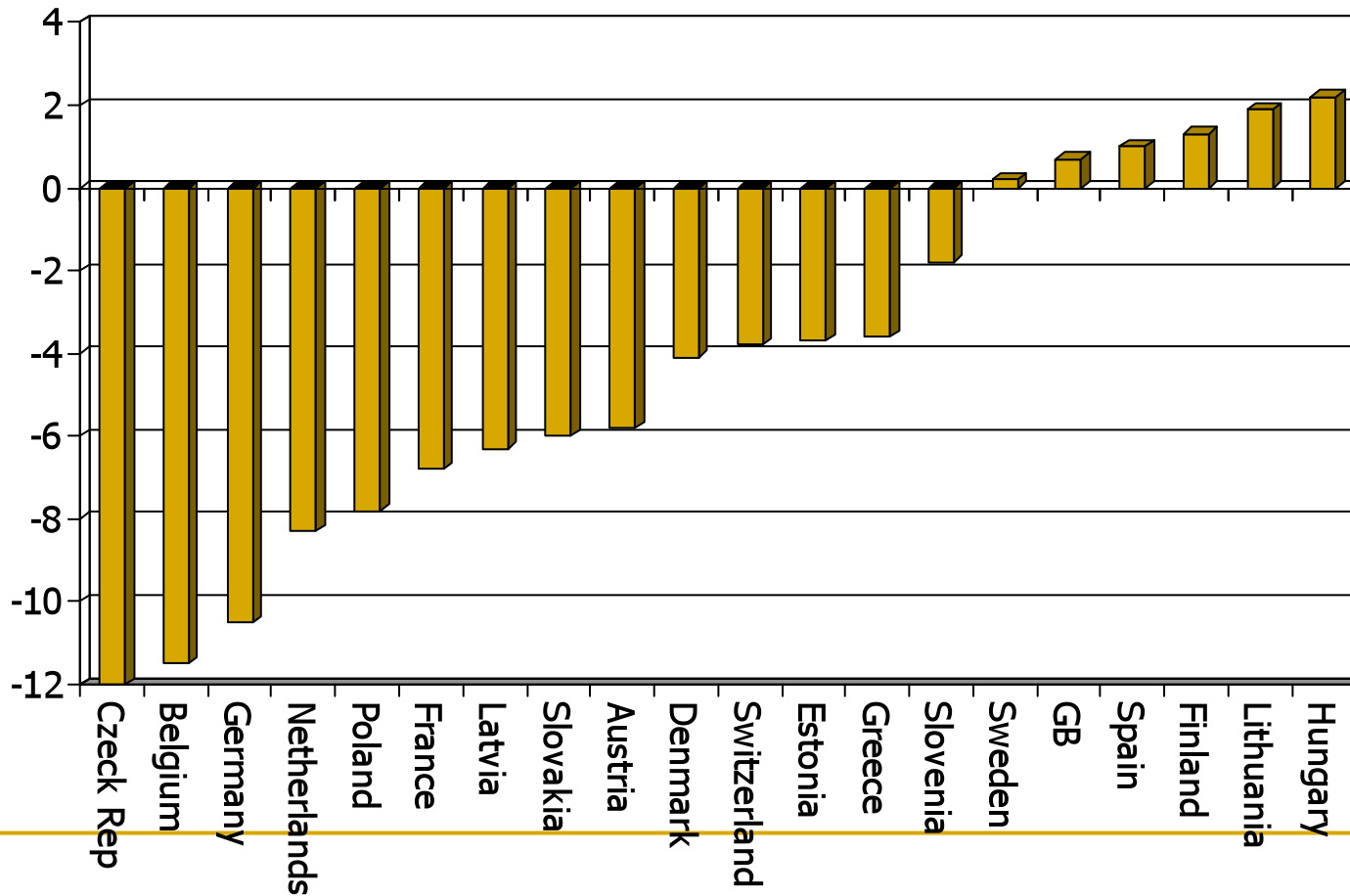
# Drink Driving as a Factor in Fatal Crashes in Selected Countries

(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)



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# 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
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## Legal limit

† Blood = 80 mg/100ml.

† Urine = 107mg/100ml.

† Breath = 35ug/100ml.

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# 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

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## Definition Alcohol Related Crash

### Driver

- † Blood alcohol level of  $\geq 20\text{mg}/100\text{ml}$  (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
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# Results of Data 2003-2005

- 995 crashes killing 1,105 people
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## 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

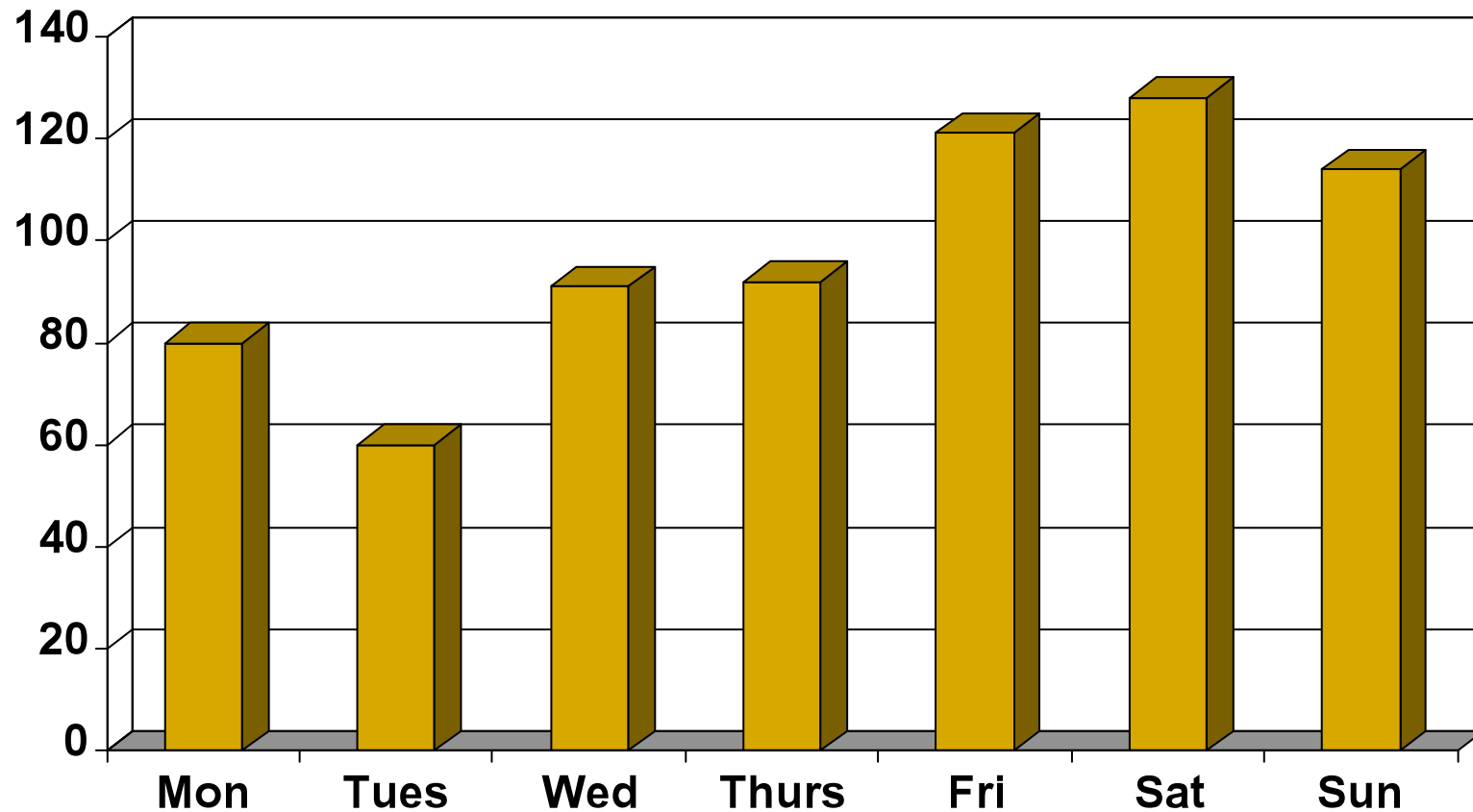
	All Deaths	Alcohol Deaths	% Alcohol Deaths
2003	335	124	37%
2004	374	110	29%
2005	396	118	30%
2003-5	1,105	352	32%

\*The decrease is not statistically significant

## Role of Alcohol in fatal crashes 2003-2005

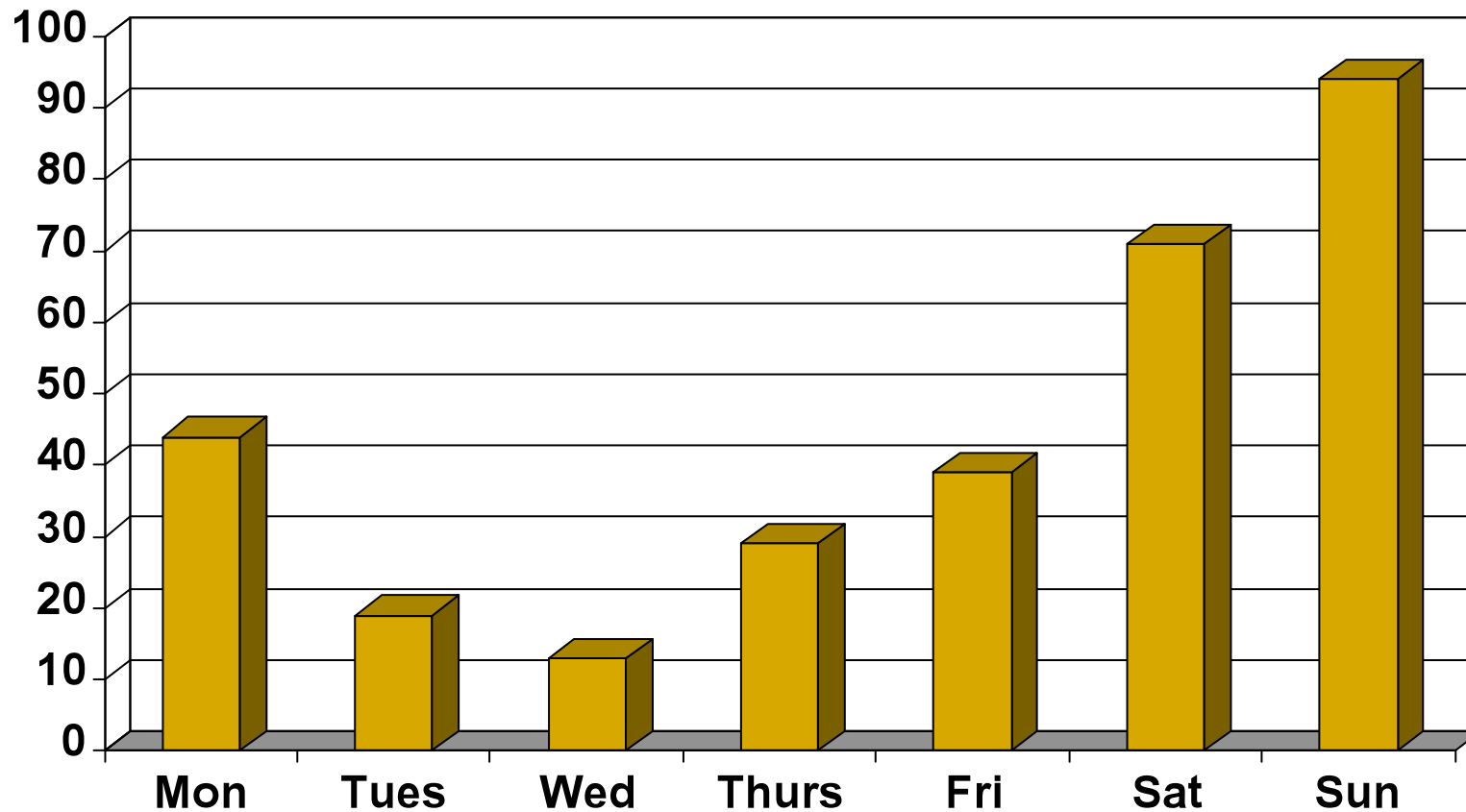
	2003	2004	2005	3 Year Ave
	%	%	%	%
Alcohol not a factor	30	43	34	36
Alcohol test not available/not done	33	28	38	33
Driver alcohol	29	25	24	26
Pedestrian Alcohol	7	2	4	4
Pedestrian and Driver alcohol	1	1	1	1
Other alcohol	0	1	1	0
Total	100	100	100	100

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

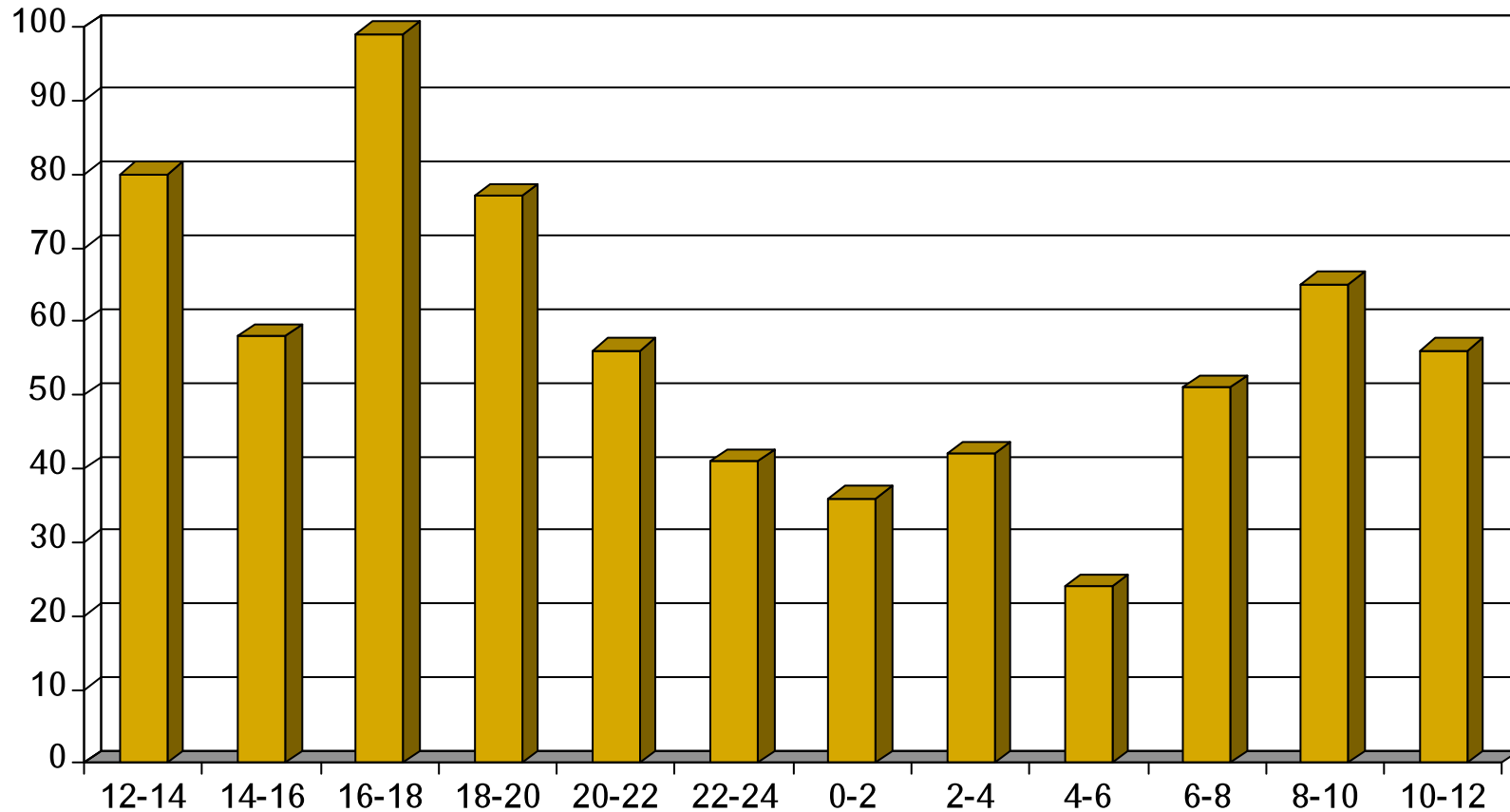


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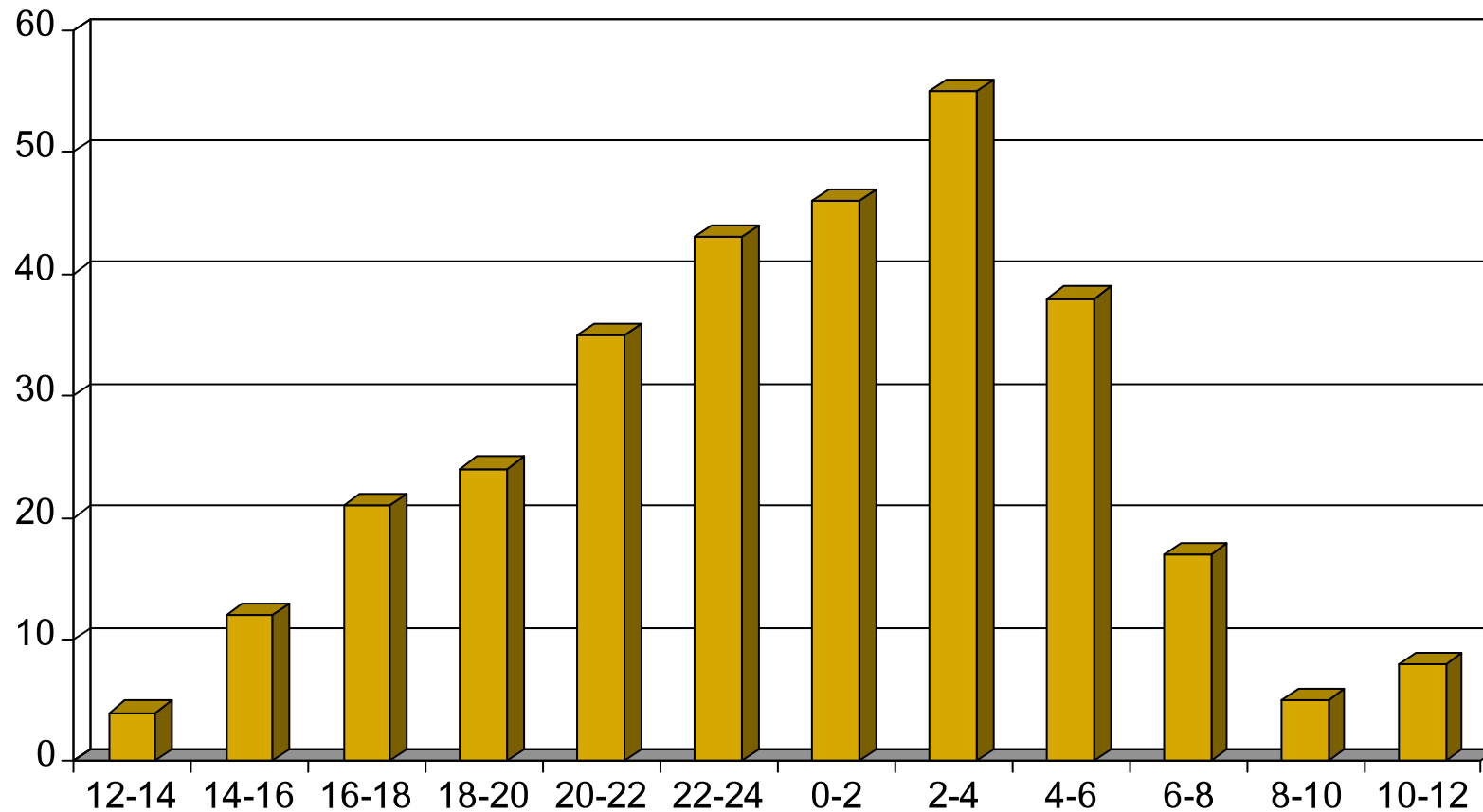
# Day Of Week Of Alcohol Related Crashes 2003-5



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



# Time Of Day Of Alcohol Related Fatal Crashes 2003-5



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## 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
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# Alcohol Related Deaths

- 15% in mornings between 04.00 and 08.00
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# Persons Who Died In Alcohol Related Crashes

	2003	2004	2005	All years
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	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%

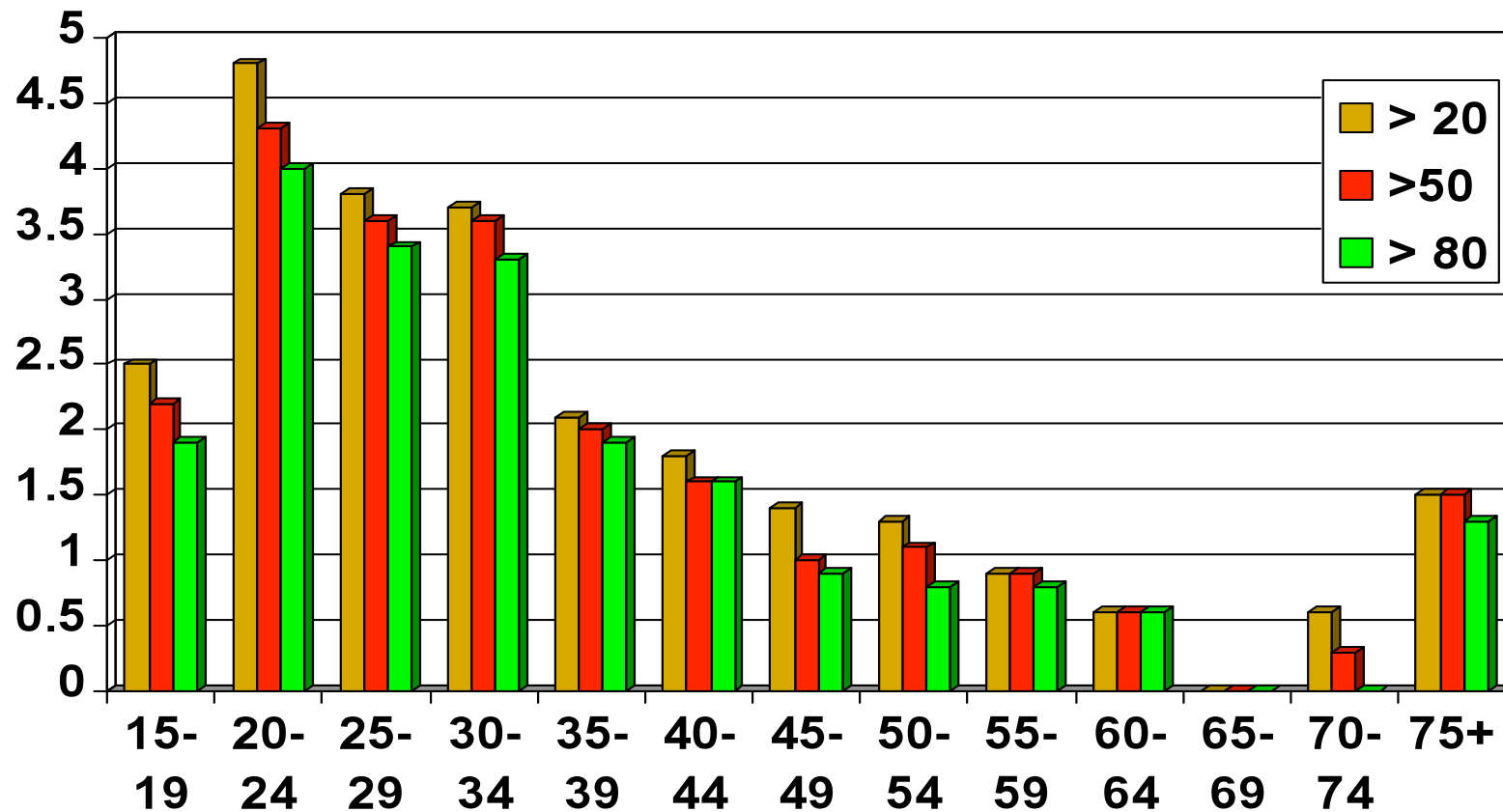
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# Who are the killed drivers with alcohol?

- 9 out of 10 are men



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

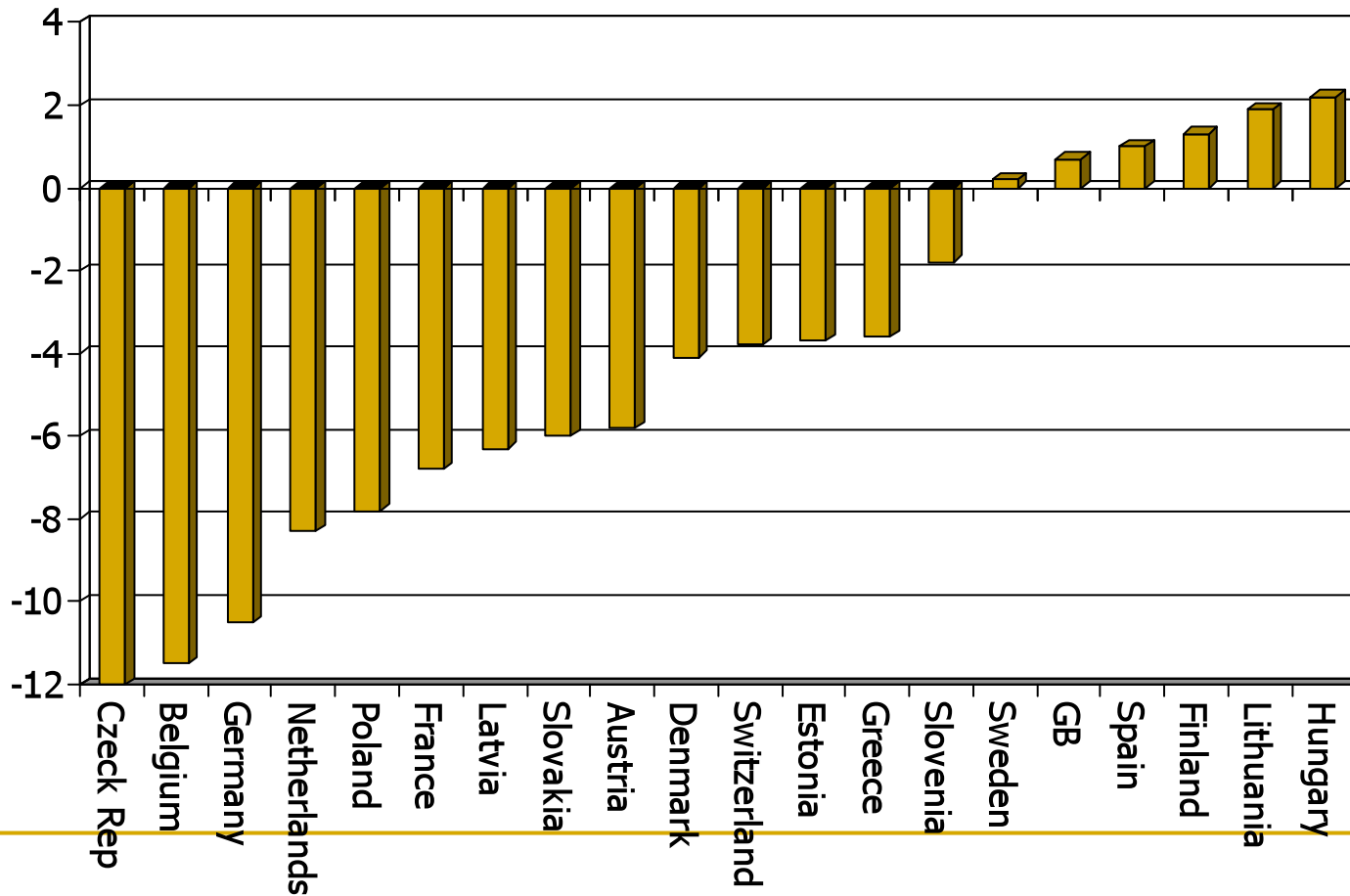


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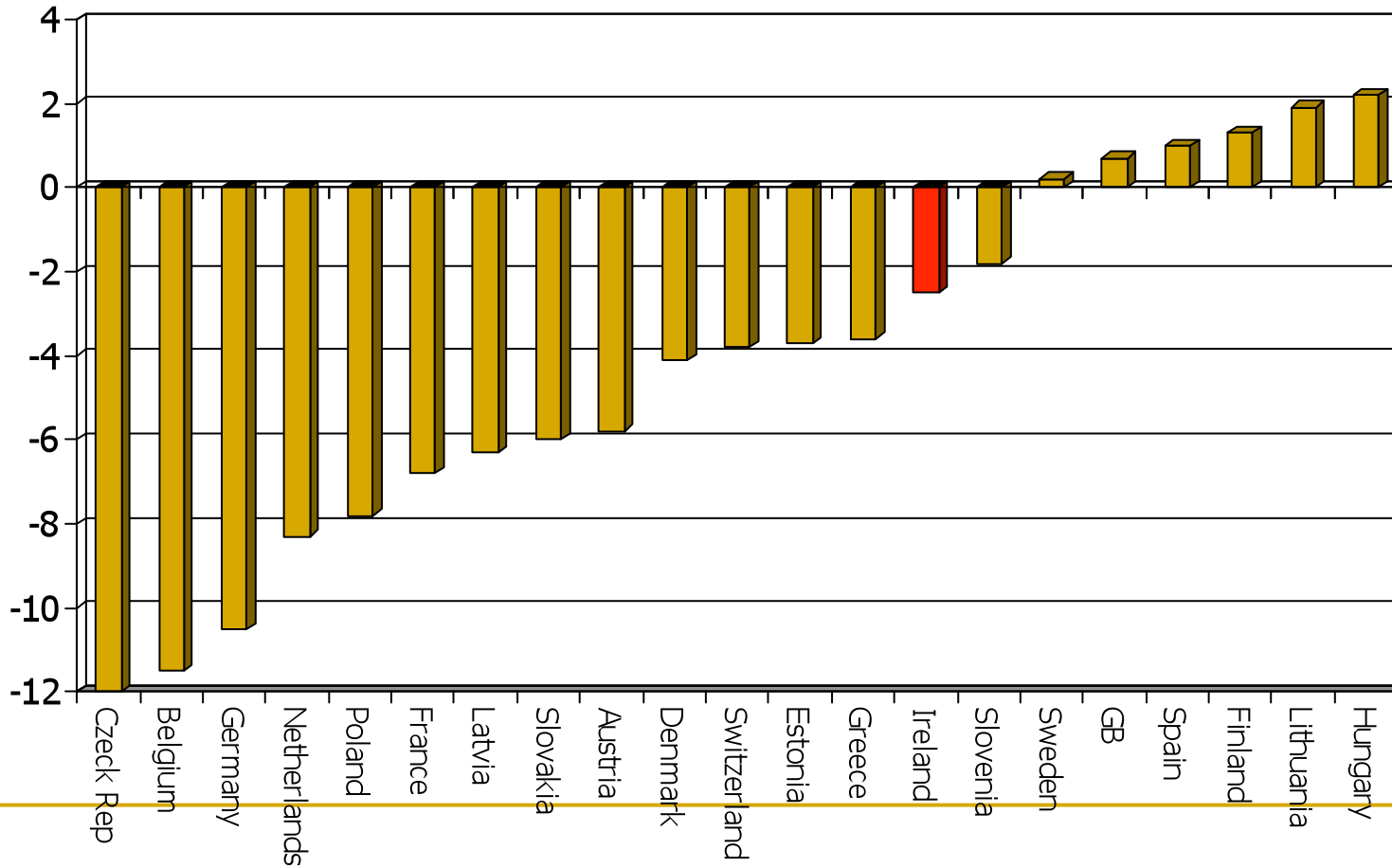
## Pedestrians Aged 15 Years And Over

- 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%
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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

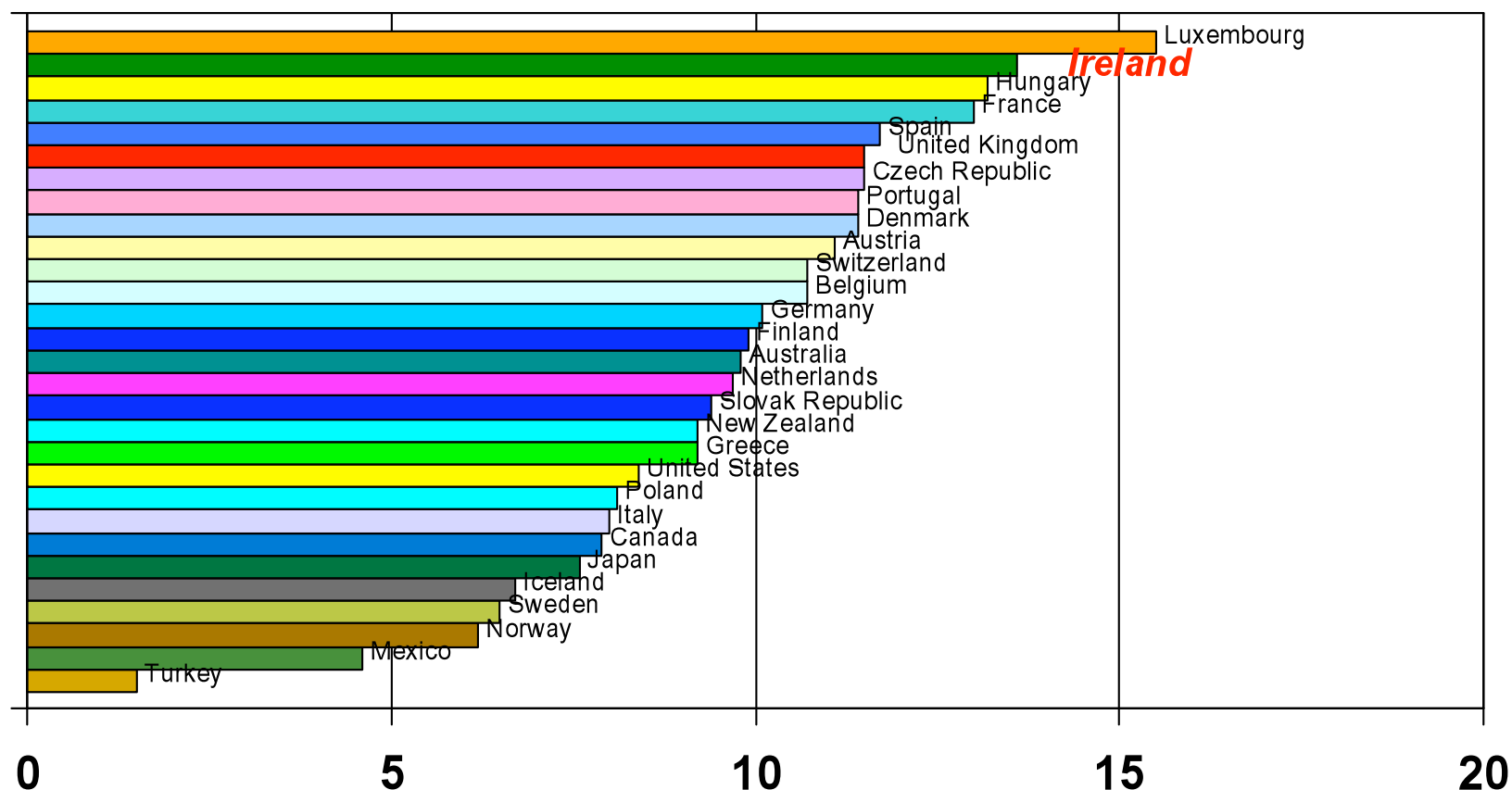


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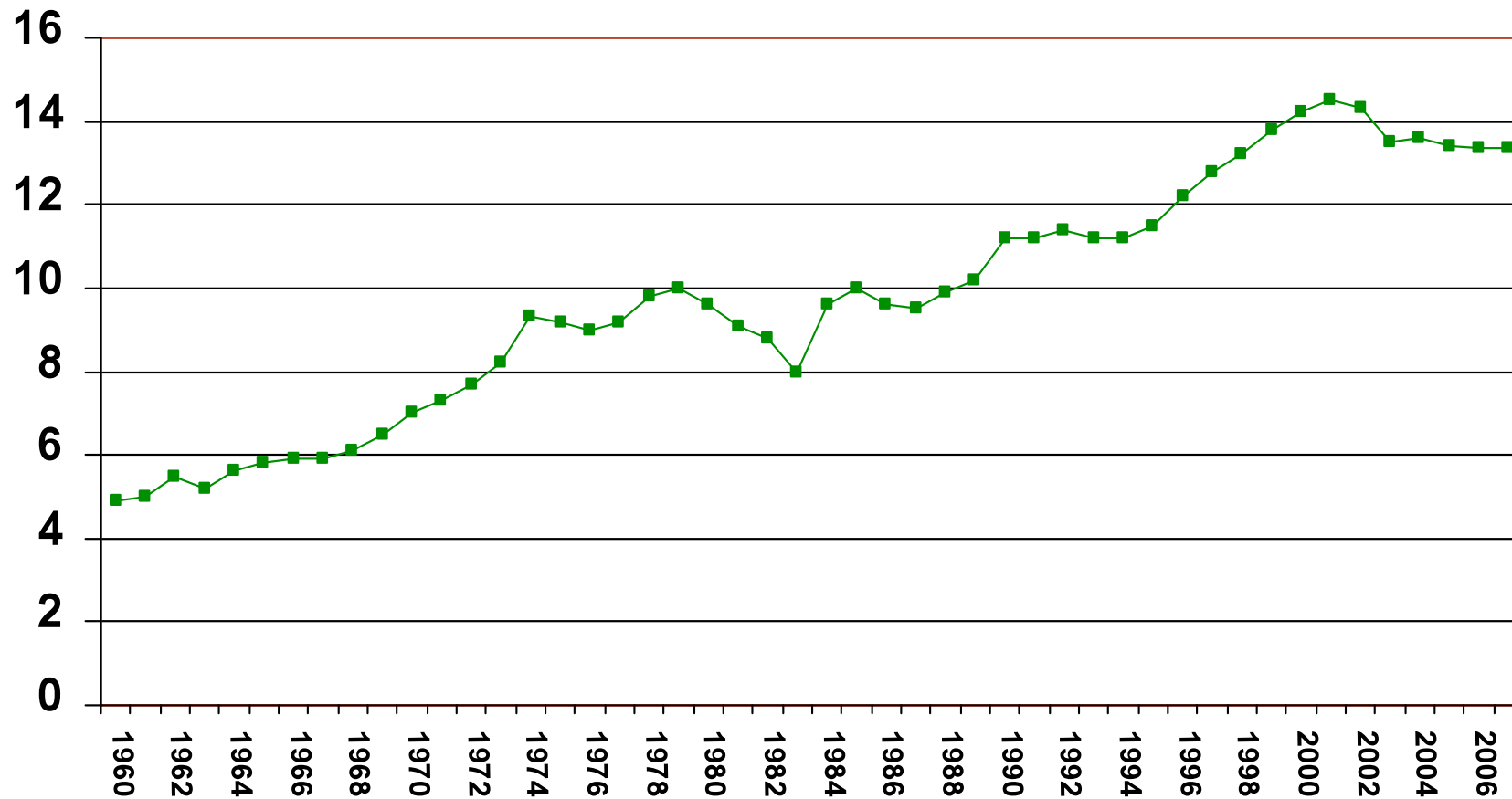
# Drink Driving

- Still a serious problem
  - Kills at least 120 people a year
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# Annual Alcohol Consumption, Litres per population 15+



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



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# Special Eurobarometer

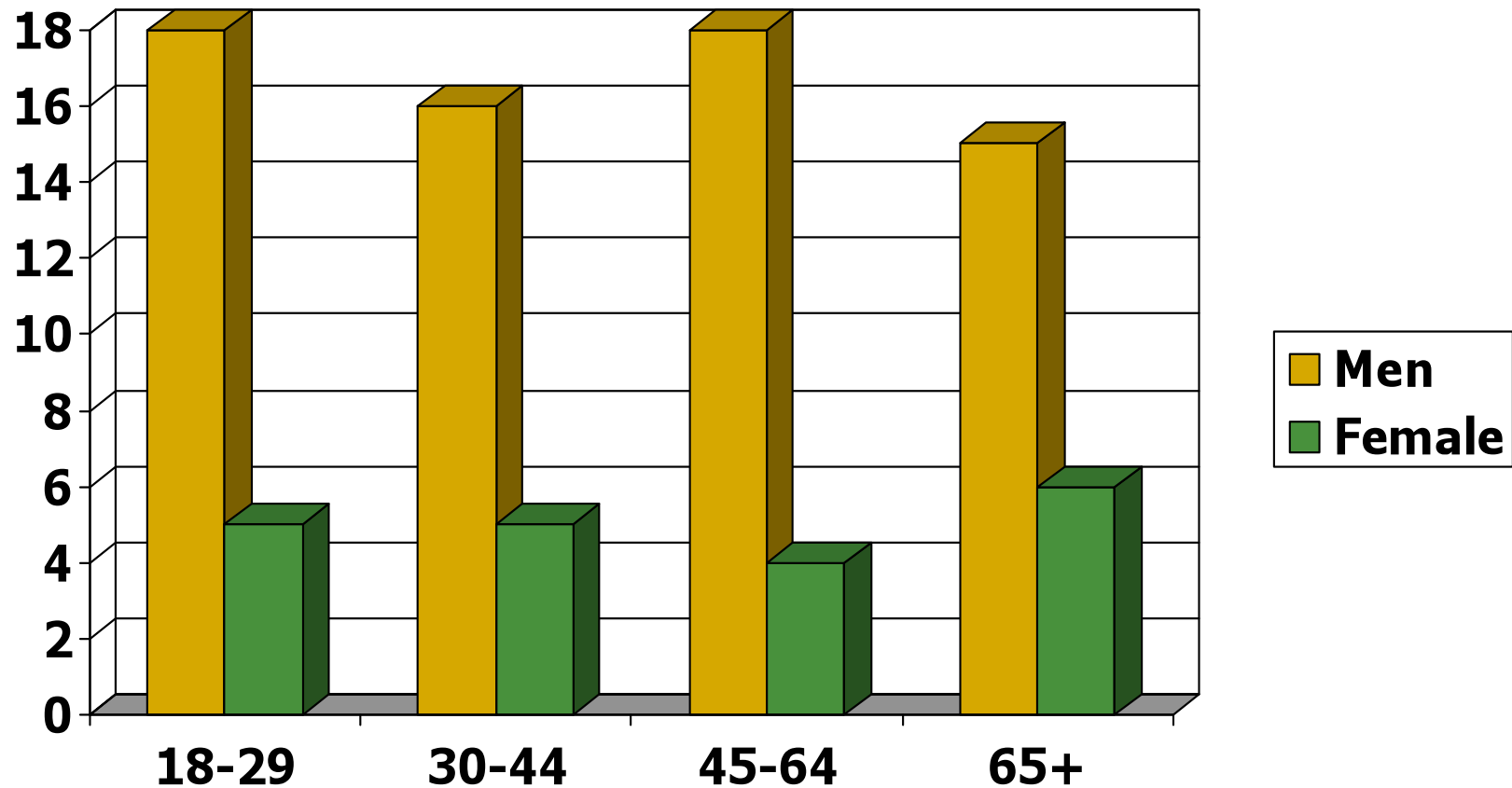
## March 2007

5 drinks or more in typical session

- Ireland 34%
  - Finland 27%
  - UK 24%
  - EU 10%
  - Italy 2%
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Percentage of drivers, who are drinkers, who drive after drinking 2 or more standard drinks (SLAN 2007)



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Targeted action needed because of high  
alcohol consumption

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# Road Safety Strategy In Ireland

## 2007-2012

- Action 76: Legislate for and introduce a reduction in the legal BAC for drivers by 2<sup>nd</sup> Quarter 2009
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# 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.

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# Reducing the limit works

## *NSW*

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

## *Queensland*

- Serious collisions down 14%
  - Fatal collisions down 18%
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# 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.
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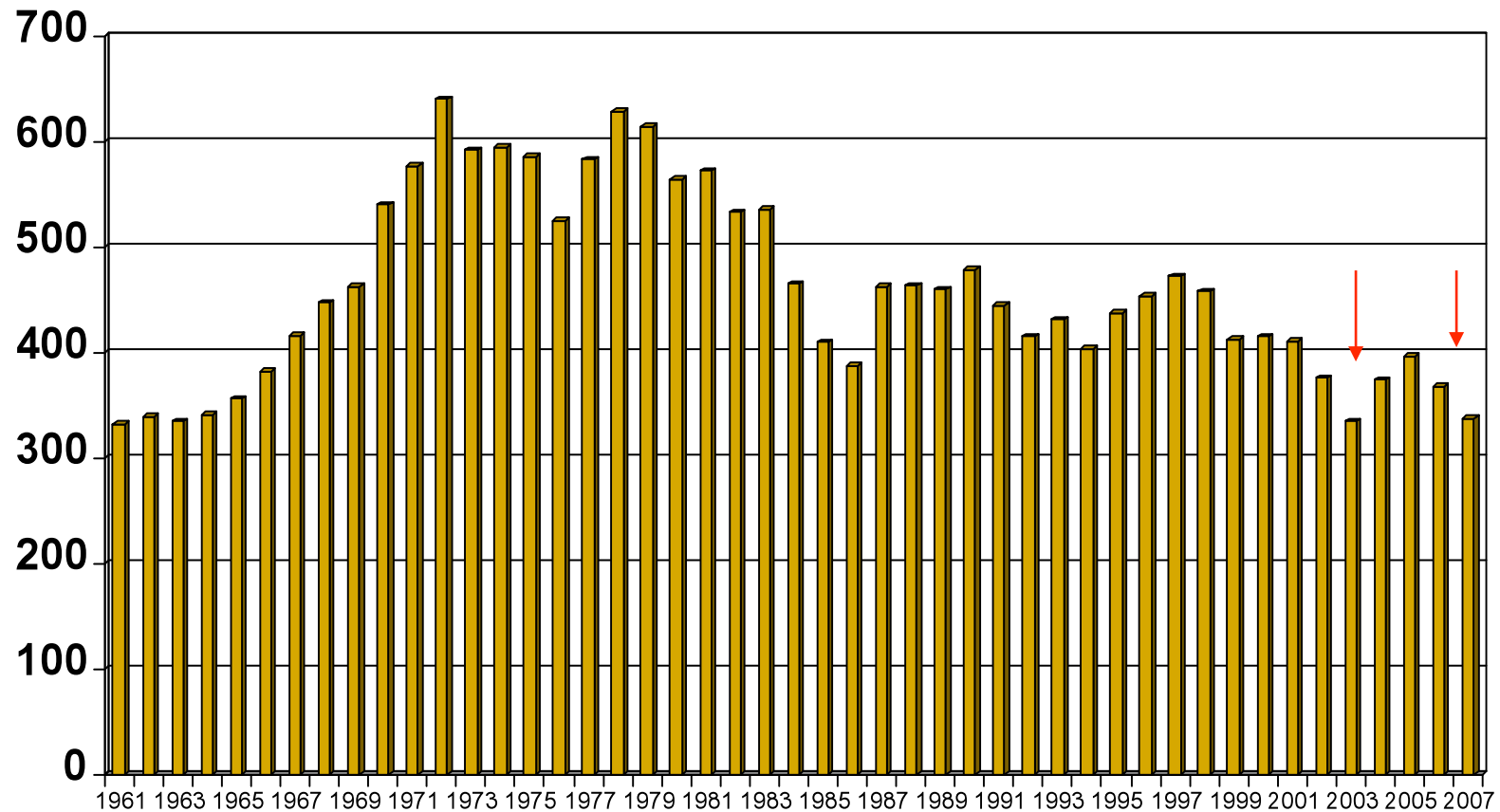
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## ***Major initiatives work***

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# Deaths on Irish Roads

## 1961-2007

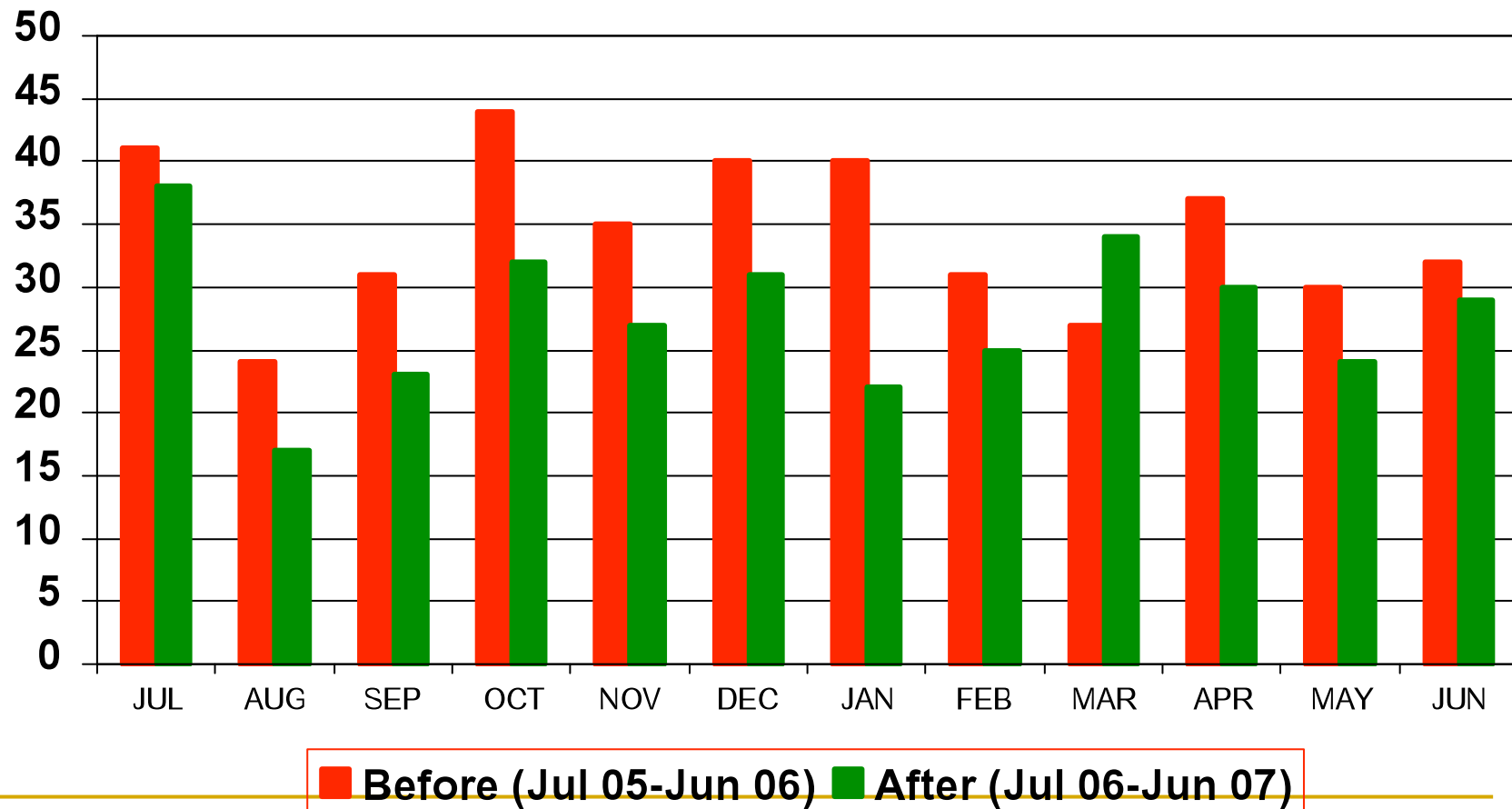


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## RBT introduced in Ireland in July 2006

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



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## 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

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\*Provisional adjusted data

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

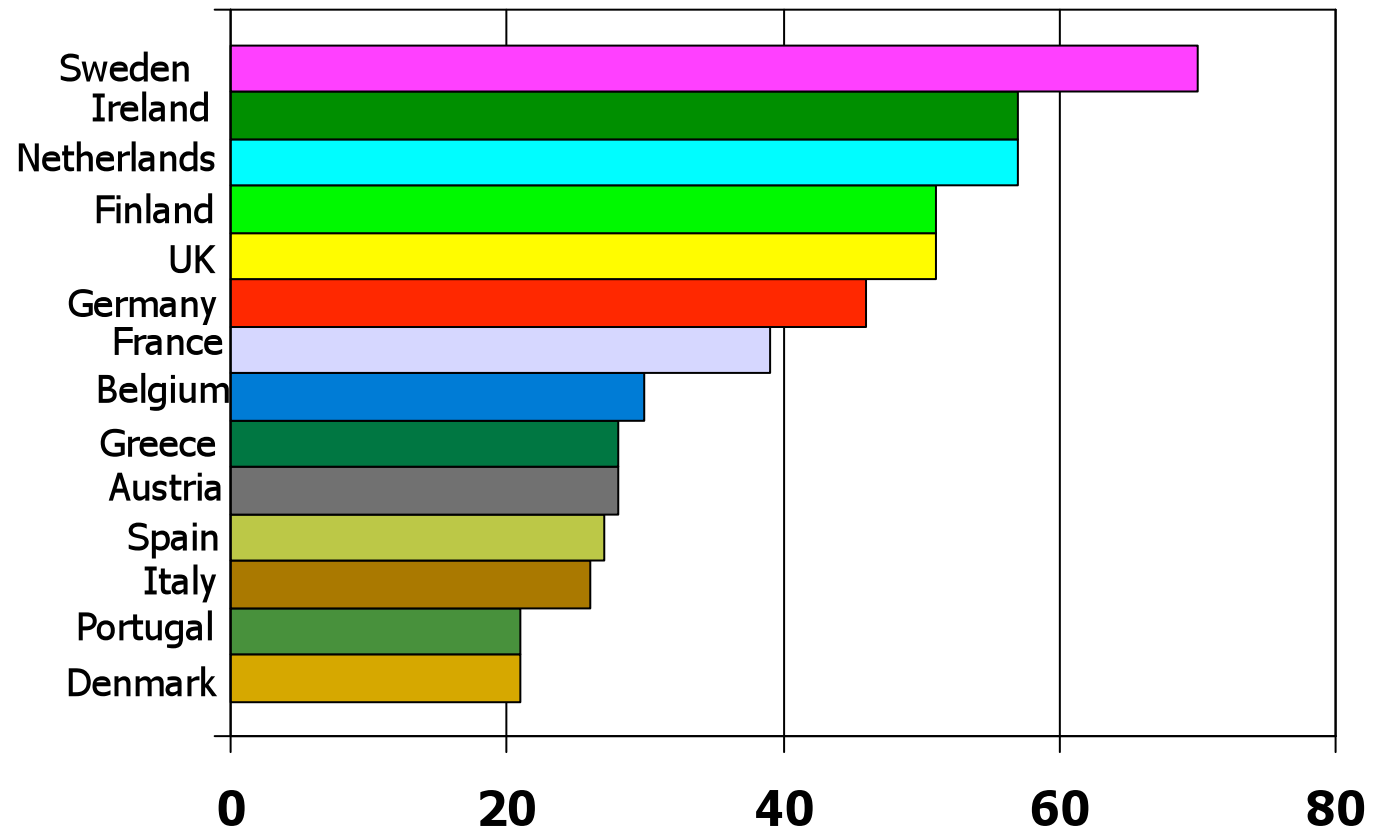
- In late 2000 meningococcal C vaccination introduced for children
  - Prior to introduction in 1999 and 2000 average deaths per year was **8**
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## There Is Support For Lowering The Limit

- DOHC survey 2002 67%
  - Sartre 2004 (where limit 80+)\_ 75%
  - PARC 2007 99%
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# Drivers Should Be Allowed No Alcohol At All (Sartre 3)



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## 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
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# Conclusion

Drink driving is a problem in Ireland

Lowering the Limit

- Will save lives
  - Will reduce injury and disability
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