

Alcohol Involvement in Fatal Motorcycle Crashes

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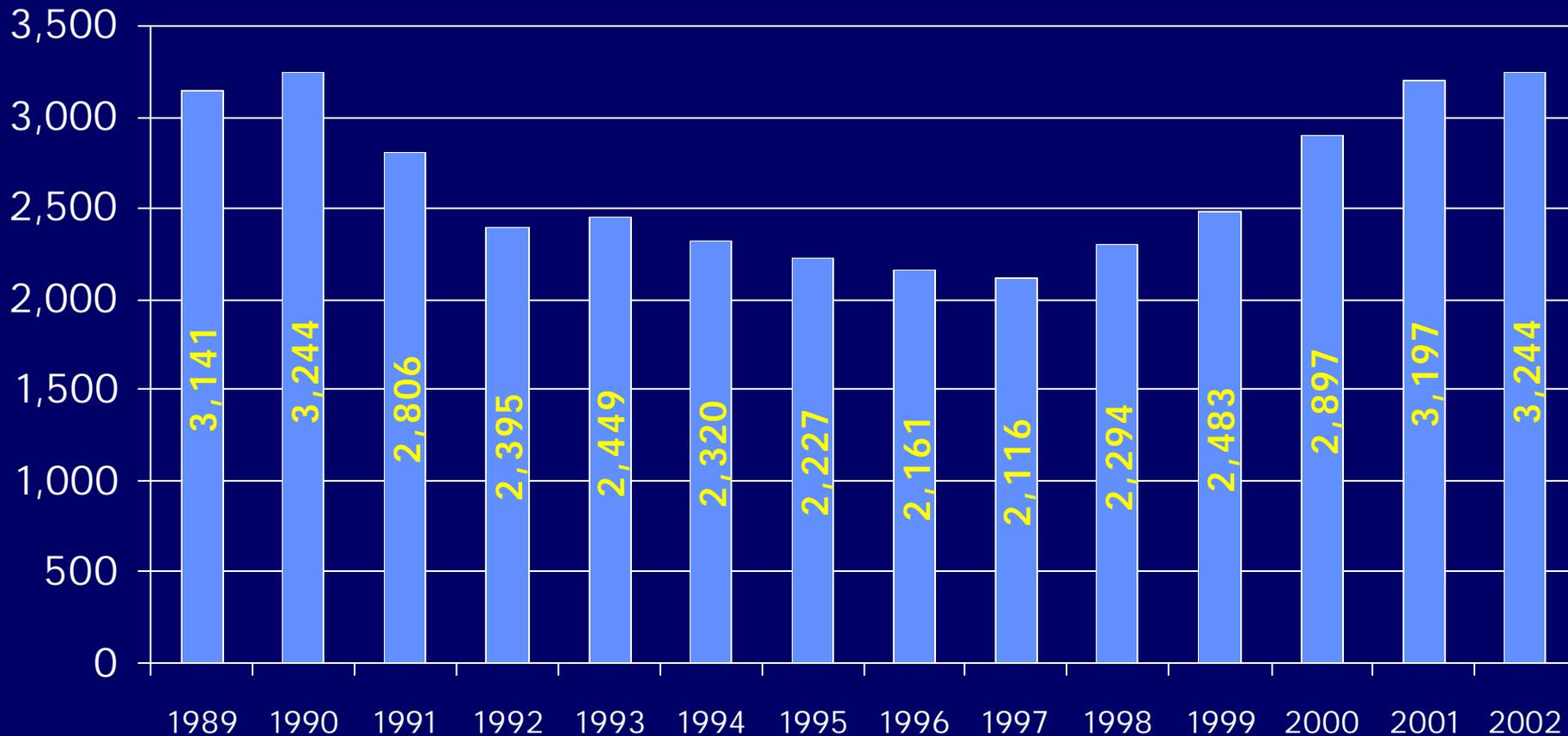
➤ **Motorcyclist Fatalities**

*Increased 5th Year in a Row
Compared to 1997 An increase of
over 50% -- 1,128 more Fatalities*

- *The increase in motorcyclist fatalities was the **smallest** in 5 years.*

Motorcyclists Killed in 2002 - highest since 1989

National Center for Statistics & Analysis



Source: FARS

Total vs. Motorcyclist Fatalities by Year, 1997-2002

National Center for Statistics & Analysis



Fatalities	Year					
	1997	1998	1999	2000	2001	2002
Total	42,013	41,501	41,717	41,945	42,196	42,815
Change	---	-512	+216	+228	+251	+619
Motorcyclists	2,116	2,294	2,483	2,897	3,197	3,244
Change	---	+178	+189	+414	+300	+47
Percent of all Fatalities	5.0	5.5	6.0	6.9	7.6	7.6

Source: FARS

Motorcyclist Fatality Rates Continued to Increase

National Center for Statistics & Analysis



Motorcyclist Fatality Rates, by Year

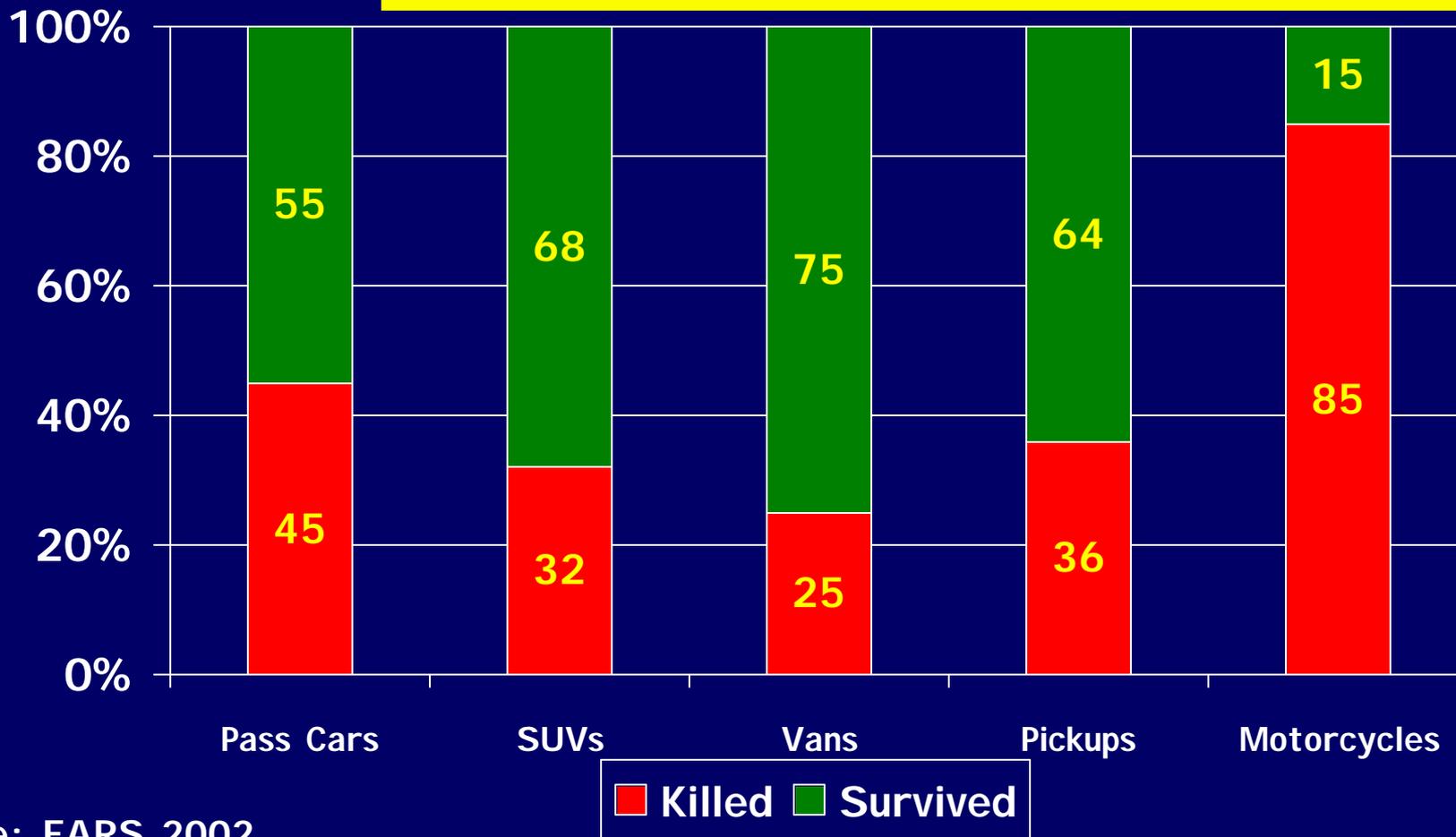
Rate	Year					
	1997	1998	1999	2000	2001	2002
Persons Killed	2,116	2,294	2,483	2,897	3,197	3,244
/100M VMT	20.99	22.31	23.46	27.67	33.17	33.96
/100K Reg. Vehicles	55.30	59.13	59.80	66.66	65.20	64.82

Sources: FARS, FHWA

Comparison with Other Vehicle Types

Occupant Survival Status by Vehicle Type

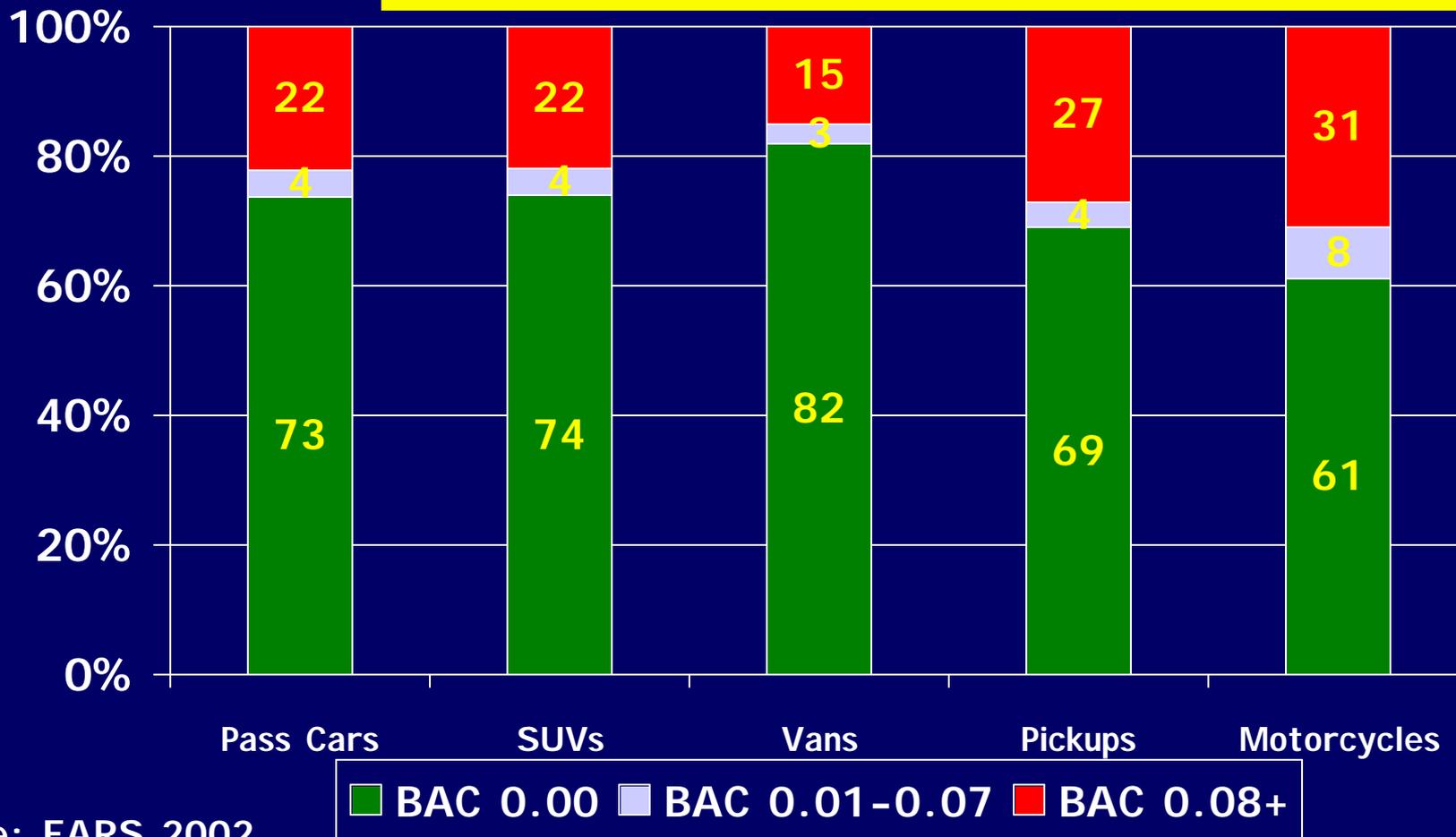
National Center for Statistics & Analysis



Source: FARS 2002

Operator Alcohol Involvement by Vehicle Type

National Center for Statistics & Analysis

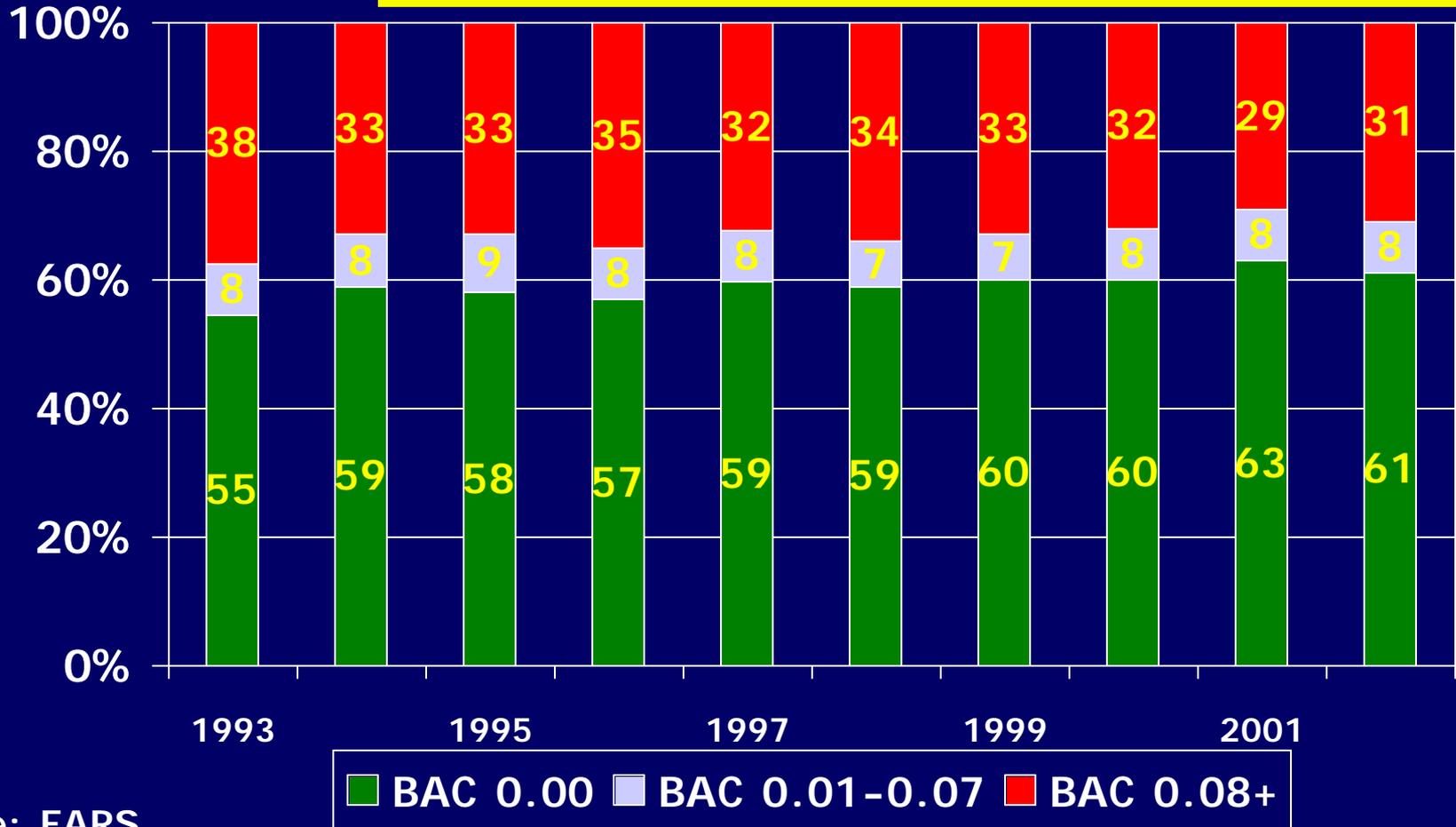


Source: FARS 2002

- Majority of motorcyclists involved in fatal crashes are killed (85 percent)
- Motorcycle operators have highest alcohol involvement compared to other vehicle types
 - ◆ Hence, when compared to other vehicle types, the operation of a motorcycle combined with alcohol can lead to deadly consequences

Motorcycle Operator Alcohol Involvement 10-Year Trend

National Center for Statistics & Analysis



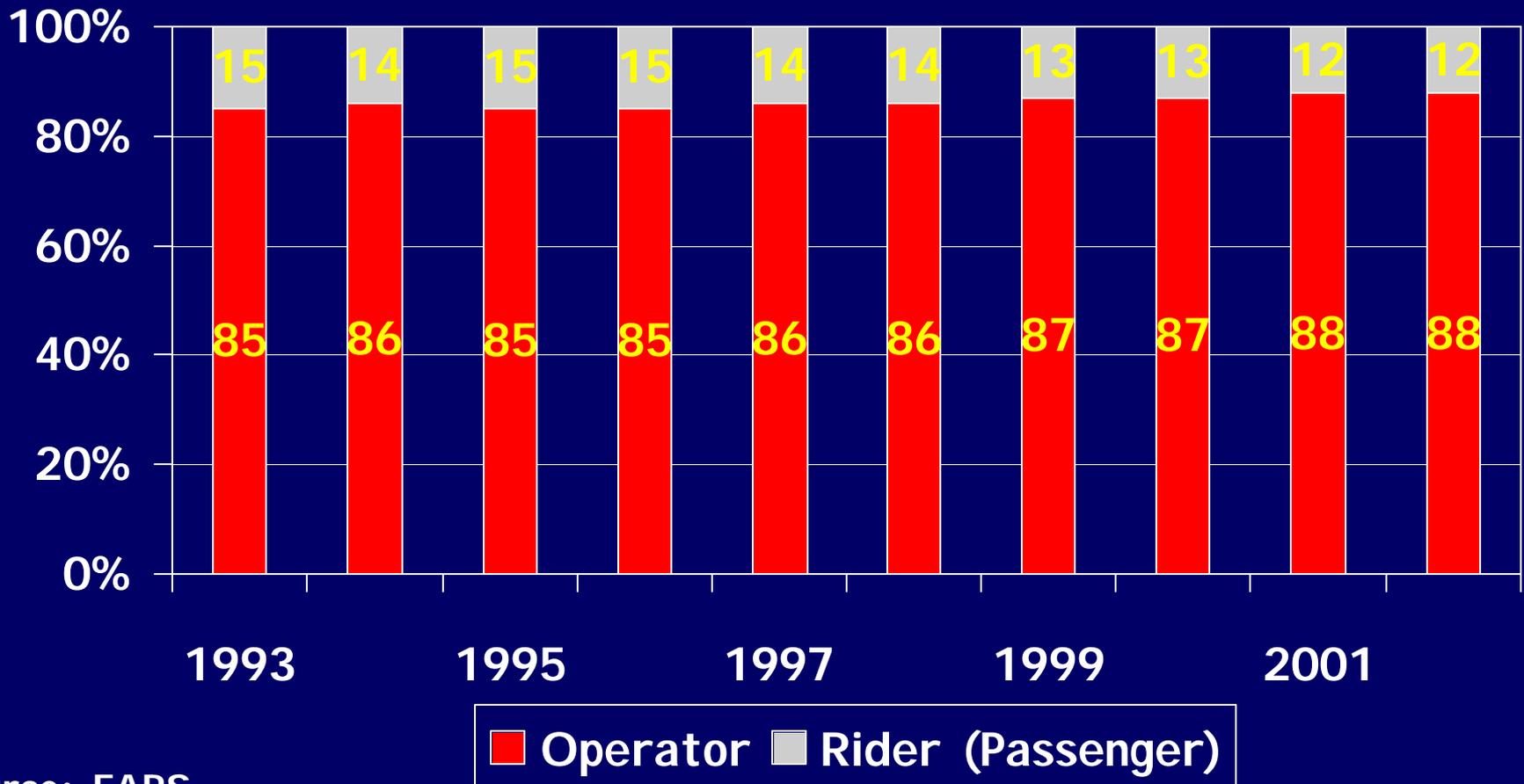
Source: FARS

Who are Involved in Motorcycle Crashes?

Operator/Rider

10-Year Trend

National Center for Statistics & Analysis

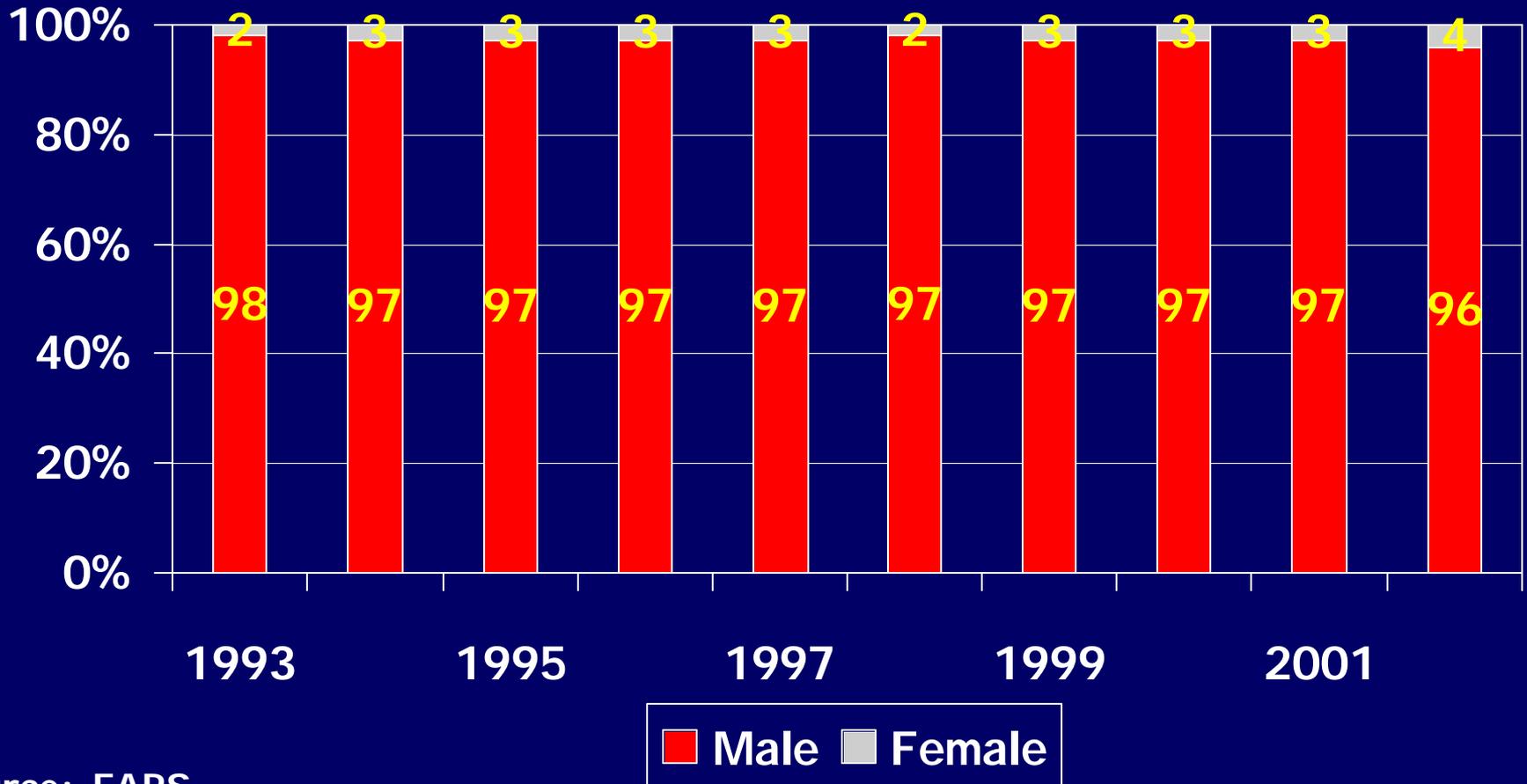


Source: FARS

Operators Involved

Male/Female 10-Year Trend

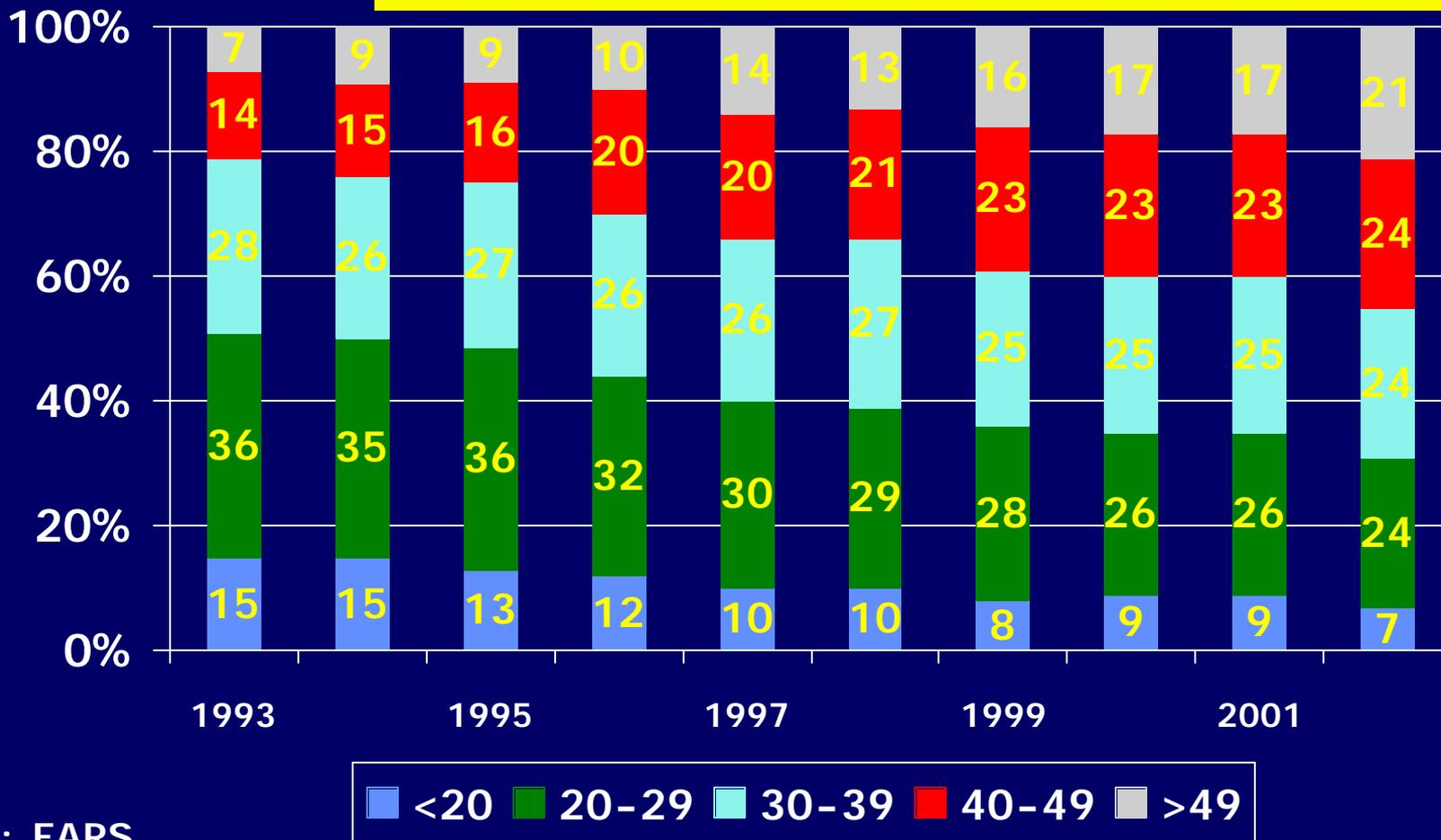
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Source: FARS

Operators Involved by Age Group 10-Year Trend

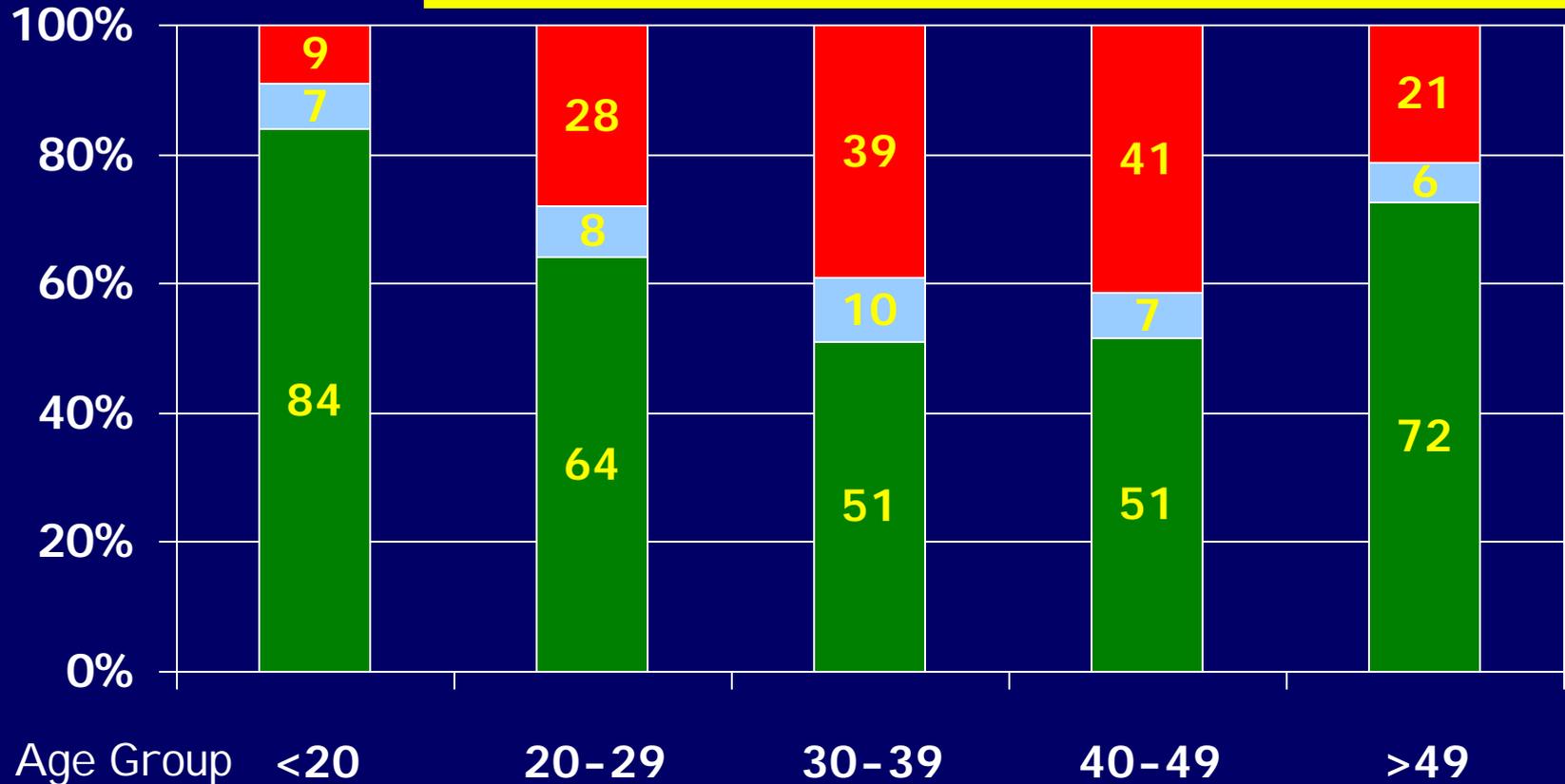
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Source: FARS

Operator Alcohol Involvement by Age Group

National Center for Statistics & Analysis



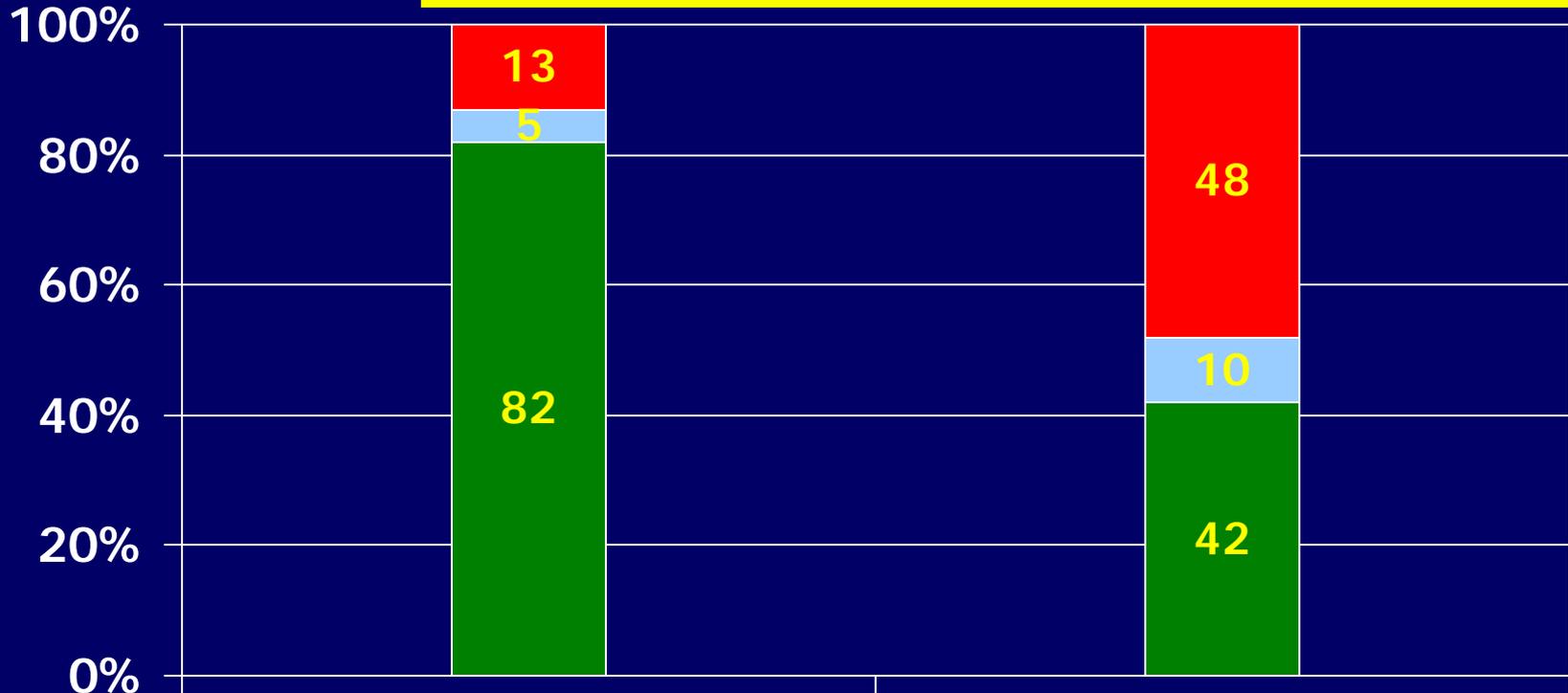
Source: FARS 2002



*When do the crashes
occur?*

Operator Alcohol Involvement by Day/Night

National Center for Statistics & Analysis



Day:
6:00 AM to 5:59 PM

Night:
6:00 PM to 5:59 AM

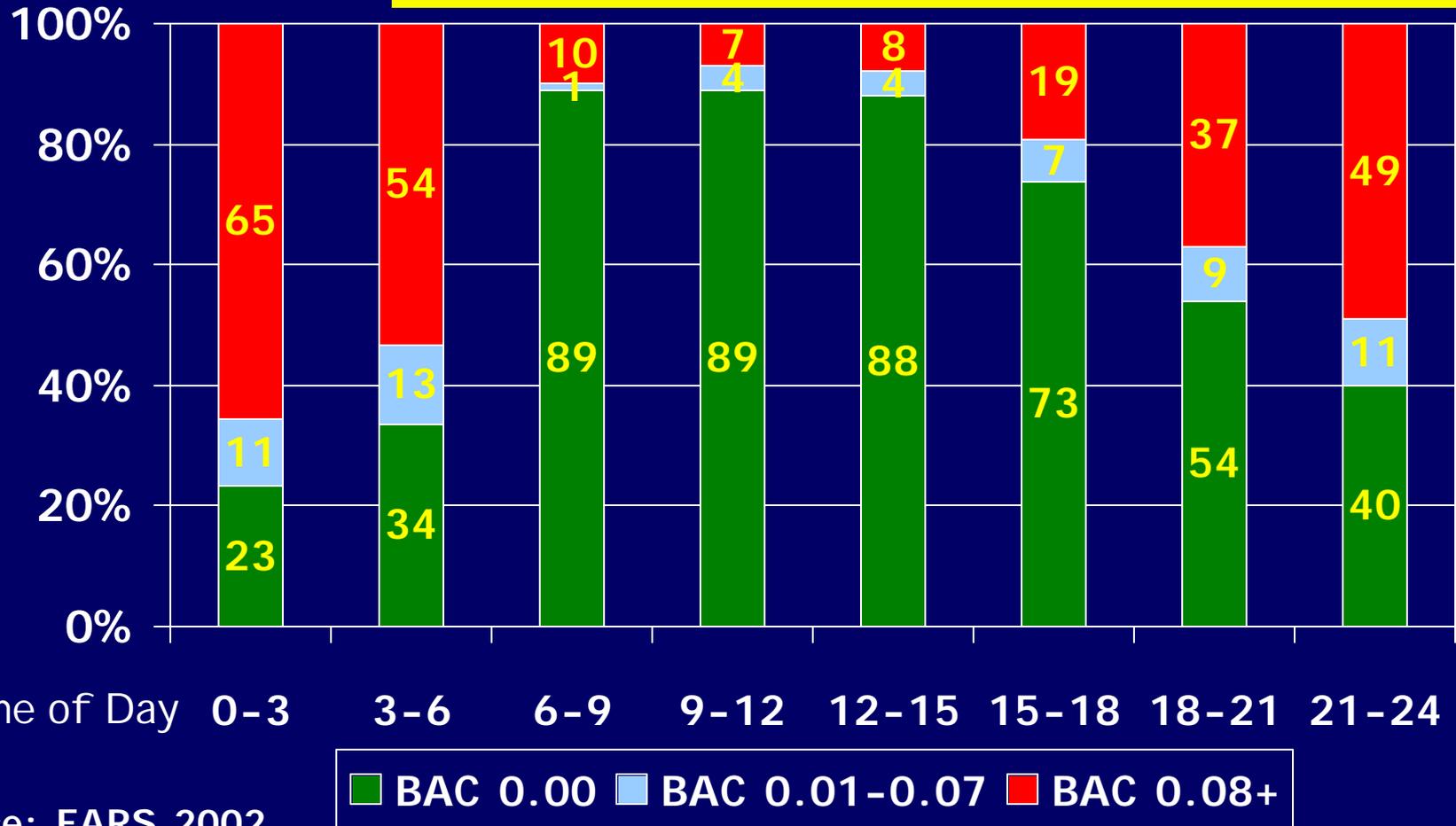
Day

Night



Operator Alcohol Involvement by Time of Day

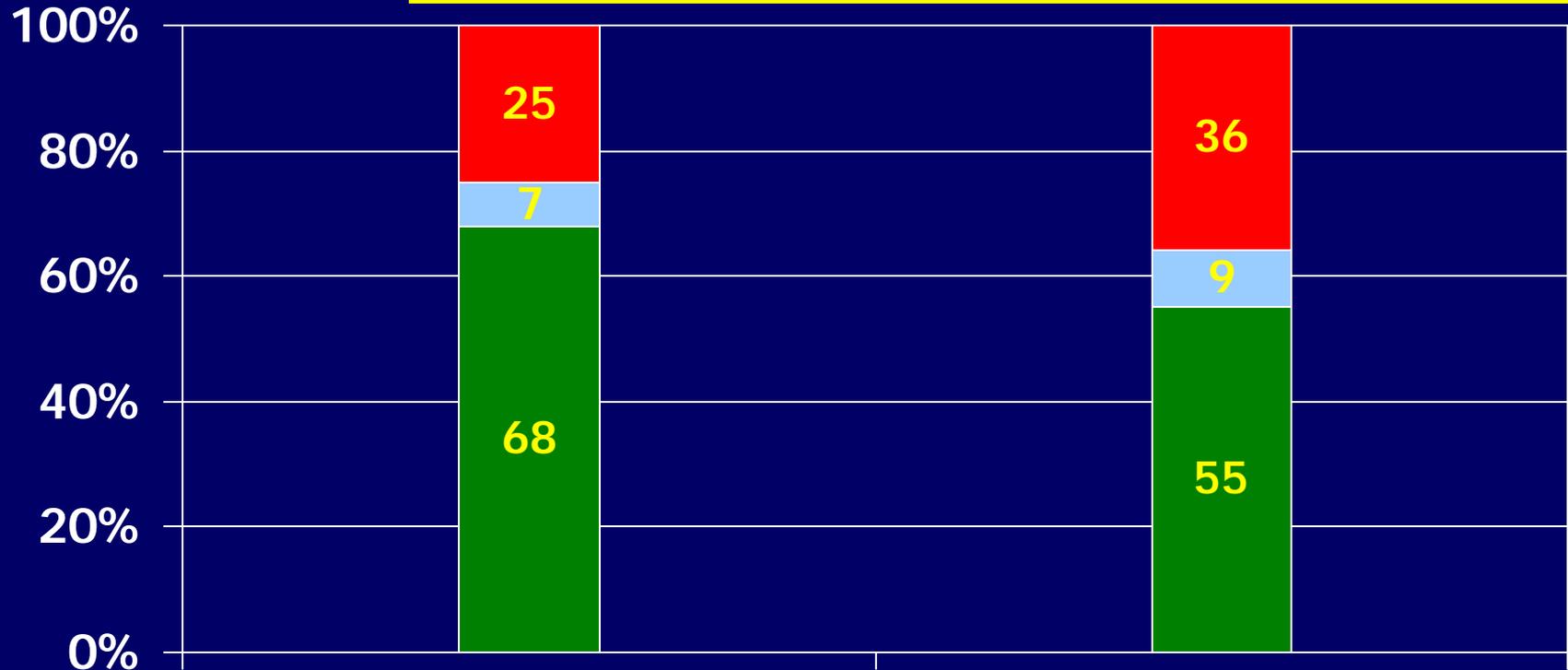
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Source: FARS 2002

Operator Alcohol Involvement by Weekday/Weekend

National Center for Statistics & Analysis



Weekday:

Mon 6:00 AM to Fri 5:59 PM

Weekend:

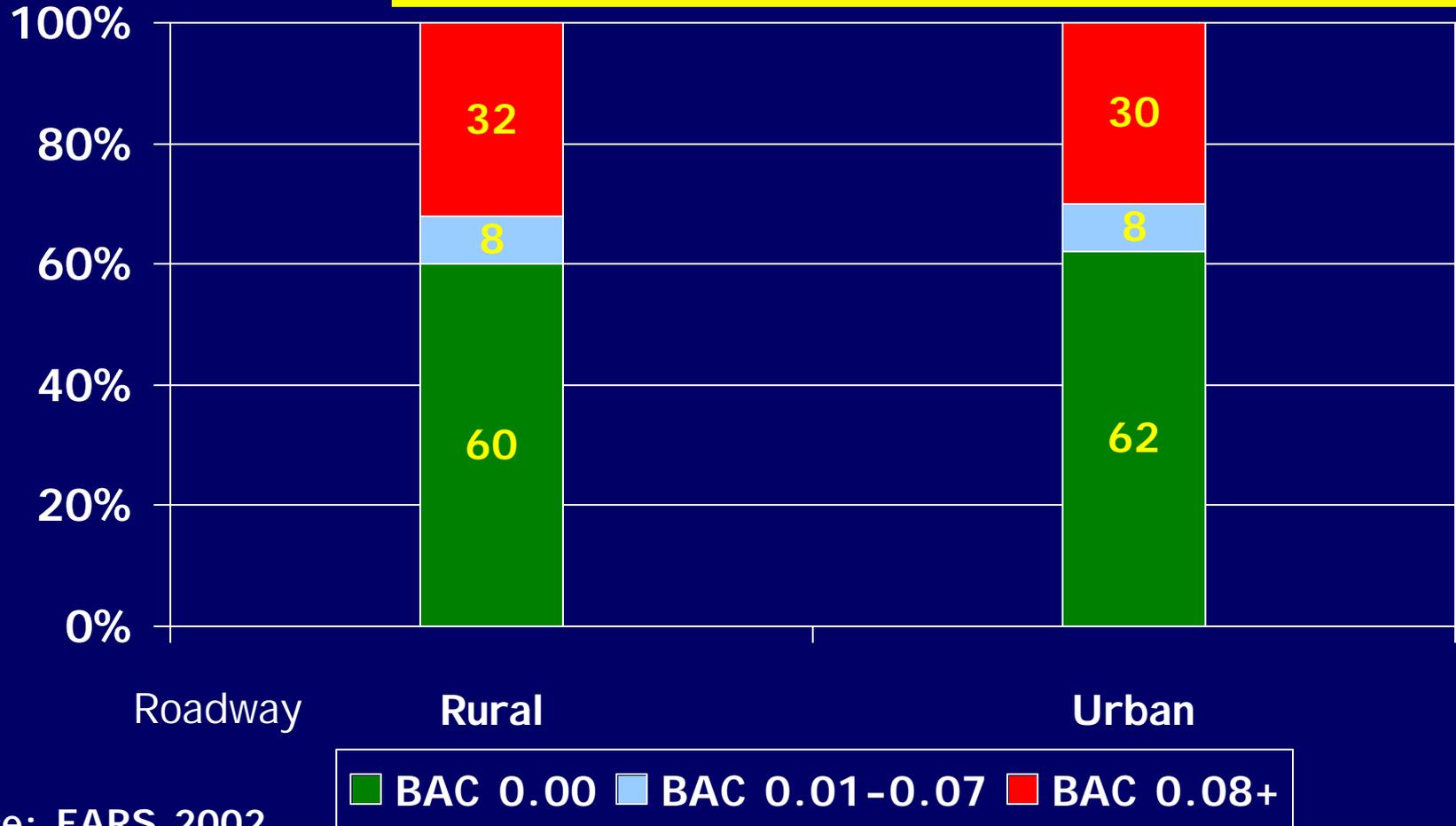
Fri 6:00 PM to Mon 5:59 AM

■ BAC 0.00
 ■ BAC 0.01-0.07
 ■ BAC 0.08+

Other Characteristics

Operator Alcohol Involvement by Roadway

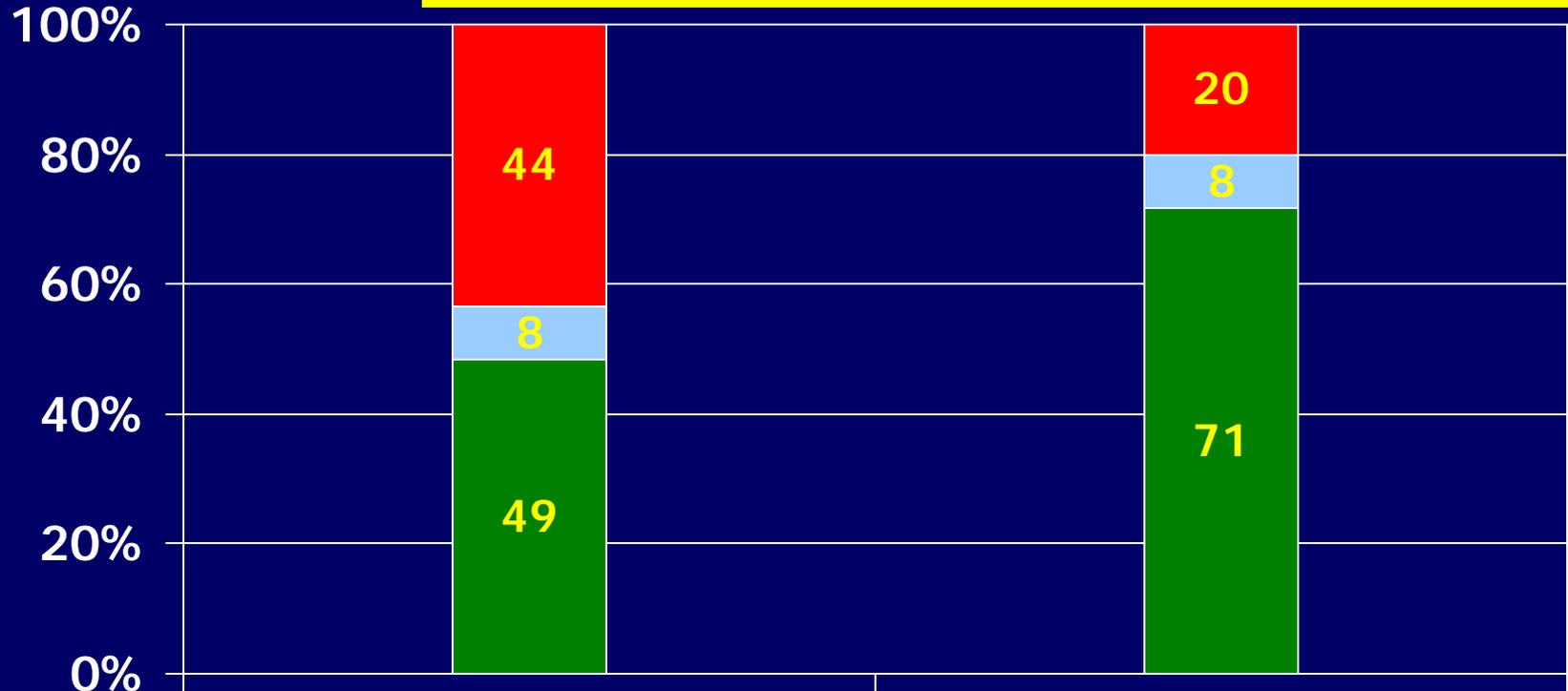
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Source: FARS 2002

Operator Alcohol Involvement by Crash Type

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Crash Type

Single Vehicle

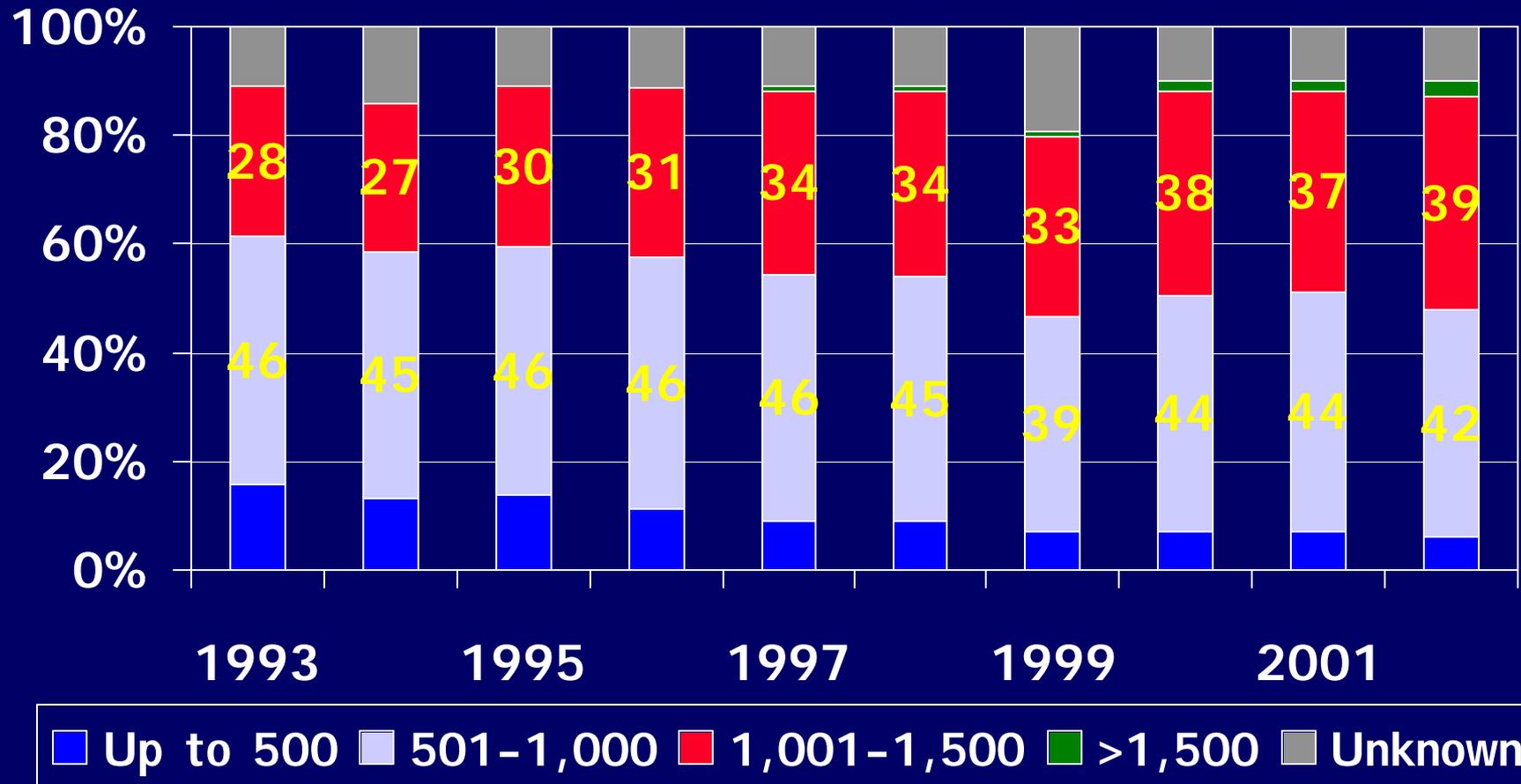
Multiple Vehicle



Source: FARS 2002

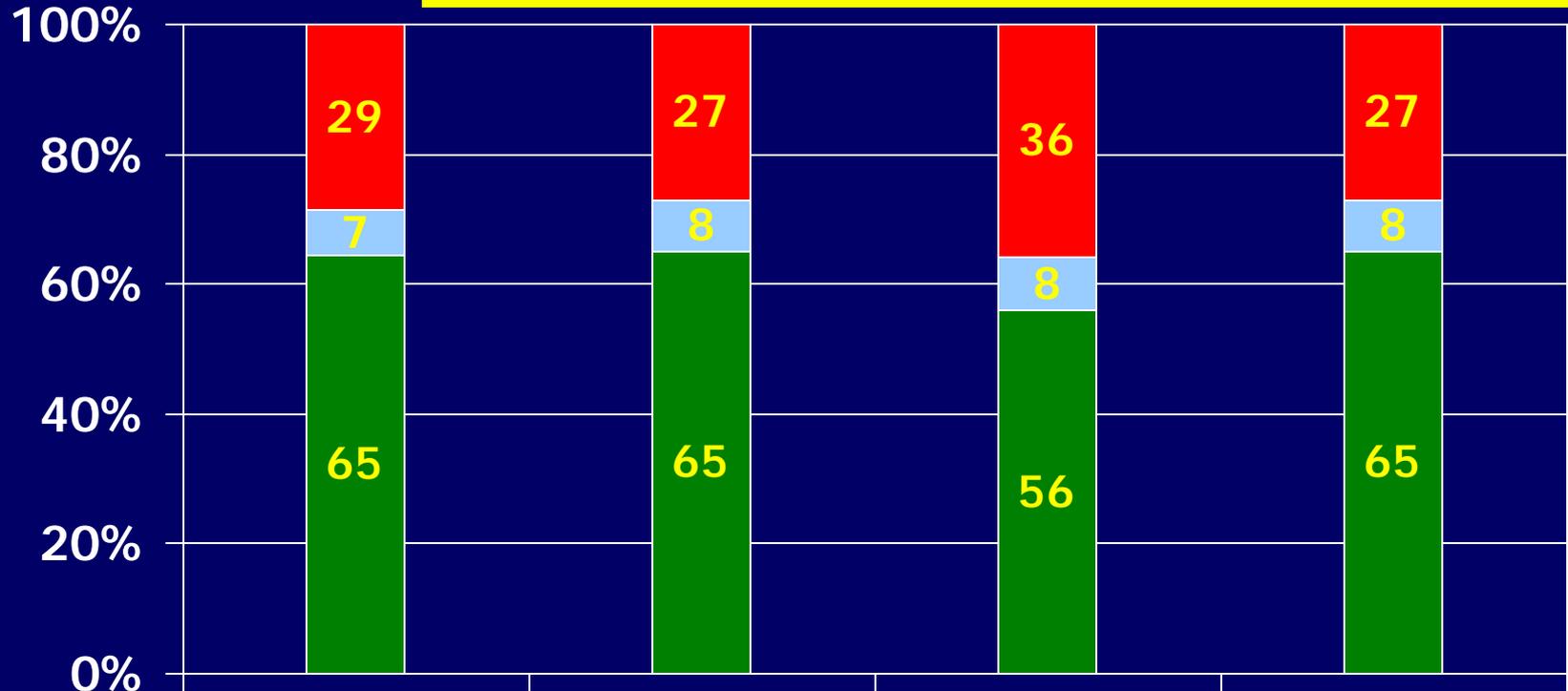
Operators Involved by Engine Size CC 10-Year Trend

National Center for Statistics & Analysis



Operator Alcohol Involvement by Engine Size CC

National Center for Statistics & Analysis



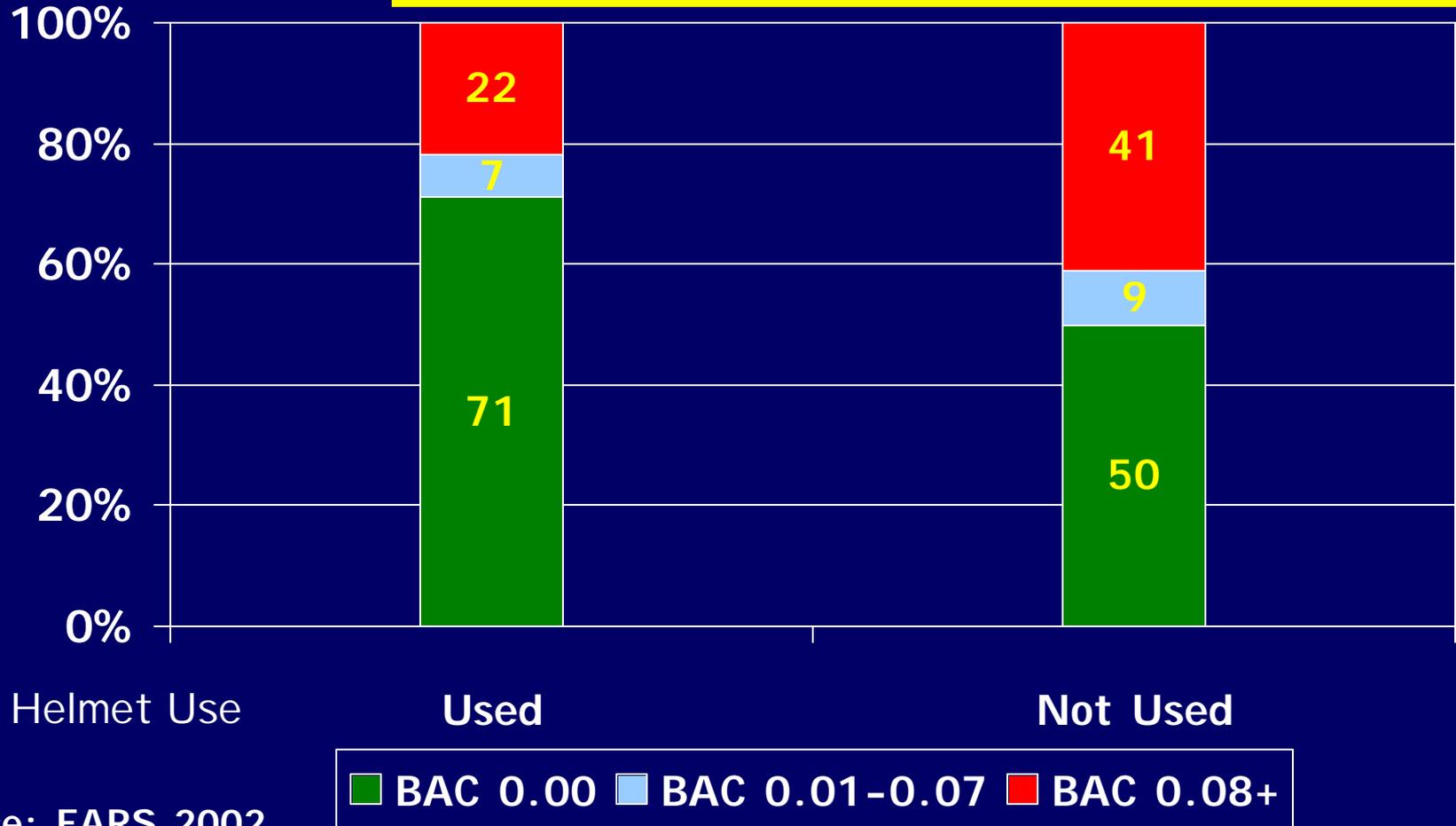
Engine Size cc Up to 500 501-1,000 1,001-1,500 >1,500



Source: FARS 2002

Operator Alcohol Involvement by Helmet Use

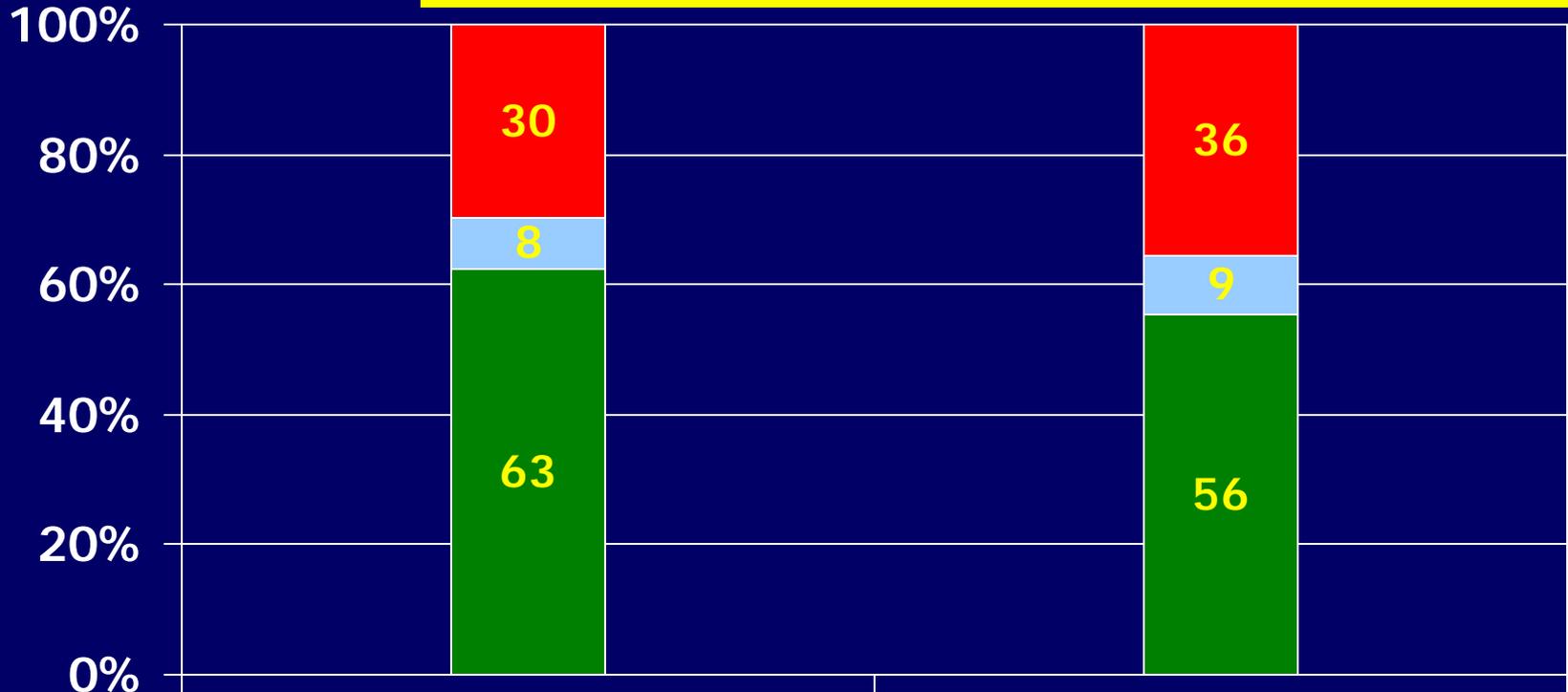
National Center for Statistics & Analysis



Source: FARS 2002

Operator Alcohol Involvement by Licensing

National Center for Statistics & Analysis



Licensing

Properly Licensed

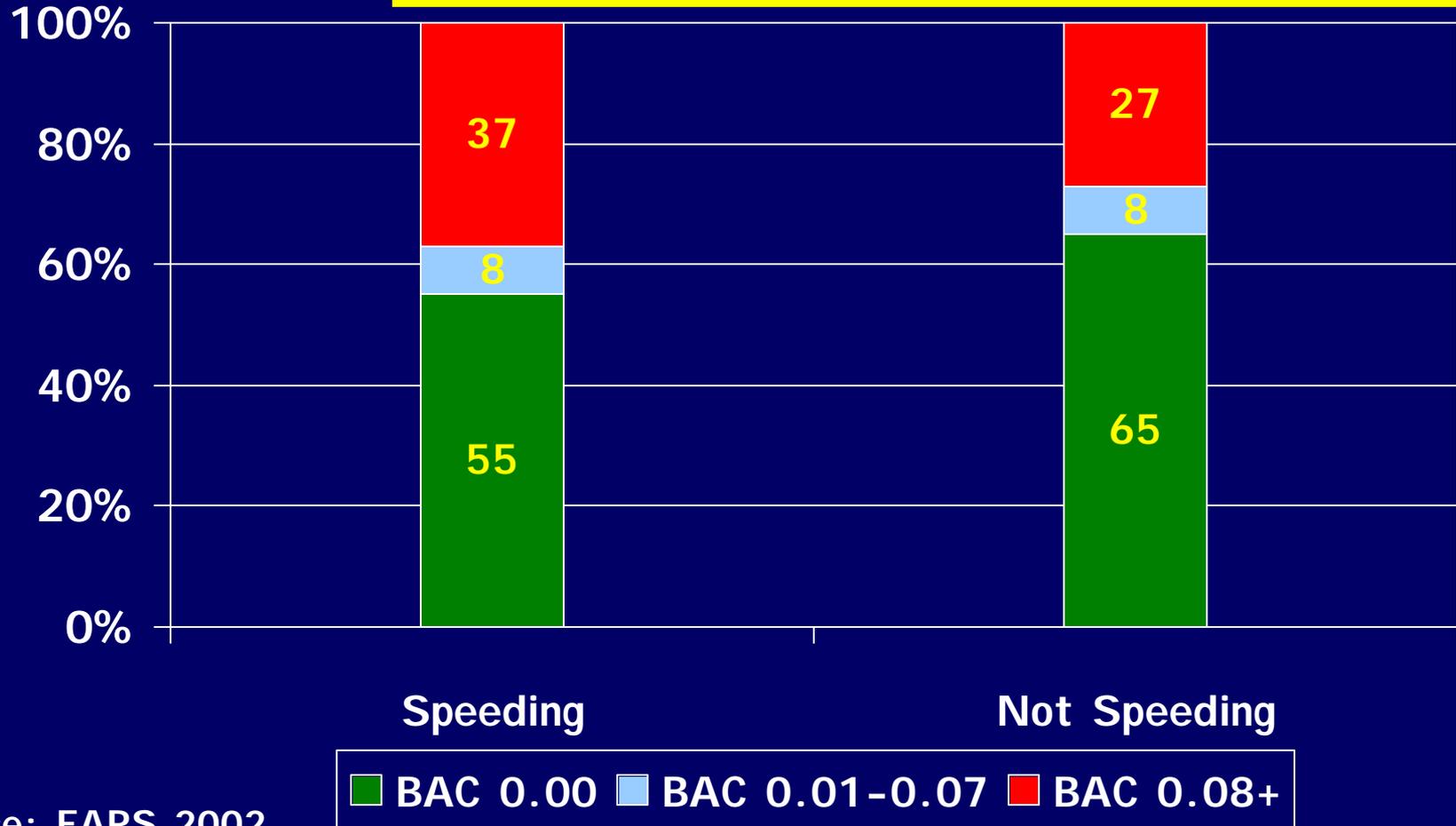
Improperly Licensed

■ BAC 0.00
 ■ BAC 0.01-0.07
 ■ BAC 0.08+

Source: FARS 2002

Operator Alcohol Involvement by Speeding

National Center for Statistics & Analysis



Source: FARS 2002

- Almost 90 percent of fatalities are operators
- Over 95 percent of fatalities are male
- Alcohol involvement has shown a steady decline from 46 percent in 1993 to 39 percent in 2002
- 30–39 and 40–49 age group operators had highest alcohol involvement among all age groups
- Alcohol involvement in single vehicle crashes was almost twice as high as multiple vehicle crashes (52 percent vs. 28 percent)

- Operators on 1,001–1,500 engine size had highest alcohol involvement (44 percent)
- Alcohol involvement in night time crashes was about three times higher than day time crashes (58 percent vs. 18 percent)
- Almost three fourths of operators were alcohol involved between midnight and 3 AM
- Operators not wearing a helmet were more likely to be alcohol involved
- Operators improperly licensed were more likely to be alcohol involved

- **DOT HS 809 271 – Recent Trends in Fatal Motorcycle Crashes:** <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/Rpts/2001/809-271.pdf>
- **DOT HS 809 360 – Fatal Single Vehicle Motorcycle Crashes:** <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/Rpts/2001/809-360.pdf>

- **DOT HS 809 387 – Motorcyclist Fatalities in 2000:**
<http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/RNotes/2001/809-387.pdf>
- **DOT HS 809 548 – Motorcyclist Fatalities in 2001:**
<http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/RNotes/2003/809-548.pdf>
- **DOT HS 809 576 – Alcohol Involvement in Fatal Motorcycle Crashes:** <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/RNotes/2003/809-576.pdf>

