

### Motorcyclist Fatalities: an Update

**National Center for Statistics & Analysis** 



### Based on The Fatality Analysis Reporting System (FARS)

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#### Data Sources

**National Center for Statistics & Analysis** 



- Crash Data
  - **♦** Fatality Analysis Reporting System (FARS)
    - 2001 (and prior years) Final File
    - 2002 Annual Report File
- Exposure Data
  - ◆ Registered Vehicles and Vehicle Miles Traveled (VMT)
    - Based on R.L.Polk and FHWA Registered Vehicles
    - FHWA VMT



#### 2002 Data Show ...

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➤ Motorcyclist Fatalities

Increased 5<sup>th</sup> 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

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## Total vs. Motorcyclist Fatalities by Year, 1997-2002

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	Year					
Fatalities	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

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5



#### 2002 Data Show ...

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Motorcycle fatalities increased in only 40 and over age groups

**But...** 

the largest percentage increase was in the over 49 age group



## Motorcyclists Killed by Age Group

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	Ye	ar		
Age Group	2001	2002	Change	% Change
Under 20	211	172	-39	-18%
20-29	925	857	-68	-7.4%
30-39	798	776	-22	-2.8%
40-49	729	764	+35	+4.8%
50+	532	672	+140	+26%
Unknown	2	3	+1	
Total	3,197	3,244	+47	+1.5%

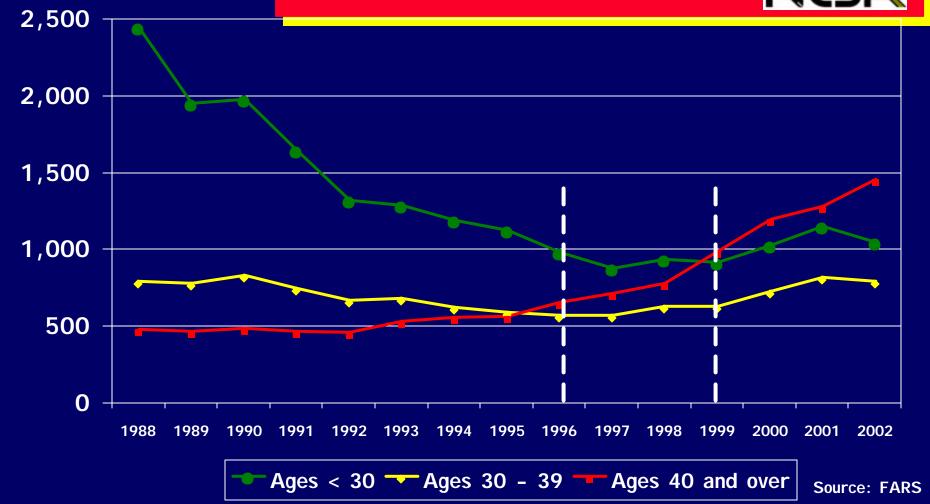
Source: FARS



### Motorcyclists Killed, by Age Group, by Year









## Motorcyclist Fatality Rates Continued to Increase

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Motorcyclist Fatality Rates, by Year							
Data	Year						
Rate	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



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10

## Long Term Trends



### Fatality Rate per 100 Million VMT by Year

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Source: FARS/FHWA



# Fatality Rate per 100,000 registered vehicles by Year

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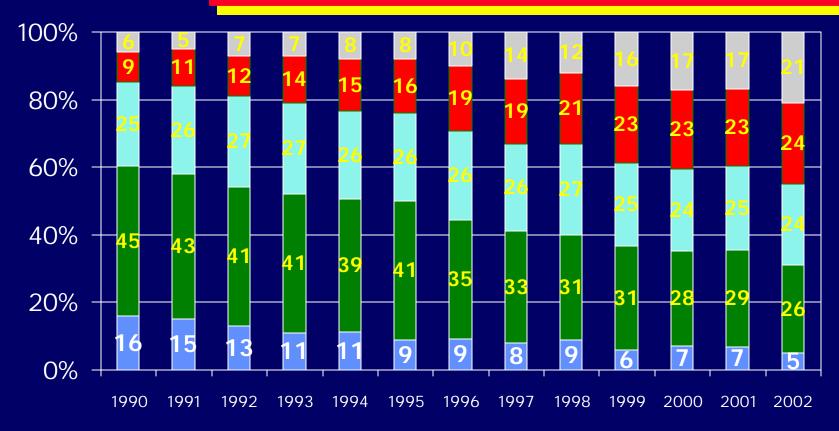
Source: FARS/FHWA



# Motorcyclists Killed (percent) by Age Group and Year

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Source: FARS

**■** <20 **■** 20-29 **■** 30-39 **■** 40-49 **■** >49



# Motorcyclists Killed by Engine Size cc and Year

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Source: FARS

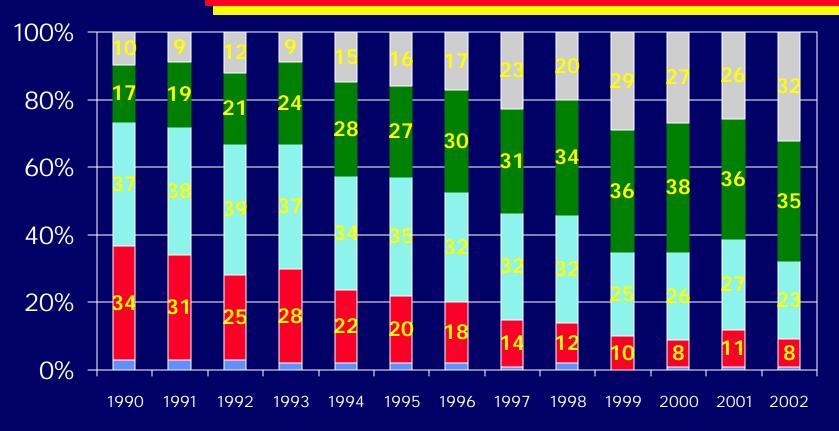
**■** Upto 500 **■** 501-1,000 **■** 1,001-1,500



#### Motorcyclists Killed (percent) on 1,001-1,500 cc Engine Size by Age Group and Year







Source: FARS

**■ <20 ■ 20-29 ■ 30-39 ■ 40-49 ■ >49** 



### 1990 to 2002 Data Show ...

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- Mean age of Motorcyclist killed is increasing
- Mean engine size of motorcycle involved in a fatal crash is increasing

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### Mean Age of Motorcyclist Killed and Mean Engine Size Involved in Fatal Crashes

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Year	Mean Age	Mean Engine Size (cc)
1990	29.3	769
1991	29.6	786
1992	30.5	799
1993	31.3	820
1994	31.8	837
1995	32.1	842
1996	33.4	865
1997	34.8	899
1998	34.6	904
1999	36.5	922
2000	36.8	957
2001	36.3	958
2002	37.9	999

Source: FARS



### NHTSA's Analytical Reports on the Web

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- **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://wwwnrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/RNotes/2001/809-387.pdf
- DOT HS 809 548 Motorcyclist Fatalities in 2001: http://wwwnrd.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



## Questions?

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