

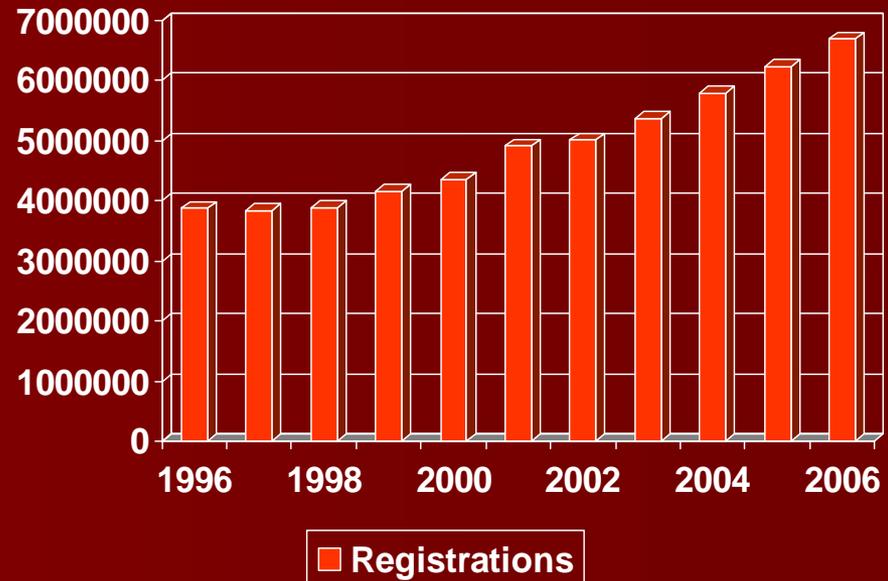
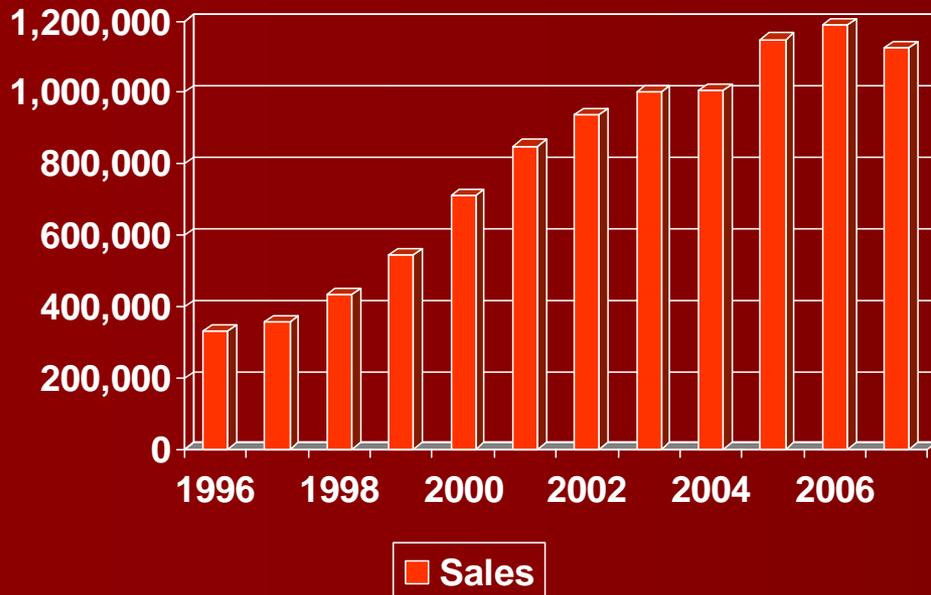
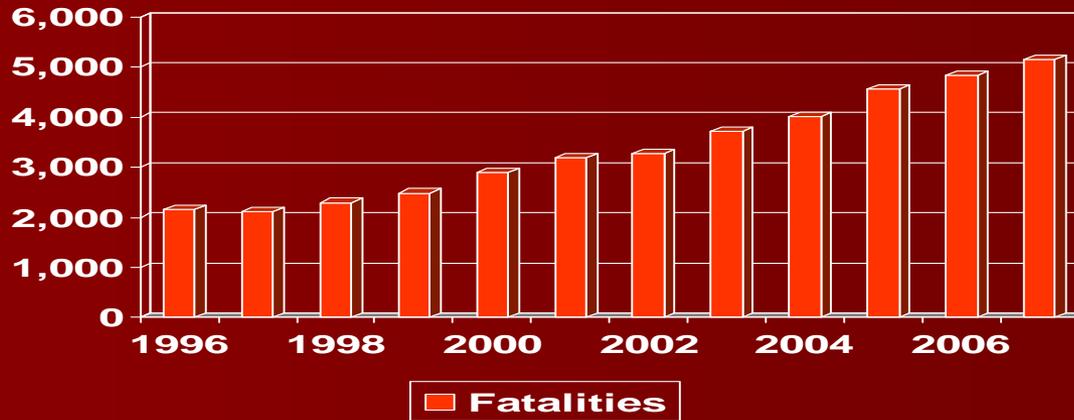
# National Highway Traffic Safety Administration

## Motorcycle Safety Program

Diane Wigle

Chief, Safety Countermeasures Division

# Motorcycle Safety Trends



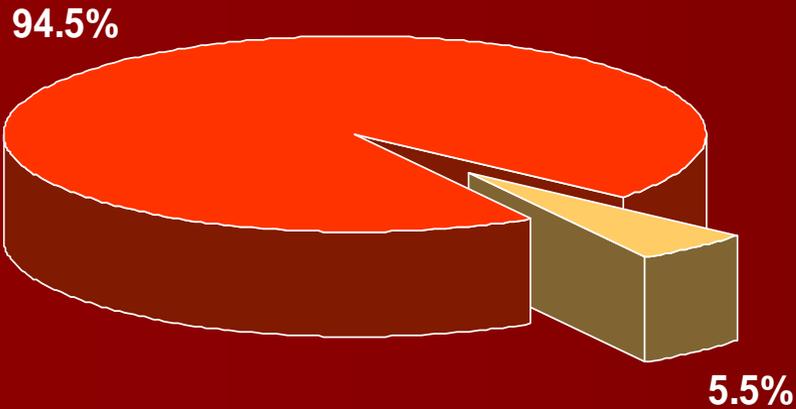
# 2007 Data Shows...

- **Motorcyclist fatalities increased for the 10<sup>th</sup> year in a row**
  - *Accounted for 12.6% of total traffic fatalities*
  - *Highest number since 1975*
    - *Previous highest in 1980 - 5,144*
  - *Over the last ten years*
    - *fatalities increased 125%*
    - *Registration increased by 84%*
    - *VMT increased by 32%*

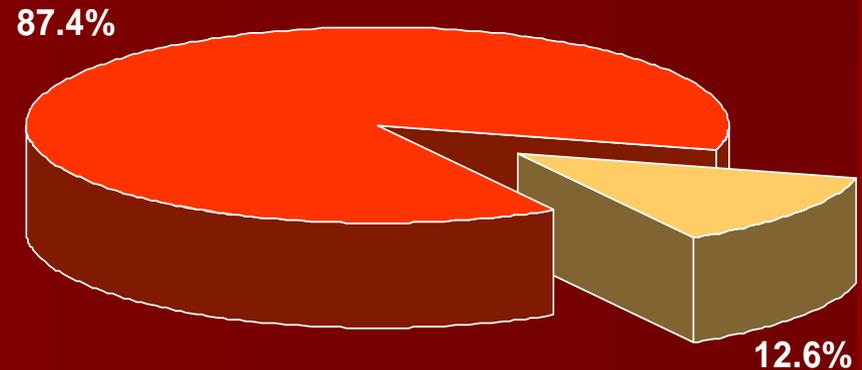
# Proportion of Total Fatalities, by Role and Year

*Motorcyclist fatalities increased to 12.6% of all motor vehicle traffic crash fatalities compared to 5.5% in 1998*

1998



2007



Other Fatalities\*



Motorcyclist Fatalities

\* Passenger Vehicle Occupants, Other occupants and Nonoccupants

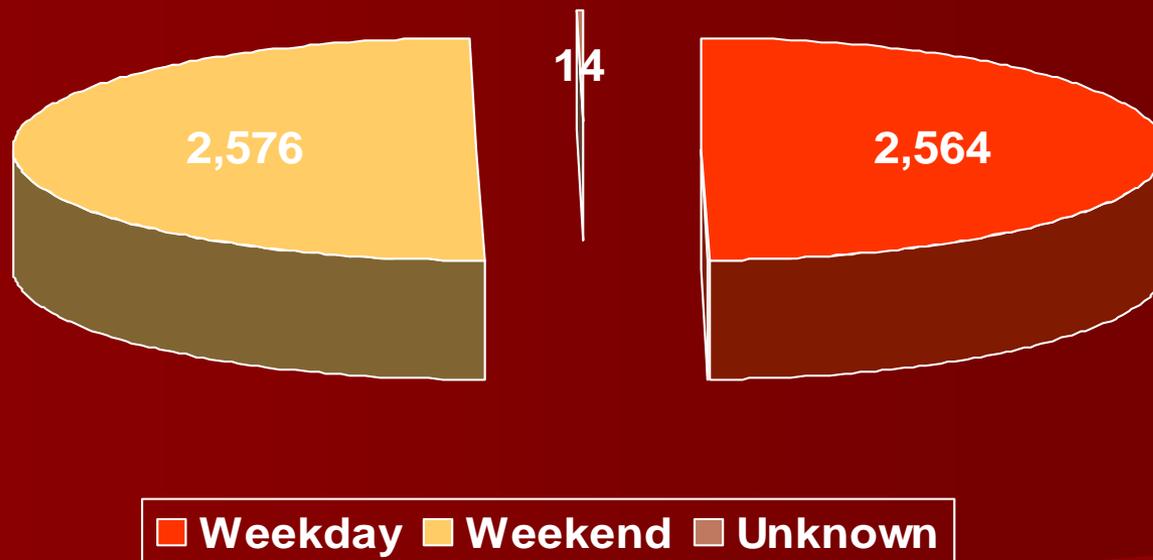
Source: FARS

# Where the Increases are

- *10-Year Trend by Age Group Shows*
  - *71-percent increase in under-30 group*
  - *70-percent increase in 30-39 age group*
  - *234-percent increase in 40+ age group*
    - *380-percent increase in 50+ age group*

# Motorcyclist Fatalities by Day of Week

Based on the number of hours, there were **nearly twice** as many motorcyclist fatalities during **weekends** than during weekdays (19.8 vs. 11.0)



**Weekday** = 6 a.m. Monday through 5:59 p.m. Friday  
**Weekend** = 6 p.m. Friday through 5:59 a.m. Monday

Source: 2007 FARS

# Motorcycle Operators Licensing

- *One out of four motorcycle riders (26%) involved in fatal crashes had an invalid license.*
- *Motorcycle riders involved in fatal traffic crashes were 1.3 times more likely than passenger vehicle drivers to have a previous license suspension or revocation(18% and 14%).*

# Motorcycle Operators Alcohol

- *Twenty-eight percent of all fatally injured motorcycle riders were alcohol impaired (BAC of .08 or higher).*
- *The percentage with BAC .08 g/dl or above was highest for fatally injured motorcycle riders among two age groups, 45-49 (41%) and 40-44 (37%) followed by ages 35-39 (35%).*

# Motorcycle Operators Alcohol

- *Forty-one percent of the 2,182 motorcycle riders who died in **single-vehicle crashes** in 2007 had BAC levels of .08 g/dL or higher.*
- *Motorcycle riders killed in traffic crashes at night were nearly 4 times more likely to have BAC levels of .08 g/dL or higher than those killed during the day (44% and 12% respectively).*

# Motorcycle Operators

## Single Vehicle vs. Multi-Vehicle Crashes

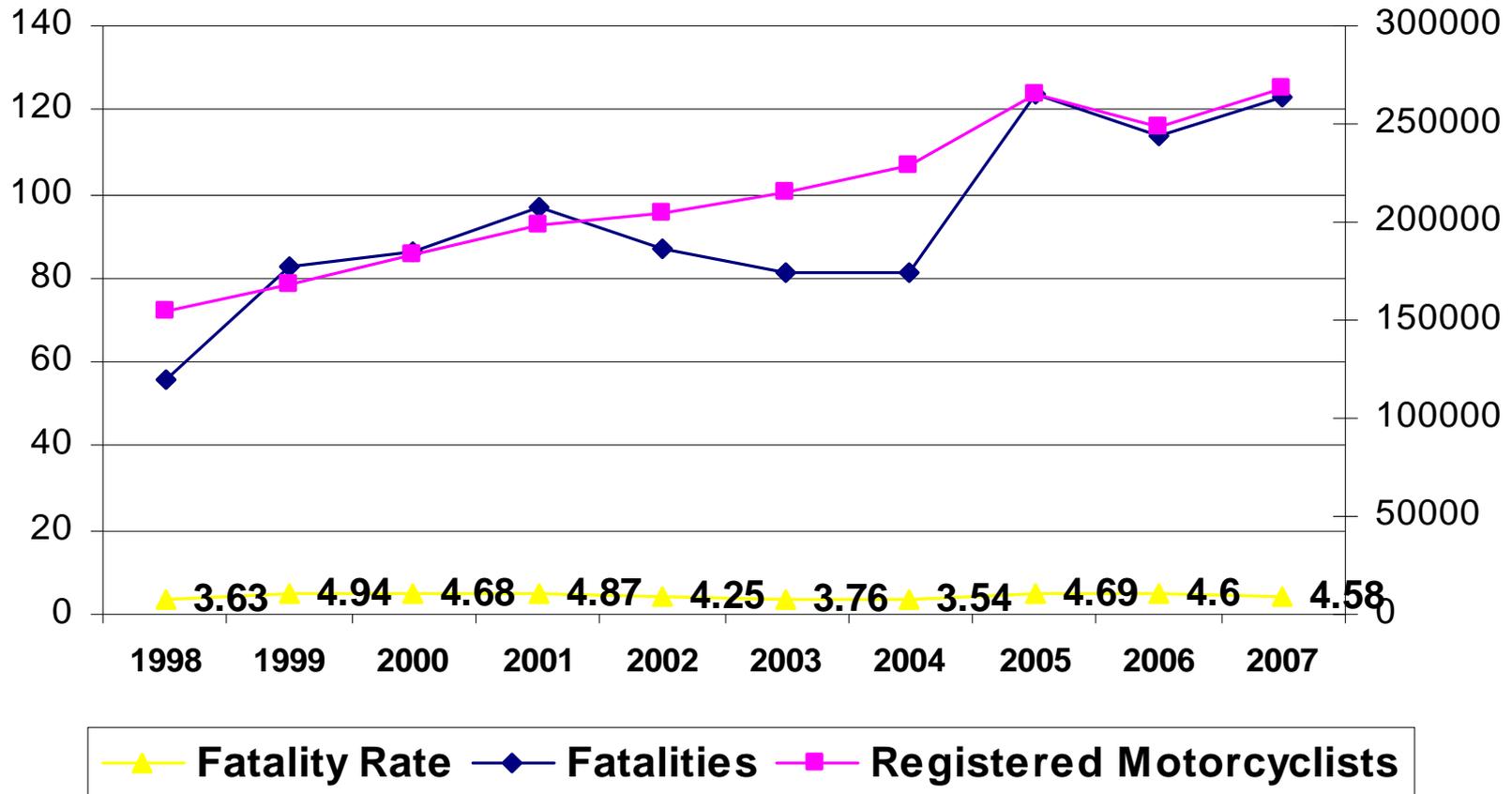
- *About 45 percent of fatal motorcycle crashes were single vehicle crashes versus 55 percent multi-vehicle crashes.*
- *In three-fourths of the multi-vehicle crashes the motorcycle was the striking vehicle.*
- *Eighty-six percent of two vehicle fatal motorcycle crashes were with passenger vehicles*

# Motorcycle Operators Helmets

- *In 2007, 57 percent of the fatally injured motorcyclists used helmets.*
- *About two-thirds (63%) of the fatally injured motorcyclists were not wearing helmets in States without universal helmet laws compared to 14% in States with universal helmet laws.*
- *Helmets are estimated to be 37% effective in preventing fatal injuries to motorcyclists. 800 additional lives would have been saved in 2007 if all motorcyclists had worn helmets.*

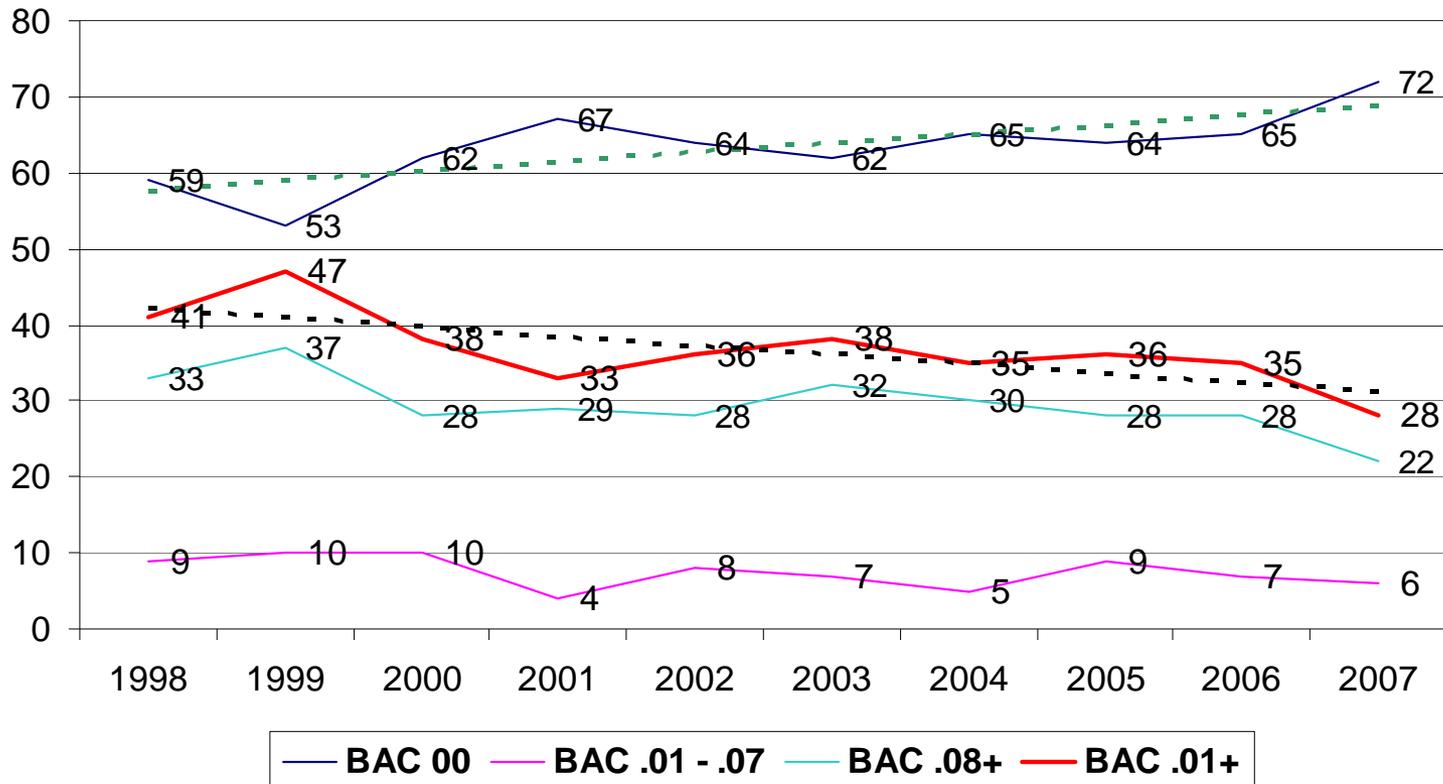


# Michigan - Fatalities Registered Motorcycles, Rate



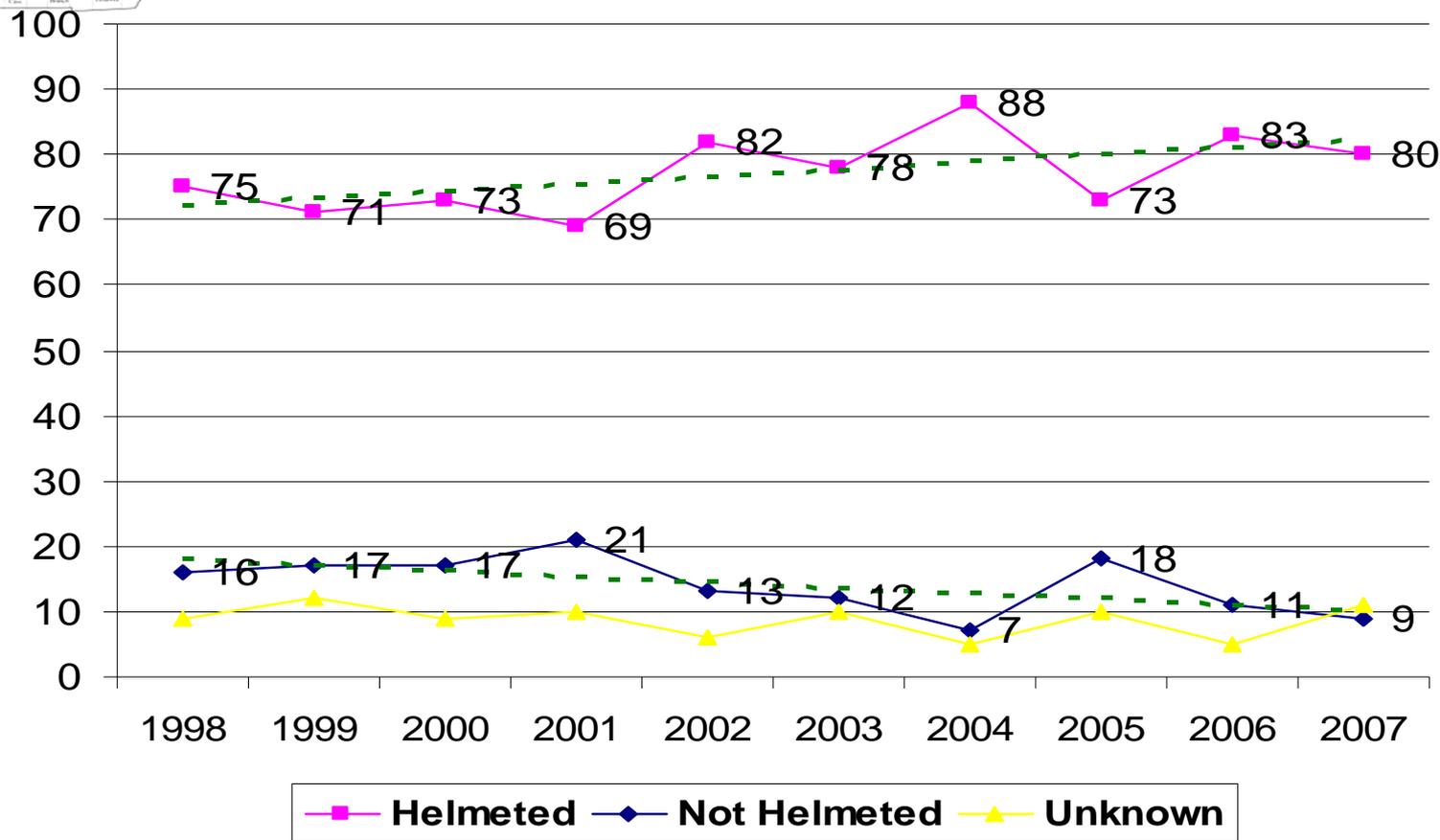
Source: FARS 1998-2006 (Final) & 2007 (ARF)

# Michigan Fatalities – Alcohol (percent)



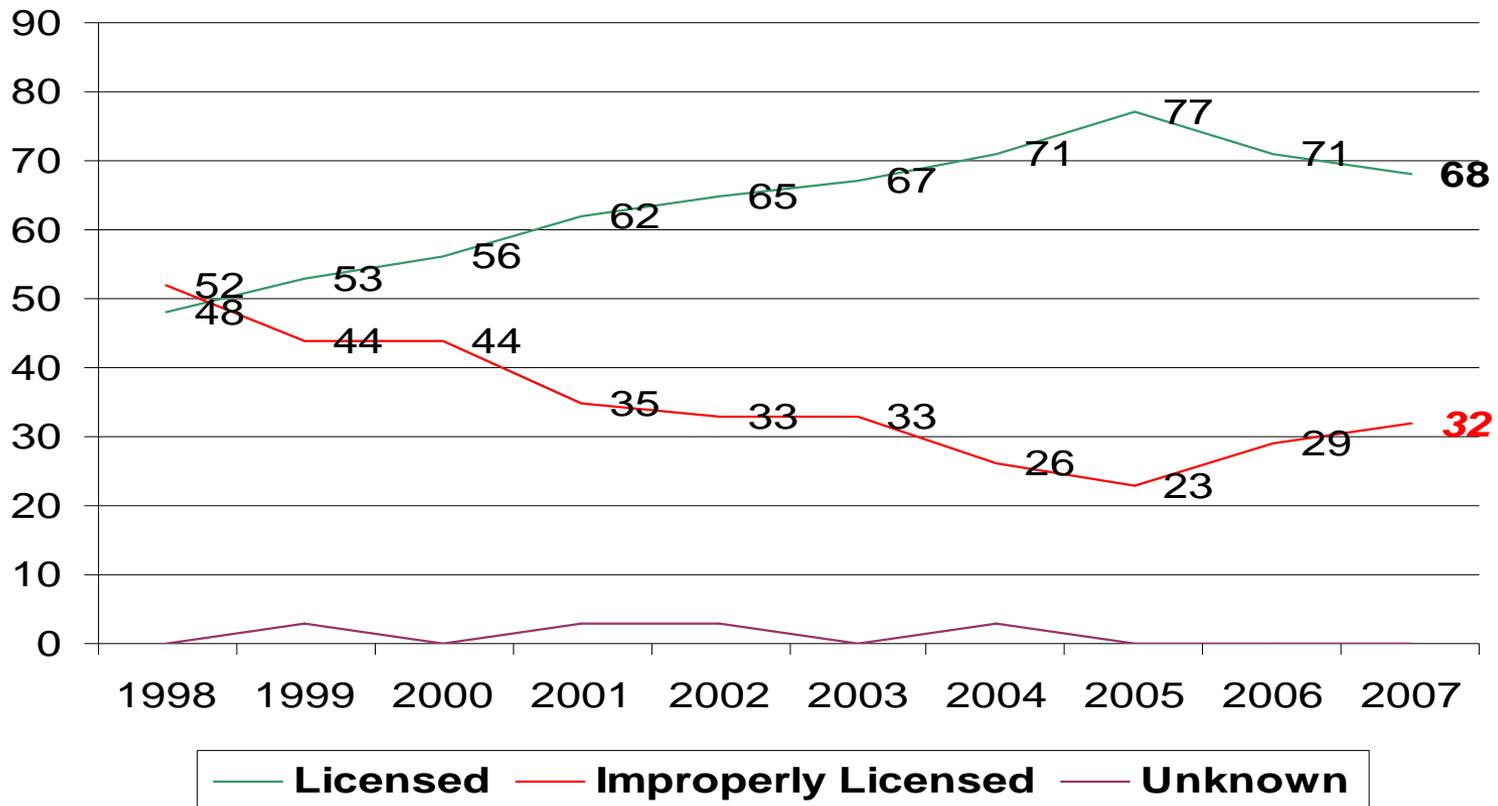
Source: FARS 1998-2006 (Final) & 2007 (ARF)

# Michigan Fatalities – Helmeted Riders (percent)



Source: FARS 1998-2006 (Final) & 2007 (ARF)

# Michigan Fatalities – Licensed (percent)



Source: FARS 1998-2006 (Final) & 2007 (ARF)

# Comprehensive Motorcycle Safety Program Elements

- Helmets and Protective Gear
- Riding Unimpaired
- Proper Licensing
- Rider Training
- Motorists Awareness

# Who Has A Role

- Riders and Rider Groups
- Manufacturers
- Law Enforcement
- Licensing
- Government
- Insurance
- Public Health

# National Agenda for Motorcycle Safety (NAMS)

- Published in November 2000.
- Created by stakeholders in the motorcycle community through support of NHTSA and MSF
- Contains 82 recommendations covering components of a comprehensive motorcycle safety program

# NAMS Implementation Guide

- NHTSA published the *Implementation Guide for the National Agenda for Motorcycle Safety* in January 2007
- Assist State and community organizations to improve motorcycle safety by implementing NAMS recommendations

# NAMS Implementation Guide

- The Implementation Guide's primary audience includes:
  - ❖ State Highway Safety Offices
  - ❖ State Licensing and Training Agencies
  - ❖ Law Enforcement Agencies
  - ❖ Motorcyclist Organizations and Clubs
  - ❖ Motorcycle Dealers and Dealer Organizations
  - ❖ Individual/Independent Motorcyclists

# NAMS Implementation Guide

- The Implementation Guide addresses major NAMS recommendations that can be implemented at State or local level.
  - ❖ Alcohol and Other Drugs
  - ❖ Personal Protective Equipment
  - ❖ Motorcycle Operator Training and Education
  - ❖ Operator Licensing
  - ❖ Motorist Education
  - ❖ Highway and Environment
  - ❖ Program Management

# NHTSA Comprehensive Motorcycle Safety Program

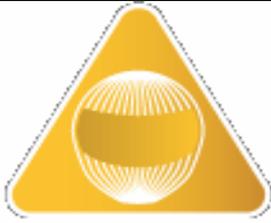
# Helmets

- On October 2, 2008, NHTSA published a Notice of Proposed Rulemaking (NPRM) to amend Federal Motor Vehicle Safety Standard (FMVSS) No. 218, Motorcycle Helmets.
- The purpose of the NPRM is to upgrade the labeling requirements for helmets and revise testing requirements.
- There was a 60-day public comment period that ended December 1, 2008.
- The NPRM can be found online at [www.regulations.gov](http://www.regulations.gov) by searching for the following: NHTSA-2008-0157

# Motorcycle Helmets

- Studied effect of repeal and enactment of State universal helmet use laws
  - Louisiana
  - Florida
  - Arkansas
  - Texas

# HelmetCheck.org



[Home](#)/[About Us](#)/[Contact Us](#)

[Helmet Compliance/](#)

[Helmet Safety/](#)

[Featured Articles/](#)

[Additional Links](#)

## HELMETCHECK.ORG

**YOUR ONE-STOP RESOURCE  
FOR MOTORCYCLE  
HELMET INFORMATION**

**Does Your Helmet Pass?**

Select a helmet below to see  
if it passes the [Safety Test](#).

Brand:

Type:

Model:

[Can't find your model?](#)

**SUBMIT >**

[Disclaimer/Waiver](#)

[Regulations in Your State](#)

[The Safety Test](#)

[Featured Articles](#)

# Impaired Riding

- Focus Groups
- DWI Detection Cues
- Drunk Driving Over the Limit. Under Arrest.
- Impaired Riding Planner
- Riders Helping Riders Training Program
- Green-Yellow-Red Campaign
- NSA Grants

# Licensing

- *Guidelines for Motorcycle Operator Licensing*
- Revise the *Motorcycle Operator Manual* (MOM) and Knowledge Test Question Database

# Rider Training

- Model National Standards for Entry-Level Motorcycle Rider Training
- Discovery Project

# Motorist Awareness

- Share the Road Planner – 2008
- Media Package - 2009

# Law Enforcement

- Law enforcement training program to educate officers on their role in improving motorcycle safety

# Motorcycle Data

- Motorcycle Data Demonstration Project
  - Maryland Department of Transportation, Motor Vehicle Administration
  - Utilize a data system that will provide a centralized Web-based rider training registration program
  - Link operator licensing, vehicle registration, driving record, rider training, and other data for analysis and countermeasure development

# Research

- Crash causation pilot study (NHTSA)
- Motorcycle braking system studies
- Motorcycle conspicuity studies
- Motorcycle operator eye-tracking study
- Feasibility study to collect on-road riding behavior
- In-vehicle technology to collect VMT data
- Strategic plan

# Contact Information

Diane Wigle

NHTSA, Office of Safety Programs

1200 New Jersey Avenue, SE (W44-301)

Washington, DC 20590

Phone: (202) 366-1739

E-mail: [Diane.Wigle@dot.gov](mailto:Diane.Wigle@dot.gov)

**This is a U.S. Government Work and is not subject to copyright protection in the United States. It may be copied and used without permission**



[www.nhtsa.gov](http://www.nhtsa.gov)