

Knowledge into Action: Motorcycle Safety

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Knowledge

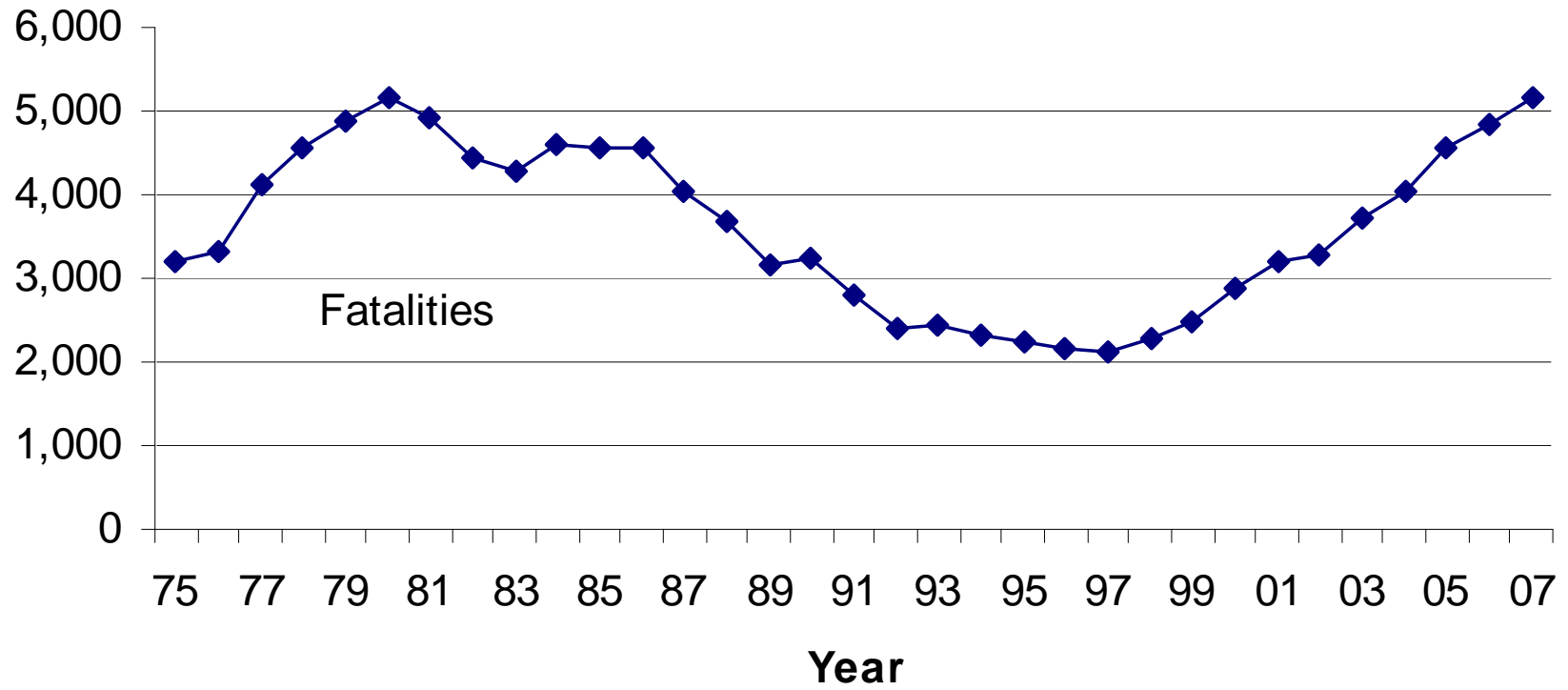
- What the data tell us: 4 key areas
- What research tells us: what works
(and what probably won't work)

Action

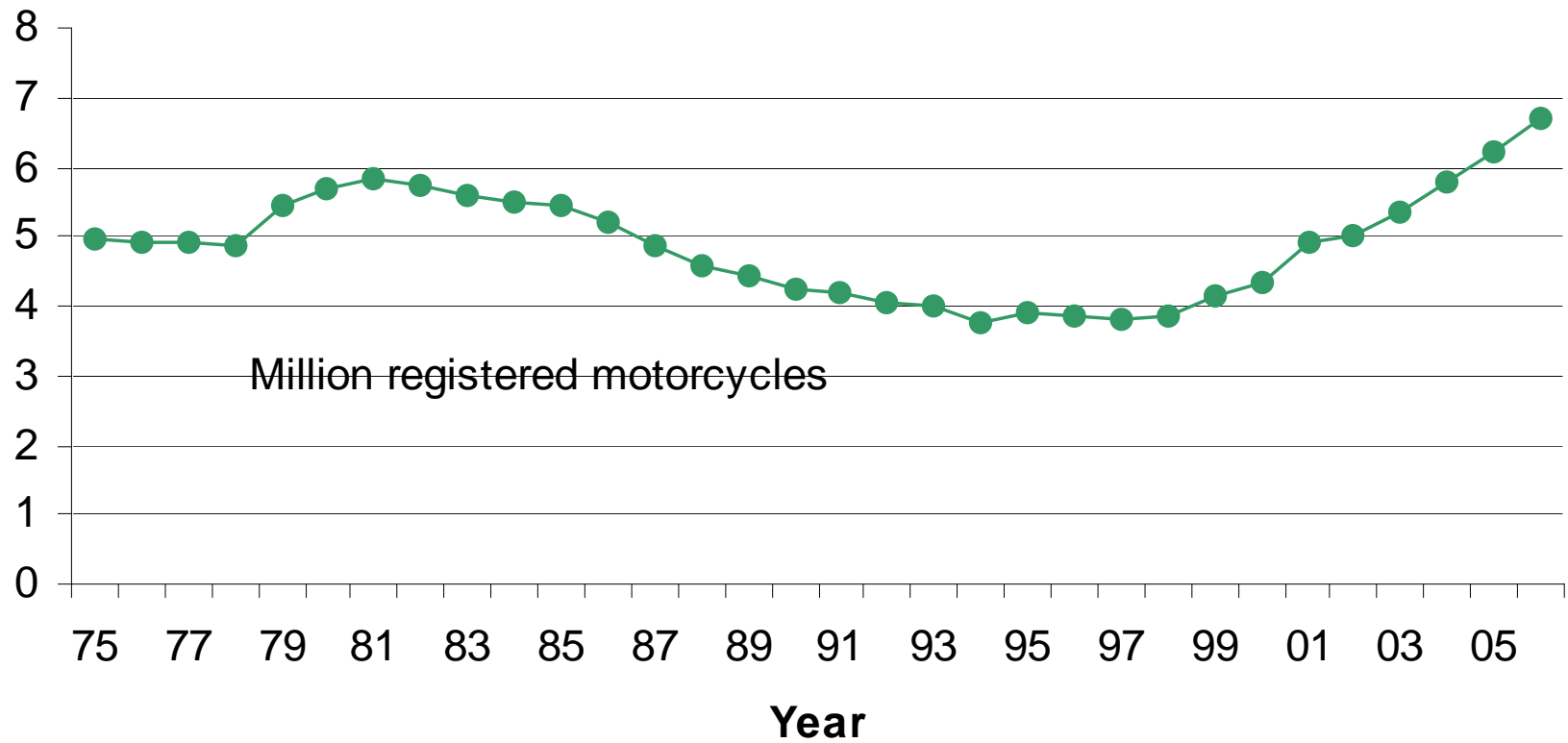
- What's being done
- What you can do
- Where to get help

Knowledge: Data

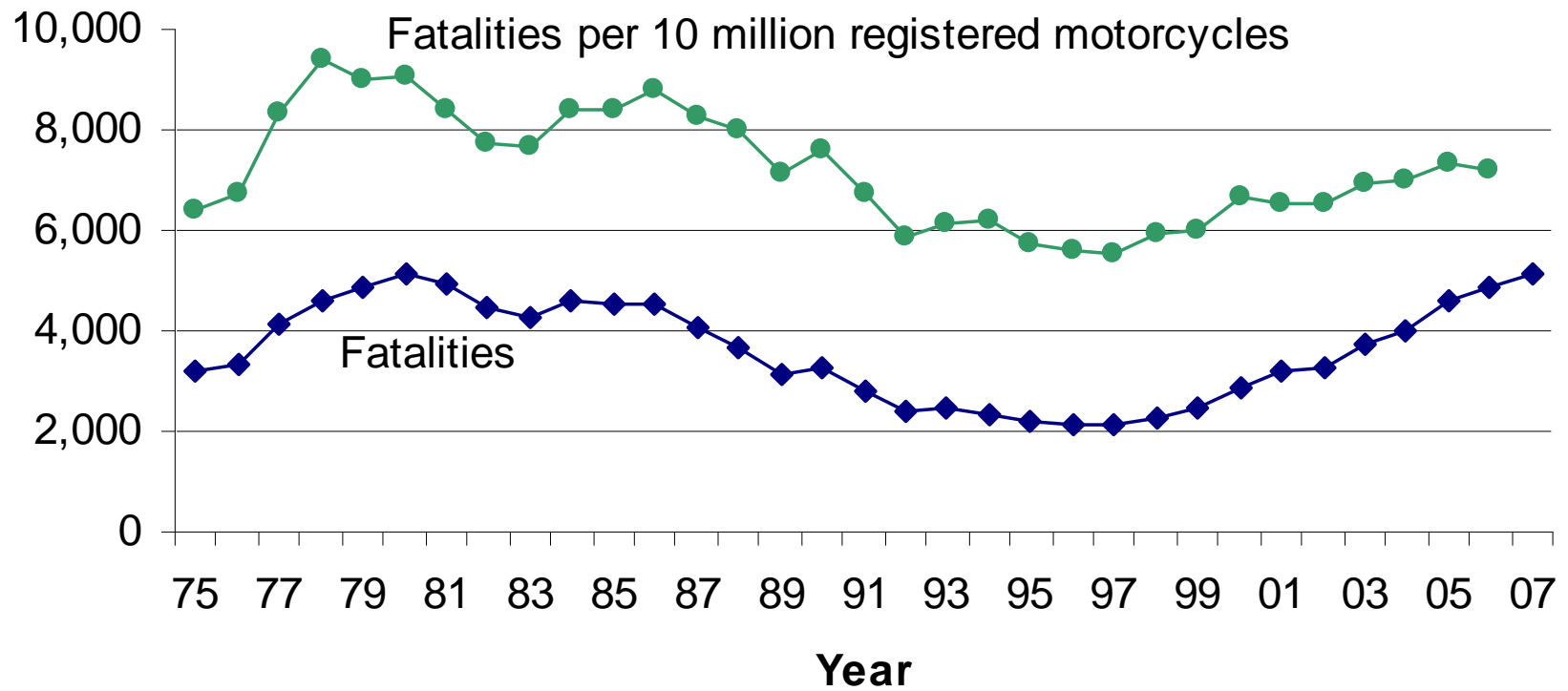
Motorcycle rider fatalities



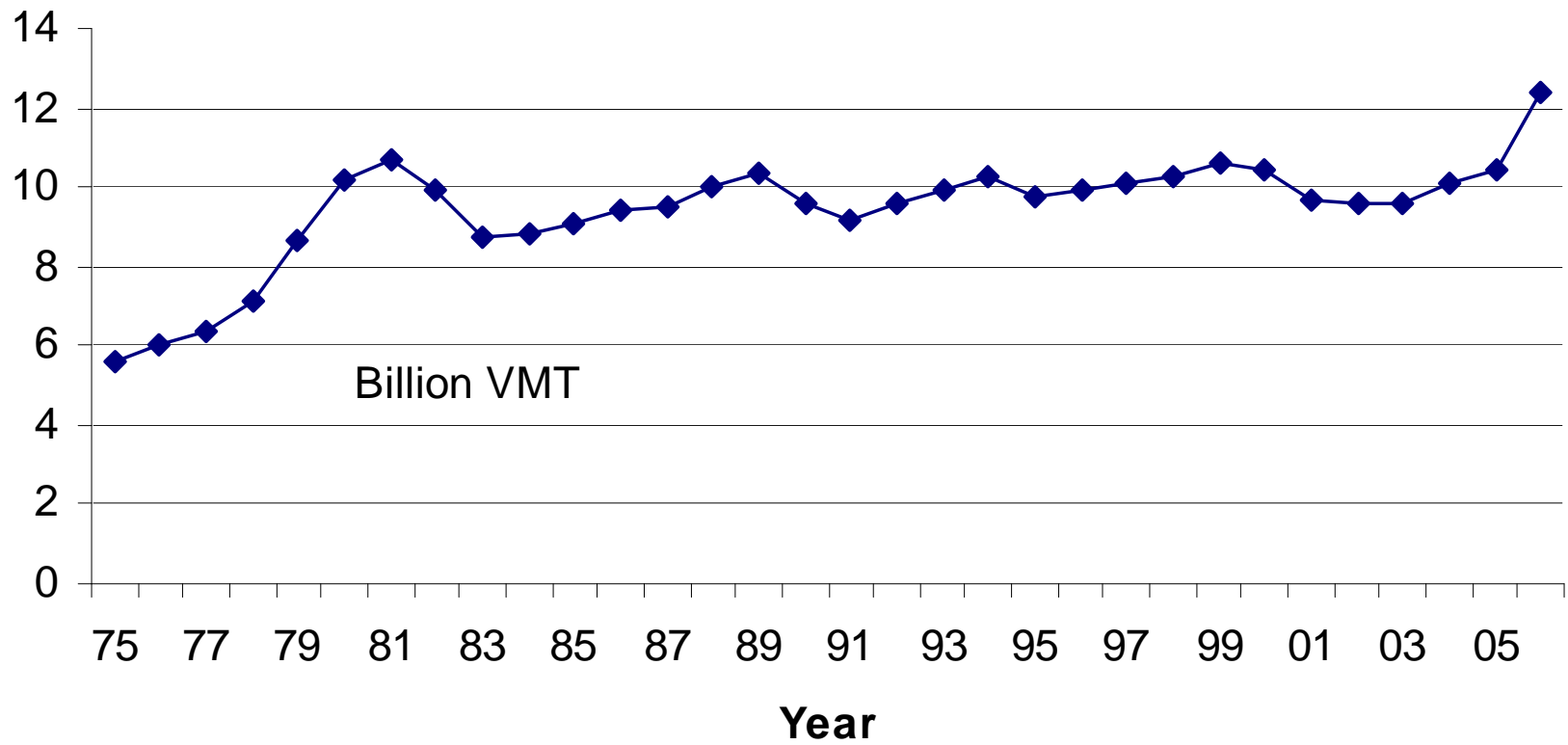
Motorcycle registrations



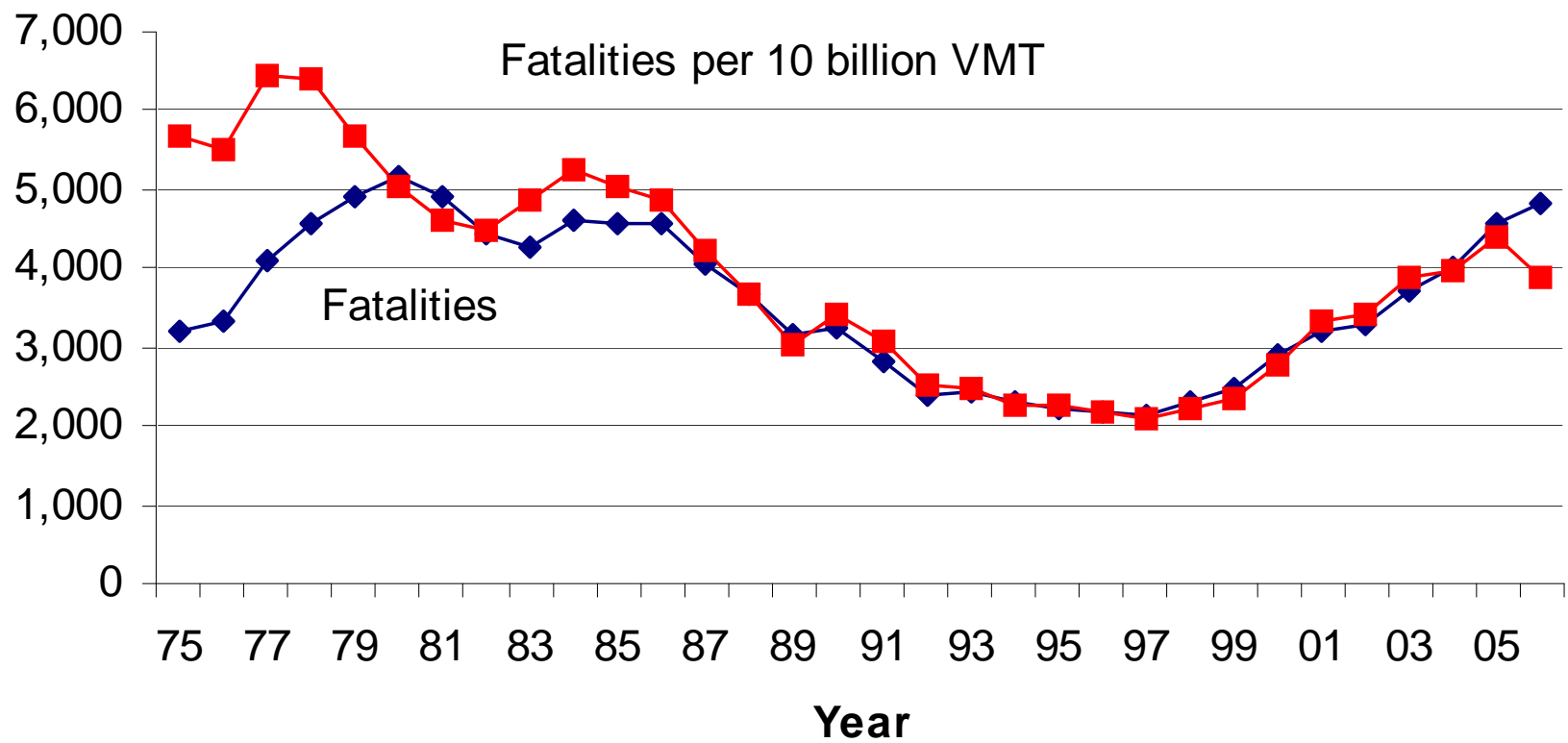
Motorcycle rider fatalities and registrations



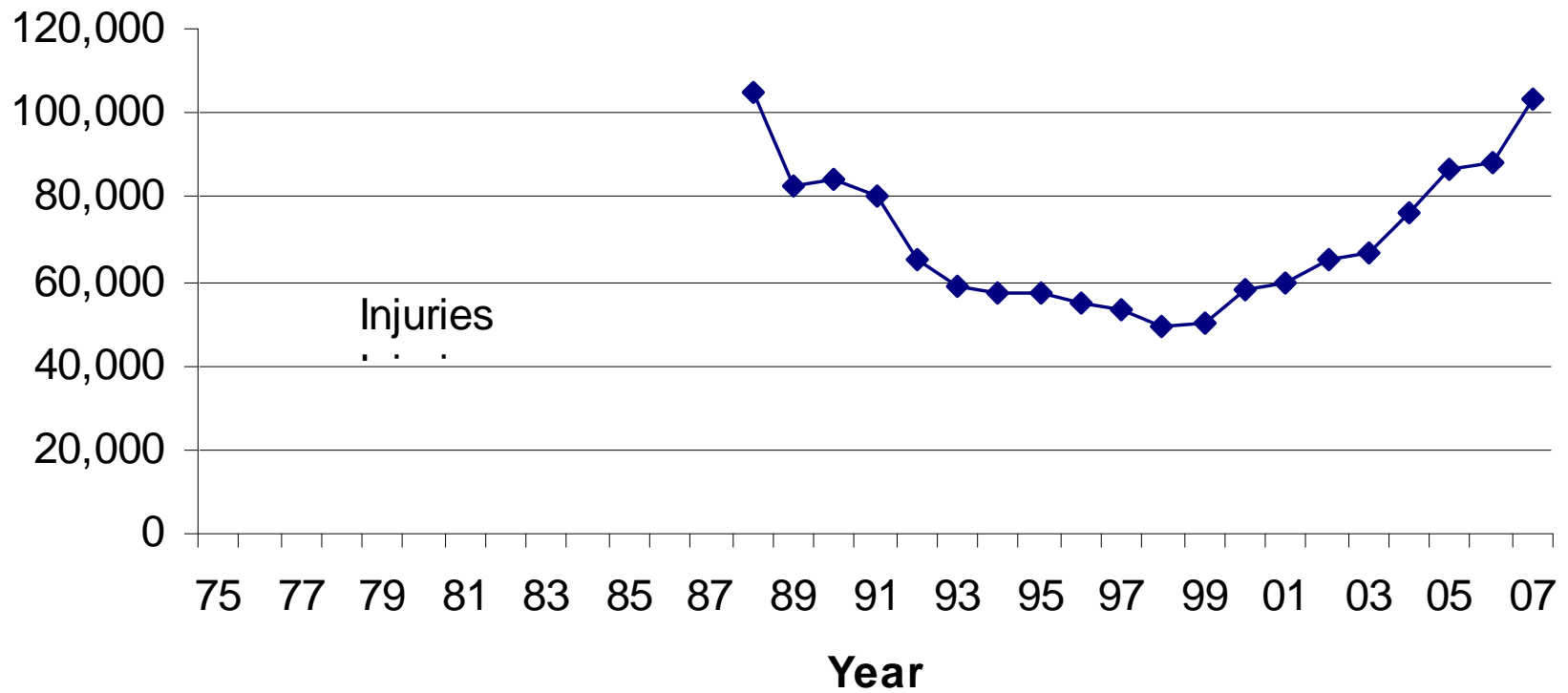
Motorcycle rider travel



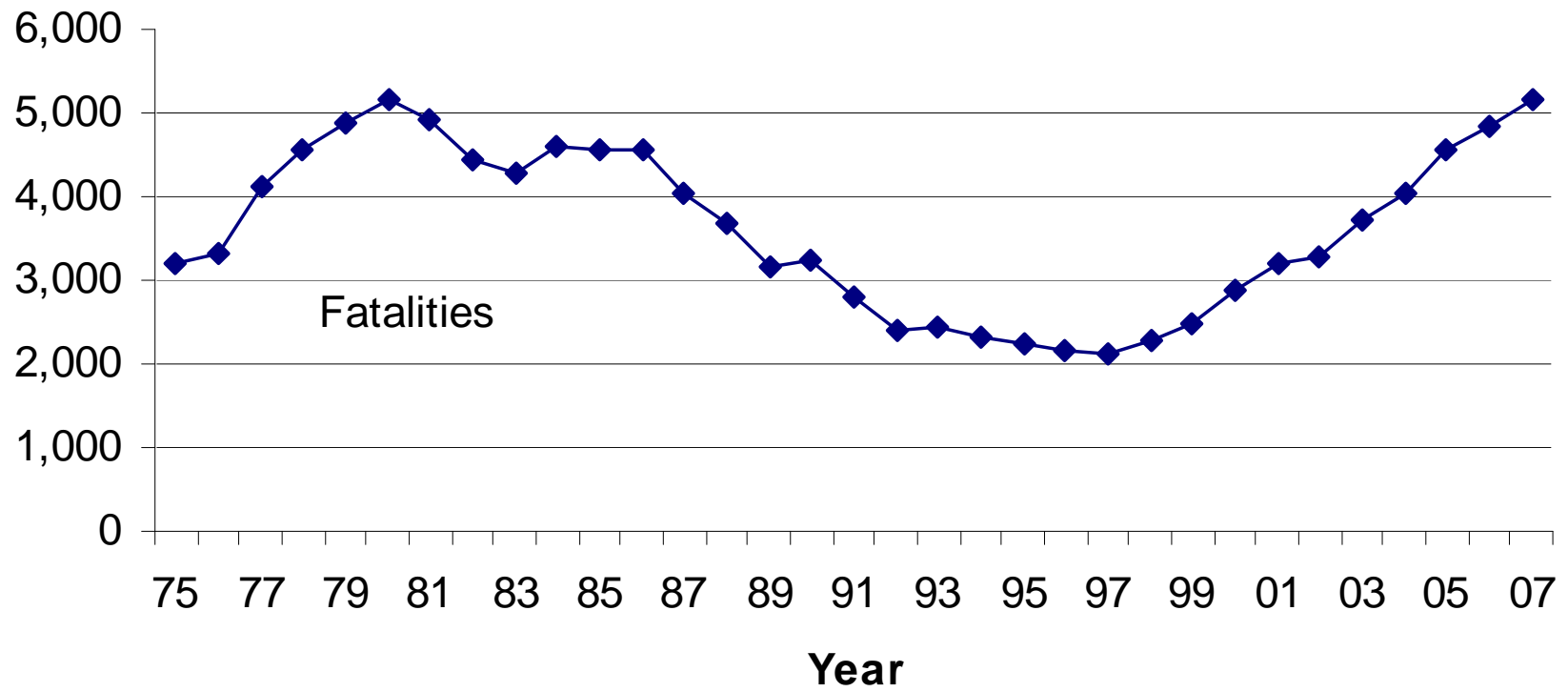
Motorcycle rider fatalities and travel



Motorcycle rider injuries



Motorcycle rider fatalities



Motorcycle operators in fatal crashes, 2006

Not properly licensed	25 %
Alcohol (positive BAC)	35 %
No helmet (fatally injured)	44 %

The big four (in fatal crashes)

- Alcohol 35%
- Helmets 44%
- Training ? %
- Licensing 25%

Knowledge: Research

General

- “The Hurt Study” – Hurt, Ouellet, and Thom (1981),
Motorcycle accident cause factors and
identification of countermeasures,
DOT HS 805 862
- Crash causation study

Alcohol

- Impaired motorcyclist cues – available from NHTSA
- Vehicle impoundment study – Becker et al (2003),
Drinking, riding, and prevention: a focus group
study, DOT HS 809 490
- Closed-course alcohol study – Creaser et al (2008),
Effects of alcohol on motorcycle riding skills,
DOT HS 810 877.

Helmetets

- Helmet effectiveness
 - reduce fatalities in a crash by 22-37%
 - reduce brain injuries in a crash by 41-65%
- Helmet law effectiveness
 - 83% helmet use in universal law States (2006)
 - 50% helmet use in other States
 - many studies of effects of enacting or repealing helmet law (see Countermeasures That Work for references)

Training

- Several studies of training effectiveness; mixed results
 - different criteria: knowledge? skills? licensure? crashes?
- Analogy with driver education
- Baer, Cook, and Baldi (2005), Motorcycle rider education and licensing: a review of programs and practices, DOT HS 809 852
- Baer, Baldi, and Cook (2005), Promising practices in motorcycle rider education and licensing, DOT HS 809 922

Licensing

- Survey of the States: Motorcycle Safety Programs
www.ghsa.org
- see Baer et al under Training

Action: What's being done

General

- VMT data: FHWA

NAMS Implementation Guide

- Audience: States, communities, dealers, rider groups
 - Action steps
 - Promising practices
 - Resources and supporting activities
 - Key references
- A menu, not a recipe
- January 2007
- NAMS Implementation Guide
www.nhtsa.dot.gov/people/injury/pedbimot/motorcycle/NAMS2006/index.html

How organized – 7 areas

- Alcohol and other drugs
- Protective equipment
- Operator training and education
- Licensing
- Motorist education
- Highway and environment
- Management

In each area

- Brief overview
- Single objective
- 3 or 4 strategies, from NAMS
- Action steps – what, how, who
- Promising practices – who's doing this
- Resources and supporting activities – where to get help
- References
- Contact info and weblinks

1. Alcohol and other drugs

Objective: reduce crashes involving impaired motorcyclists

Strategies

1. communications
2. enforcement
3. partnerships
4. rider groups

References and notes

- NAMS recommendations on alcohol and other drugs
- general references on alcohol and other drugs

1.1. Alcohol - Communications

Strategy: Create and disseminate effective communications to riders on how alcohol and other drugs affect motorcycle operator skills

Action steps:

- create understandable, sensible messages and material
- develop with rider groups and organizations
- distribute through rider groups, rider media, dealers, local news, law enforcement, insurance
- law enforcement officers deliver messages to motorcyclists
- work with motorcycle-friendly businesses

1.1. Alcohol - Communications

Resources: communications

- SMSA Resource Idea Sampler
- AMA and NHTSA Ride Straight materials
- MSF Riding Straight module
- NHTSA study on activities to reduce impaired motorcycling;
to appear
- NHTSA study on effects of alcohol at different BAC levels;
to appear
- NHTSA multifaceted impaired riding program;
being developed

1.1. Alcohol - Communications

Promising practices: communications

- State campaigns: CA, CT, IN, MN, MO, OH, OR, WI
- CA posters to schools, colleges, DMVs, dealers, CHP
- GA “Riders Helping Riders”
- OH focus groups “Ride Smart/Ride Sober”
- OR impaired rider symposium
- MN motorcycle dial-a-ride

Phone or web contacts for almost all

2. Protective equipment

Objective: increase use of approved helmets, other personal protective equipment

Strategies

1. education
2. promotion
3. non-compliant helmets

3. Training and education

Objective: provide motorcycle operator training to all who need or seek it; increase motorcyclists' knowledge of methods to increase their safety on the road

Strategies

1. training availability
2. training promotion
3. training curricula and quality control
4. training and licensing
5. communications

4. Licensing

Objective: ensure that all motorcycle operators riding on public roads are properly licensed

Strategies

1. administration
2. promotion
3. quality
4. enforcement

Countermeasures That Work

- Audience: SHSOs
 - Countermeasures: brief description
 - Use: how frequently used
 - Effectiveness: summary of research findings
 - Costs: very approximate (low, medium, high)
 - Time to implement
 - Other considerations
- A menu, not a recipe
- 2008 edition: DOT HS 810 891
www.nhtsa.gov then go to Traffic Safety

Motorcycle Safety - Chapter 5

- | | <u>effectiveness</u> |
|---|----------------------|
| 1. Motorcycle helmets | |
| 1.1 Helmet use laws | proven |
| 1.2 Helmet law enforcement | unknown |
| 1.3 Helmet use promotion | unknown |
| 2. Alcohol impairment | |
| 2.1 Detection, sanction | unknown |
| 2.2 Communications | unknown |
| 3. Operator licensing and training | |
| 3.1 Operator licensing | uncertain |
| 3.2 Operator training | uncertain |
| 4. Communications and outreach | |
| 4.1 Protective and conspicuous clothing | unknown |
| 4.2 Other driver awareness of motorcyclists | unknown |

Action: What you can do

Management suggestions

- Incorporate motorcycles into other program areas
 - impaired driving enforcement
- Form a motorcycle safety advisory council
- Hold a NAMS implementation summit
- Conduct a motorcycle program assessment
- Attend Motorcycle Safety 101

Action: Where to get help

Programs

- State motorcycle assessments

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References

- Countermeasures That Work 2008
DOT HS 810 891
www.nhtsa.gov then go to Traffic Safety
- NAMS Implementation Guide
www.nhtsa.dot.gov/people/injury/pedbimot/motorcycle/NAMS2006/index.html
- Survey of the States: Motorcycle Safety Programs
www.ghsa.org

Questions?

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