



South by Southwest Webinar, February 27

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Meeting Orientation

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POLICY RESEARCH & EVALUATION

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OBJECTIVES

As a result of this session, participants will be able to:

- 1) Describe different types of policy research & evaluation.
- 2) Consider concrete examples of policy evaluation.

BASIC PRINCIPLES



WHAT IS POLICY?

- Strategies for governing practices & behavior
 - *Governmental* (international, federal, state, tribal, local)
 - Laws
 - Regulations
 - Common law: cases
 - *Organizational* (e.g., business, school, hospital, professional organization)

EXAMPLES OF LAWS

Governmental Laws:

International: EU Product Standards, international land mine treaty

Federal law: (e.g., OSHA, child labor, Brady Law, drinking age)

State or tribal law: (e.g., alcohol taxation, building codes, workers comp, seat belt laws, GDL, fire safe cigarettes, child abuse reporting, death penalty)

Local law (e.g., pool fencing ordinances, speed cameras, publishing sex offender lists)

EXAMPLES OF REGULATIONS

Regulations:

Governmental agencies: (e.g., NHTSA for cars; CPSC for toy safety)

Organizational: (e.g., crim checks for college applicants, hospital screening for IPV, athletic trainers in schools, alcohol brief interventions in ED's, 80 hour week for medical residents)

INJURY-DIRECTED VS. INJURY-RELATED POLICY

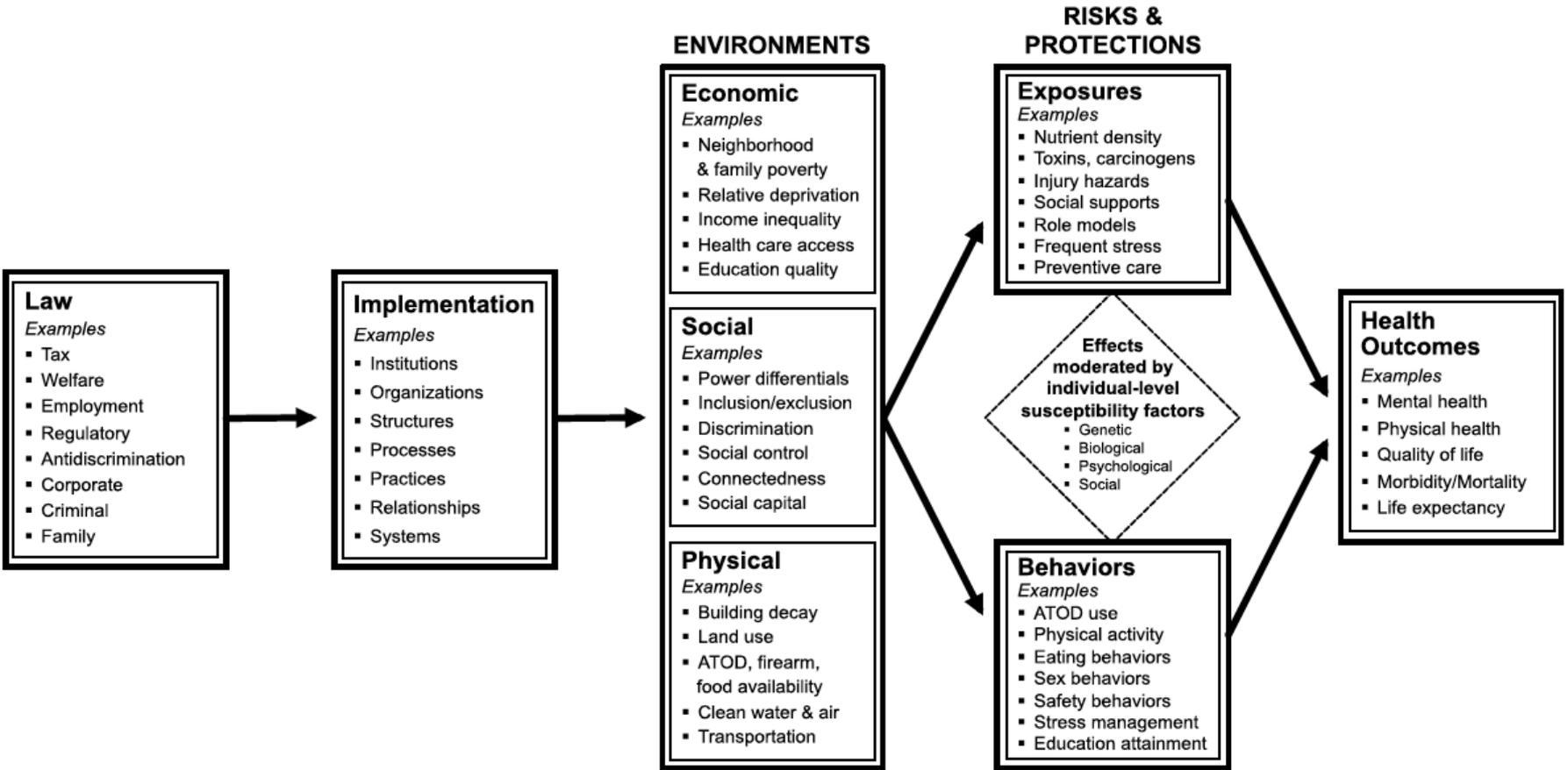
Injury-directed policies (laws or regulations):

- developed with purpose of improving safety / reducing / treating injury

Injury-related policies:

- not necessarily intended to influence injury, but potential impact (e.g., welfare policy, day care availability, tax policy, zoning laws)

Causal diagram showing a public health perspective on how law affects population health (from: Komro L, O'Mara R, Wagenaar, A, 2012)



DIFFERENT TYPES OF POLICY STUDIES

- Policy attitudes
 - Policy advocacy
 - Policy enactment
 - Policy implementation
 - Policy awareness
 - Policy analysis
 - Policy mapping
 - Evaluation of health outcomes of policy interventions
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POLICY ATTITUDES

Examine attitudes/beliefs about policy issues or policy options (e.g., opinion polls, values re: policy options)

Purpose: To understand barriers to successful implementation, enactment or adherence to policy.

Examples:

- What are citizen attitudes about a law to restrict use of cell phones in cars?
- What are attitudes of health care providers re: IPV screening?
- What is the acceptable level of increased tax on alcohol in the state?
- What is the nature of opposition to a proposed bill to prohibit corporal punishment in schools?
- Why are businesses failing to comply with laws requiring work permits for teens?

POLICY ADVOCACY

Examine the process of advocacy for given policies or related to specific issues

Purpose: To learn about successful and unsuccessful advocacy approaches to inform future policy change processes.

Examples:

- What lessons can be learned about advocacy from examining how the firesafe cigarette legislation unfolded over many years?
- What successful strategies did MADD use to effect change in DUI laws nationwide?
- What approaches are being used to promote right to carry policies for college campuses?

POLICY ENACTMENT

To understand factors that influence successful enactment of policies in a given jurisdiction

Purpose: To learn how to improve enactment process.

Examples:

- How do decision makers respond to different types of information in making policy decisions?
- What is the role of the media in influencing corporate safety practices?
- How do community-level opinion leaders influence adoption of school board policies?

POLICY IMPLEMENTATION

Examine policy implementation issues, including enforcement:

Purpose:

- to improve implementation
- to determine if implementation issues are the reason for policy failure or success (process evaluation)

Examples:

- How well is the highway patrol enforcing the cell phone ban?
 - Are child care facilities adhering to the standards for playground safety?
 - Are child abuse cases being reported to authorities from the emergency department?
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POLICY AWARENESS

How aware / knowledgeable are given groups about the existence of particular policies?

Purpose: To examine possible needs for increasing awareness as a means of improving policy success.

Examples:

- Do parents and employers understand child labor laws?
- To what extent are employees aware of their own rights as workers? Are EMS providers aware of triage protocols for regional trauma care?

POLICY ANALYSIS

Conduct policy analysis: – Comparing attributes of policy alternatives to solve a problem using defined values/criteria, such as:

- Effectiveness (policy evaluation research – see subsequent slide)
- Freedom
- Cost
- Equity (vertical or horizontal)
- Stigmatization
- Preferences
- Technologic or political feasibility
- Ethically appropriate
- Legally permissible (i.e. constitutional, within powers granted an agency or locality)

Purpose: To select among alternative policy approaches to solving a problem by factoring in multiple values.

Examples:

- Comparing options of: raising tax on alcohol vs. server training to reduce DWI fatalities

POLICY MAPPING

- Compare policies across jurisdictions / settings – to describe variations in approaches

Purpose: Consider alternative ways jurisdictions have approached safety policy so as to learn from other's experiences.

Examples:

- How do state policies differ with respect to addressing IPV in workplaces?
- How do GDL policies vary across states?
- What are the differences among universities with respect to doing crim checks at the time of admission?

EVALUATION OF HEALTH OUTCOMES OF POLICY INTERVENTIONS

Evaluate effects of policy on : mortality, morbidity, disability, etc.

Compare policies across jurisdictions / settings – to evaluate differences in effect (ecologic studies)

Purpose: To compare potential effect of policy variations or effects of policy over time (e.g., before/after or time trend studies)

Examples:

- Are there fewer suicides in states with stricter gun laws?
- How do state teen driving fatalities differ by provisions of GDL policies?
- Do companies requiring worker safety committees have fewer injuries?
- To what extent are sports injuries reduced if schools require pre-season physicals?

UNINTENDED CONSEQUENCES OF POLICIES

What are the unintended consequences (positive or negative) of given policies not specifically designed to address safety ?

Purpose: To explore potential injury effects of policies developed for other purposes, determining potential need for new injury control measures

Examples:

- How did the design of the placement of sidewalks and businesses influence pedestrian behaviors?
- To what extent is violence in a given locale influenced by a change in public transportation routes?
- How does the change in the minimum wage influence worker safety?

IMPORTANCE OF POLICY EVALUATION & RESEARCH

- Public health is about the health of populations
- Population level change requires population level approaches
- Population level approaches often rely on policy change (laws and regulations)
- As with any type of intervention, policy interventions require careful research and evaluation to develop, implement & evaluate
- Varied methods required depending on question & circumstances. One size does not fit all.
 - Qualitative and quantitative
 - RCT's and quasi-experimental studies

EXAMPLE



EXAMPLE: THE ENHANCING VEHICLE-TO-VEHICLE CRASH COMPATIBILITY (EVC) AGREEMENT

- **Voluntary agreement involving NHTSA, the Insurance Institute for Highway Safety, and the major automobile manufacturers**
 - **Address the issue of crash compatibility between passenger cars and light trucks and SUVs**
 - **In the 1990's there was a 2.4 times greater risk of death from light trucks and SUVs**
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***IN CRASHES (ABOVE). A VOLUNTARY AGREEMENT AMONG AUTOMAKERS HAS
RESULTED IN FRONT ENDS THAT LINE UP BETTER (BELOW),
REDUCING DEATHS AND INJURIES.***



RESEARCH APPROACHES

Policy Implementation

Outcome Evaluation

Impact Evaluation



POLICY IMPLEMENTATION RESEARCH

- **Systematic review of interventions**
 - Included bumper heights and front-end structures
- **To what extent have those interventions been implemented**

Vernick JS, Tung GJ, Kromm JN. Interventions to reduce risks associated with vehicle incompatibility. *Epidemiol Rev.* 2011;34(1):57-64.

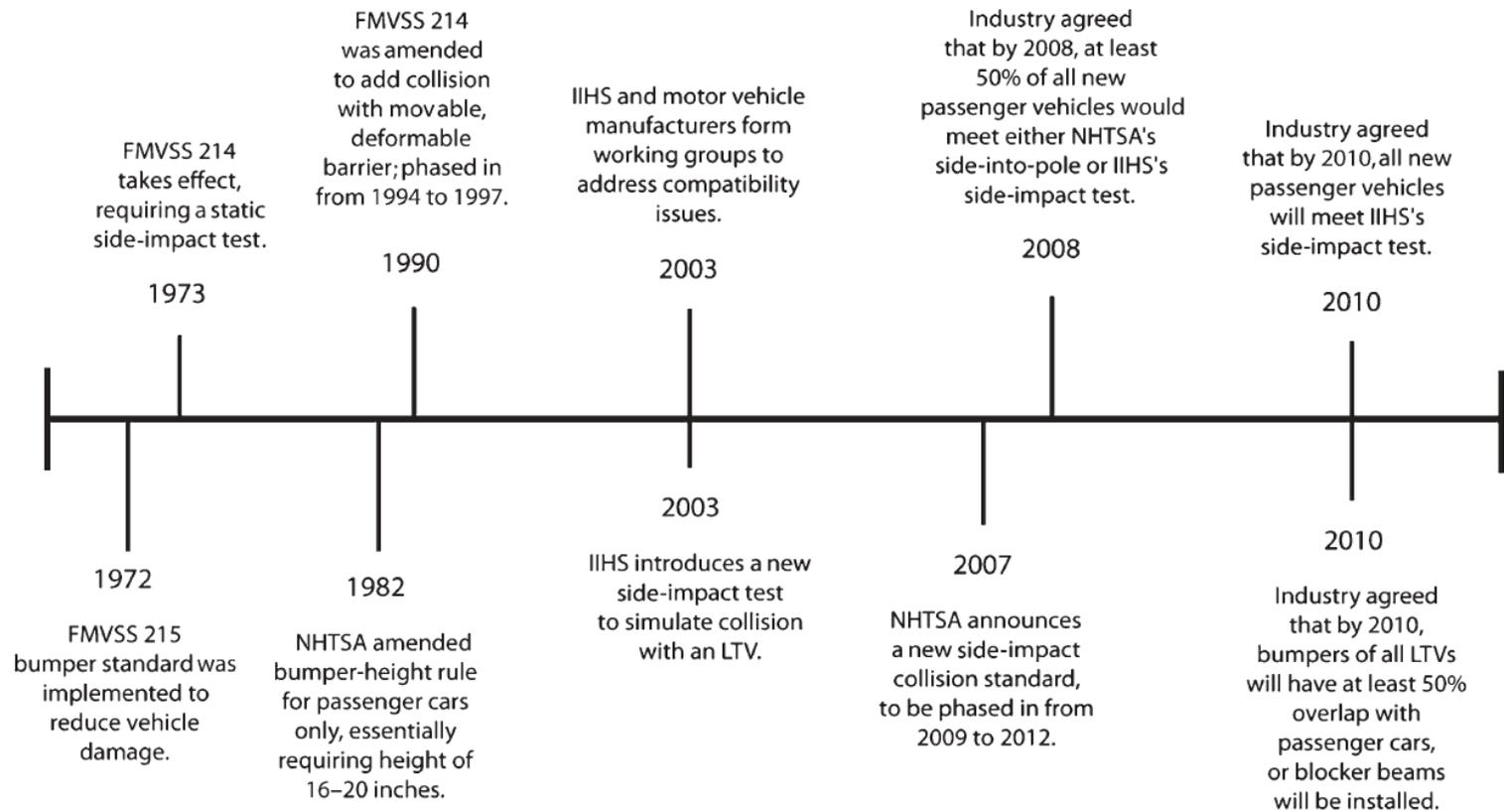


Figure 1. Timeline of significant regulations and voluntary agreements regarding motor vehicle side-impact protection and bumper height, United States. FMVSS, Federal Motor Vehicle Safety Standard; IIHS, Insurance Institute for Highway Safety; LTV, light truck and sport utility vehicle; NHTSA, National Highway Traffic Safety Administration. One inch = 2.54 cm.

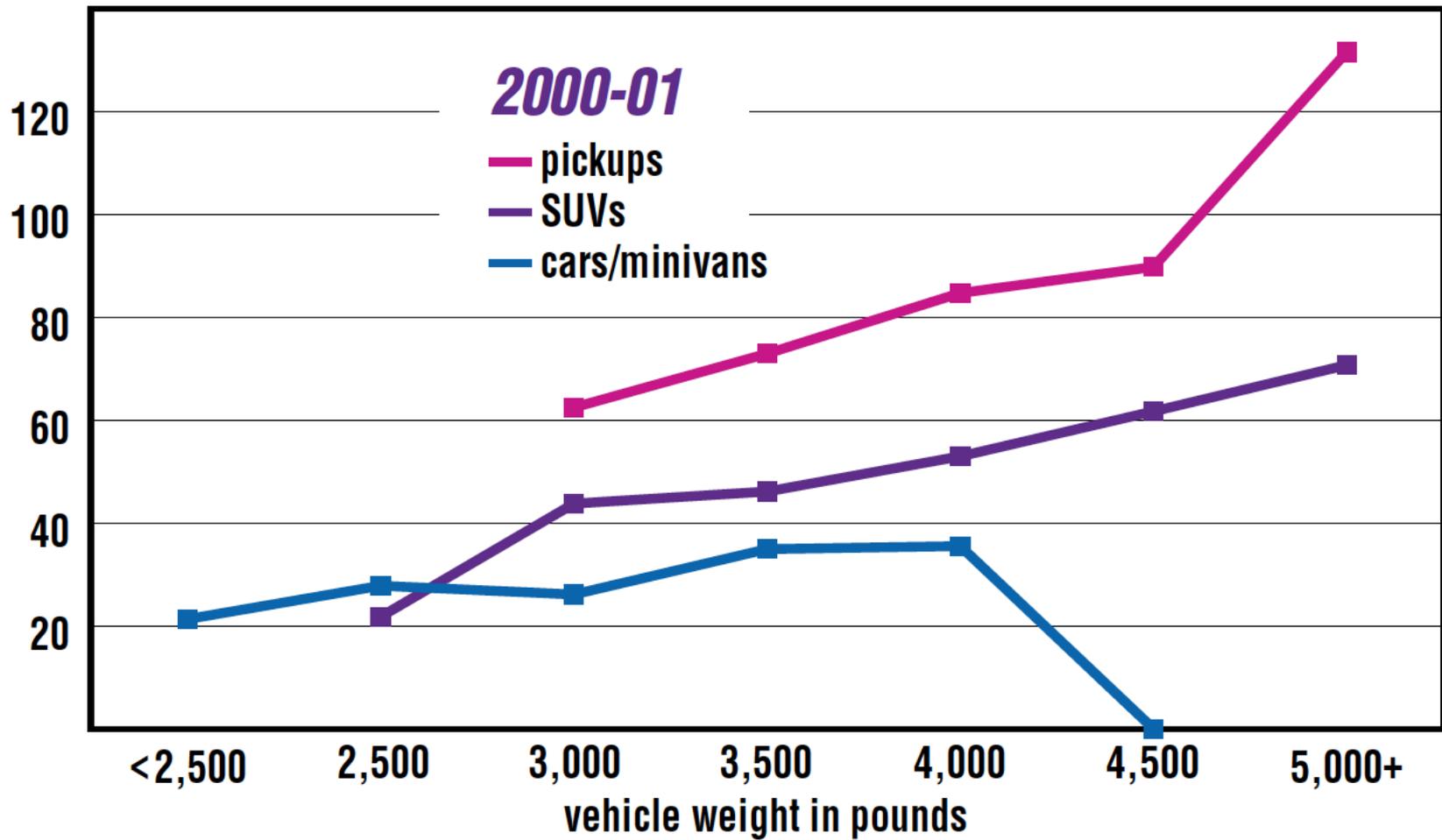
CONCLUSION

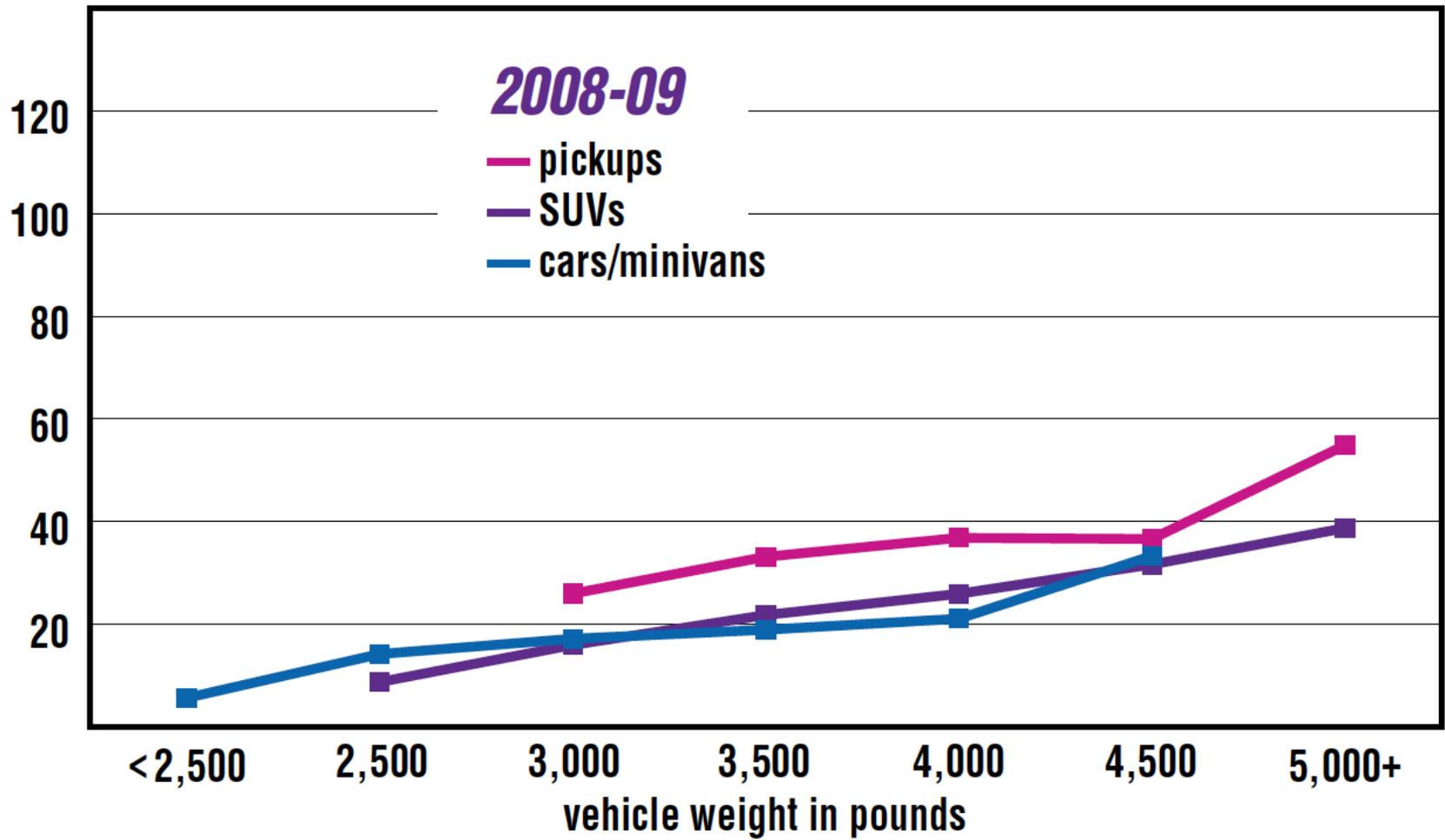
- Found that bumper height and front-end structure based interventions have been implemented via a voluntary industry agreement
 - The Enhancing Vehicle-to-Vehicle Crash Compatibility Agreement
 - Potential issues with an industry voluntary agreement being the implementing mechanism
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OUTCOME EVALUATION

- Conducted by the Insurance Institute for Highway Safety
- Has the EVC helped to improve the issue of crash compatibility between passenger vehicles and light trucks and SUVs
- Examined crash partner death rates

“Is passenger vehicle incompatibility still a problem?” by E.R. Teoh and J.M. Nolan





CONCLUSIONS

- Light Trucks and SUVs represented no greater risk to passenger cars
- Attributed improvement to EVC
- Limitations of study design

IMPACT EVALUATION

- Conducted by NHTSA
- Study design focused on time of adoption of EVC recommendations
- Calculated rate ratios pre and post EVC adoption by model

Greenwell, N. K. (2012, May). Evaluation of the Enhancing Vehicle-to-Vehicle Crash Compatibility Agreement: Effectiveness of the primary and secondary energy-absorbing structures on pickup trucks and SUVs. (Report No. DOT HS 811 621). Washington, DC: National Highway Traffic Safety Administration.

RESULTS

Overall: 8% decrease in fatality rate associated with model adoption of EVC requirements

Pickup Truck only: 4.9% increase in fatality rate associated with model adoption of EVC requirements

SUV only: 17.5% decrease in fatality rate associated with model adoption of EVC requirements

CONCLUSIONS

Moderate evidence for effectiveness of EVC in address vehicle compatibility

Discrepancy between pickup trucks and SUVs

Additional research needed



REFLECTION

Policy Implementation

Outcome Evaluation

Impact Evaluation



OTHER RESOURCES TO LEARN MORE

- **Public Health Law Research Center**
- **<http://publichealthlawresearch.org>**