

Nighttime Seat Belt Enforcement
Why, Where, How

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Dunlap and Associates, Inc.
Lifesavers 2009, March 31, 2009



Agenda

- Review of the problem and recent data trends
- Nighttime Seat Belt Demonstration Program and Evaluation—Mark Solomon
- The Washington Nighttime Seat Belt Enforcement (NTSBE) project—Jonna Van Dyk
- A preview of the research data coming soon from NTSBE—Richard Blomberg
- Discussion—Questions and suggestions



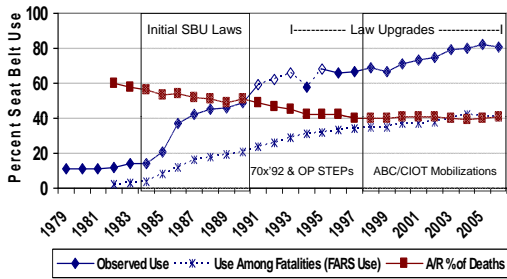
With thanks to:

Increasing Seat Belt Use at Night and Among Drinking Drivers: An Update

James L. Nichols
Nichols and Associates
Neil K. Chaudhary
Julie Tison
Preusser Research Group

Progress Made in Increasing Seat Belt Use and Decreasing A/R Deaths

Safety Belt Use Rates (Observed and Among Fatalities) and the Alcohol-Related Percent of Total Deaths (U.S.)

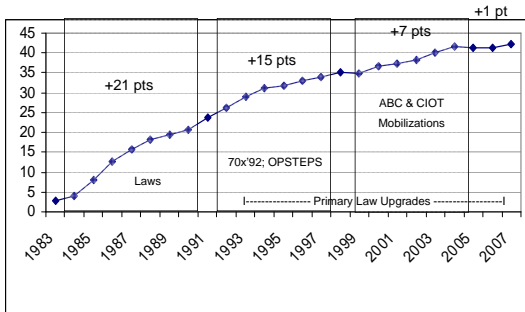


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Usage Among Fatalities is No Longer Increasing

Usage Among Occupants Killed 1983 through 2007

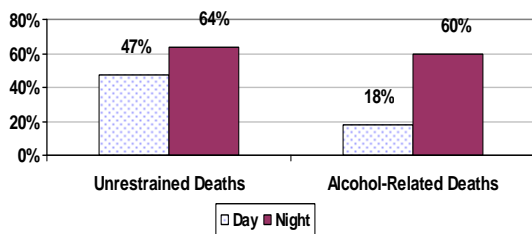


High Risk Deaths Are More Prominent at Night

**Especially Unbuckled and
Alcohol-Related Deaths**

Unrestrained and Alcohol-Related Occupant Fatalities: Daytime (6 am to 6 pm) versus Nighttime (6 pm to 6 am)

Source: Varghese and Shankar (2007); FARS, 2005 data.

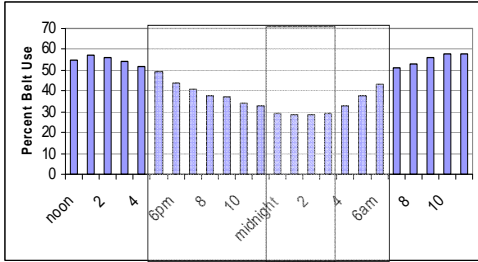


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Seat Belt Use among Fatally Injured Occupants, by Time of Day, All Ages

All Ages: Source: FARS

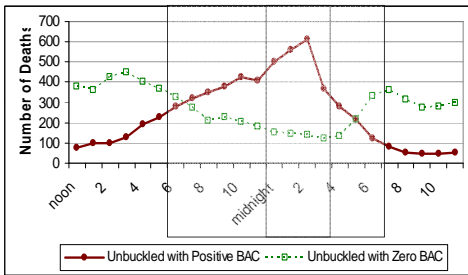


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Number of Unbuckled Fatalities, by Time of Day, and by Presence or Absence of Alcohol: All Ages

(Source: FARS)



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In Summary

- Unbuckled deaths peak late at night
- Alcohol-related (A/R) deaths peak late at night
- Unbuckled A/R deaths peak late at night

Focusing on night belts should help the fatality picture and benefit drinking-driving enforcement + ?


Jonna Van Dyk

Washington Traffic Safety
Commission (WTSC)




Mark Solomon

Preusser Research Group



Where does this leave us?

A quick and (it is hoped)
tantalizing view of what's to come



Some Major Open Research Questions

- What are the characteristics of the unbelted driver day and night?
 - Are they different than those of the belted?
 - Are night unbelted different than day unbelted?
 - Are the unbelted different than the belted in significant ways that can aid publicity development and targeting? Enforcement?

Some Major Open Research Questions

- Are there "side benefits" to night seat belt enforcement?
- Are there negatives to night seat belt enforcement, e.g., lower day use?
- Are the "holdouts," the last to buckle up, really incorrigible?
- Does night seat belt enforcement ticket the "typical" non-user?

How will we answer these?

- NTSBE has a separate research/evaluation component
- Data are being collected to answer these and other salient research questions in addition to whether NTSBE increased nighttime seat belt usage
- Data include...

Nighttime Seat Belt Observations

- Measurements before and after each intervention
- 40 sites around the State
- Give counts of belted and unbelted at sites included in statewide survey
- In all, 11 waves will be available for analysis



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Licensing Office Surveys

- Measurements before and after each intervention
- 5 offices around the State
- Track awareness of campaign and attitudes towards belt use
- In all, 12 waves will be available for analysis



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24-Hour Seat Belt Observations

- Repeated measures for the life of the campaign
- At 24-hour gas stations in 4 locations across the State
- Provide sufficient ID on drivers to access
 - Driving record (ADR=Abstract of Driver Record)
 - Criminal records
- For 1st year, 1,372 unbelted and 2,690 belted drivers - 2nd year underway



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Night Belt Tickets

- Written by participating law enforcement
- Provide characteristics of those who were cited
 - Driving record
 - Criminal record
- 5,035 analyzed for year 1

Intercept Surveys

- Conducted by WTSC during first wave (6 days) of gas station observations
- Provide attitude and knowledge profiles of belted and unbelted
- Total sample of 2,541 including 598 refusals

The Bottom Line

- Lots of new data to shed light on issues
- Year 1 report about to be submitted
- Total project report to be completed by end of the year
- Should add new information and greater precision to older information

Stay tuned!

Discussion and Questions



Dunlap and Associates, Inc.
