

Role of Attitude toward Seat Belts as a Predictor of Seat Belt Use, by Seating Position

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Seat Belt Use in the United States

- Overall rates of seat belt use relatively high
 - Observed front row use, 2014 = 87%
- BUT millions are still unrestrained
 - Half of all occupants killed are unrestrained
 - Certain groups less likely to buckle up than others



Study Purpose

- To investigate the association between attitudes toward seat belts and use of seat belts




Study Methods: Data Sources

- HealthStyles, 2012
 - Self-report survey, health-related attitudes & behaviors
 - Nationally representative
 - Adults (18+ years)
 - Sample size n=4170
- Insurance Institute for Highway Safety (IIHS)
 - Identify types of state seat belt laws in 2012

Study Methods: HealthStyles 2012

- How often do you wear seat belts when you ride in the driver seat/ front passenger seat/ back seat of a car, truck, van, or SUV (sport utility vehicle)?


Always
Nearly always
Sometimes
Seldom
Never



Study Methods: HealthStyles 2012

□ **How important is it to wear seat belts in the driver seat/ front passenger seat/ back seat of a car, truck, van, or SUV?**

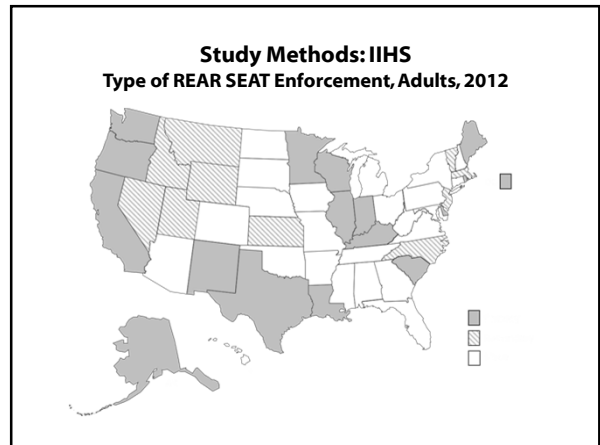
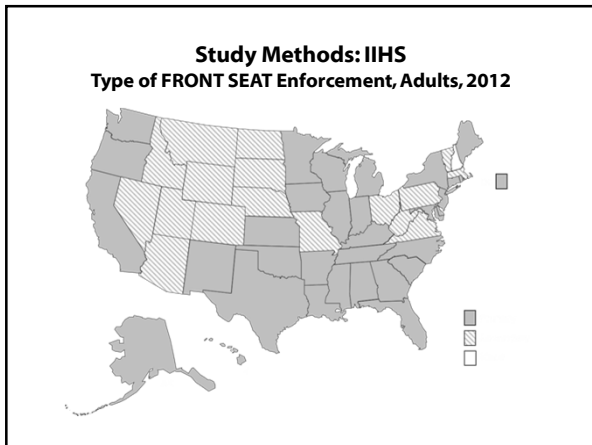
Not at all important
A little important
Somewhat important
Important
Very important



Study Methods: HealthStyles 2012

□ **Demographic and geographic variables**

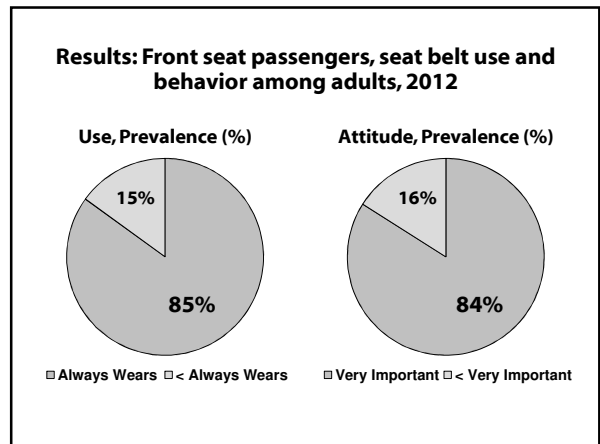
- Gender
- Age group
- Race/ethnicity
- Marital status
- Employment status
- Household income
- Census region
- Metropolitan status



Study Methods: Modeling

□ **Front and rear seat passengers modelled separately using backward stepwise multivariable regression**

- **Outcome: Seat belt use (always)**
- **Primary predictor: Attitude (very important)**
- **Other variables included: potential confounders and interaction terms (significant at p<0.01)**



Final model: Seat belt use among adult front seat passengers, 2012

Attitude x Front Seat Law <i>(ref: not very important)</i>	Adjusted prevalence ratio (95% CI)
Very Important, Primary Law	1.67 (1.53, 1.81)
Very Important, Non-Primary Law	2.79 (2.27, 3.38)

Controlling for gender, race/ethnicity, income, MSA, region

Results: Rear seat passengers, seat belt use and behavior among adults, 2012

Use, Prevalence (%)

Always Wears < Always Wears

Attitude, Prevalence (%)

Very Important < Very Important

Final model: Seat belt use among female adult rear seat passengers, 2012

Attitude x Gender Attitude x Rear Seat Law <i>(ref: not very important)</i>	Adjusted prevalence ratio (95% CI)
Females	
Very Important, Primary Law	3.54 (2.85, 4.41)
Very Important, Secondary Law	6.55 (4.36, 9.83)
Very Important, No Law	5.39 (4.26, 6.81)

Controlling for age group, income, region



Final model: Seat belt use among male adult rear seat passengers, 2012

Attitude x Gender Attitude x Rear Seat Law <i>(ref: not very important)</i>	Adjusted prevalence ratio (95% CI)
Males	
Very Important, Primary Law	2.38 (1.99, 2.84)
Very Important, Secondary Law	4.39 (2.98, 6.48)
Very Important, No Law	3.62 (2.98, 4.39)

Controlling for age group, income, region

Implications

- Improving attitudes toward seat belts may increase seat belt use
- Potential strategies
 - Theory-driven approaches (e.g., social norming)
 - Targeted messaging to high-risk populations
 - May need different messages for rear vs. front seats

Every Person. Every Seat. Every Trip.
www.cdc.gov/MotorVehicleSafety

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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