



Attitudes toward a primary seat belt law among adults in a rural state with a secondary seat belt law

Bobbi Jo Perkins, Steven D. Helgersen, Todd S. Harwell *

Injury Prevention Program, Chronic Disease Prevention and Health Promotion Bureau, Montana Department of Public Health and Human Services, Helena, Montana

ARTICLE INFO

Available online 5 February 2009

Keywords:

Seat belt
Attitudes
Adults
Motor vehicle occupant crash
Unintentional injury
Rural
Legislation/jurisprudence

ABSTRACT

Problem: Enforced primary seatbelt laws can reduce morbidity and mortality associated with motor-vehicle crashes. Constituent support is an important factor associated with legislator voting behavior toward injury prevention laws. Little is known about attitudes toward a primary seat belt law among adults in rural states without a primary seat belt law. **Methods:** Data from the Behavioral Risk Factor Surveillance System (BRFSS) survey, a telephone survey of a representative sample of adults in Montana, were used to assess attitudes toward a primary seat belt law. **Results:** Sixty-one percent of respondents supported a primary seat belt law. Using multiple logistic regression analyses, women (AOR 1.87; 95% CI 1.49–2.36), persons aged 65 years and older (1.45; 1.06–1.96), American Indians (2.71; 1.55–4.75), those with health insurance (1.51; 1.07–2.14), and those who reported always wearing their seat belt (4.05; 3.14–5.21) were more likely to support a primary seat belt law than respondents without these characteristics. **Conclusions:** The majority of adults in a rural state support a primary seat belt law.

© 2009 National Safety Council and Elsevier Ltd. All rights reserved.

1. Problem

The prevention of injury, disability, and death associated with motor-vehicle occupant crashes is an important public health issue in the United States, particularly in rural states. In 2005, Montana had the sixth highest age-adjusted death rate for occupants in motor-vehicle crashes in the nation (18.8 per 100,000), three times higher than the national motor-vehicle death rate (6.4 per 100,000; [Centers for Disease Control & Prevention, 2008](#)). During this time period the motor-vehicle crash death rates in Montana were over two-fold higher for men (27.3 per 100,000) than for women (10.4 per 100,000), and for American Indians (40.1 per 100,000) than for whites (17.2 per 100,000; [Centers for Disease Control & Prevention, 2008](#)). There are multiple factors that contribute to this extraordinary fatality rate among Montanans, including a lack of seat belt use, high speed, and impaired and careless driving ([State Highway Traffic Safety Bureau, 2008](#)).

An effective strategy to reduce unnecessary motor-vehicle-related injuries and deaths is to increase seat belt usage for motor-vehicle occupants both by educating motor-vehicle users and enforcing a

primary seat belt law ([National Center for Statistics & Analysis, 2008](#)). Assessments in Illinois and the New England states have shown that primary enforcement laws are more effective than secondary enforcement laws to increase seat belt usage ([Dinh-Zarr et al., 2001](#); [Shults, Elder, Sleet, Thompson, & Nichols, 2004](#); [Shults, Nichols, Dinh-Zarr, Sleet, & Elder, 2004](#)). Twenty-five states have enacted primary seat belt laws, which allow law enforcement officers to stop a vehicle when an occupant is not wearing a seat belt. Montana currently has a secondary law, enacted in 1987, which only allows law enforcement officers to educate and/or cite an occupant for not wearing a seat belt, after a vehicle has been stopped for another traffic violation. Since 2000, state legislators have repeatedly and unsuccessfully introduced legislation to upgrade Montanans seat belt law from a secondary to a primary law. A study by [Lowenstein, Koziol-McLain, Satterfield, and Orleans \(1993\)](#) found that the strongest predictors of legislator voting behavior toward injury prevention laws were concerns for individual freedoms, perceived constituent support of the law, and the overall effectiveness of the injury prevention laws.

Relatively few published studies have been conducted to assess support among adults for a primary seat belt law in a state without a primary seat belt law ([Morelock, Hingson, Smith, & Lederman, 1985](#); [Mortimer, 1983](#)). In 2008, the Montana Department of Public Health and Human Services (DPHHS) conducted a telephone survey of a representative sample of adults to assess their attitudes toward a primary seat belt law. This report provides information regarding the adult attitudes toward a primary seat belt law overall, and by selected characteristics.

* Corresponding author. Montana Department of Public Health and Human Services, Cogswell Building, C-314, PO Box 202951, Helena, Montana 59620-2951. Tel.: +1 406 444 1437; fax: 406 444 7465.

E-mail address: tharwell@mt.gov (T.S. Harwell).

2. Method

2.1. Study population

Montana is a rural state with an estimated population of 957,861 in 2007 and a population density of only 7 persons per square mile compared to 85 persons per square mile in the United States. A larger proportion of Montana residents are white (91%) or American Indian/Alaska Native (6%) compared to the United States, where 80% are white and 2% are American Indian/Alaska Native (U.S. Census Bureau, 2008). Montanans are somewhat older (median age=39.2) than the overall population of the United States (median age=36.6).

2.2. Behavioral Risk Factor Surveillance System survey

The Montana DPHHS has conducted the BRFSS survey annually since 1984. The BRFSS survey is a state-based random digit dial telephone survey of a sample of non-institutionalized civilian adults (Centers for Disease Control & Prevention, 2006). Three-thousand one hundred and three Montanans were surveyed between January and June 2008. The overall response rate was 46%. Respondents were asked one question regarding seat belt use: “How often do you use seat belts when you drive or ride in a car?” The response categories for this question included: always, nearly always, sometimes, seldom, never, don't know, never drive or ride in a car, and refused. Self-reported seat belt use was categorized as either always wears a seat belt or not always wears a seat belt (response categories - nearly always, sometimes, seldom, never). Respondents were asked the following question to assess their attitudes toward a primary seat belt law: “Currently Montana has a secondary seat belt law, which means law enforcement officers cannot stop vehicles because a driver or any passenger is unbelted – there must be another reason for the stop. A primary seat belt law allows officers to stop vehicles when they observe any unbelted driver or passenger in the vehicle. Do you

Table 2

Percent of respondents supporting a primary seat belt law, overall, and by selected characteristics, Montana, 2008

	Support primary seat belt law	
	% (95% CI)	Odds ratio (95% CI)
Total	60.5 (58.0–63.0)	–
Sex		
Men	50.5 (46.6–54.3)	–
Women	70.4 (67.4–73.2)	2.33 (1.89–2.88)
Age (years)		
18–44	58.5 (53.8–63.0)	–
45–64	57.8 (54.5–61.1)	0.97 (0.77–1.23)
65+	70.7 (67.0–74.2)	1.72 (1.33–2.23)
Race		
American Indian	78.4 (69.1–85.6)	2.42 (1.47–3.99)
White	60.1 (57.4–62.7)	–
Health planning region		
East	55.3 (48.6–61.8)	–
South central	61.4 (55.1–67.3)	1.29 (0.88–1.88)
North central	59.8 (53.6–65.7)	1.20 (0.83–1.74)
Southwest	56.3 (51.7–60.9)	1.04 (0.75–1.45)
Northwest	65.3 (60.6–69.8)	1.53 (1.09–2.14)
Education (years)		
<12	66.1 (55.6–75.2)	1.29 (0.82–2.02)
12+	60.2 (57.7–62.8)	–
Health insurance		
Yes	62.5 (59.8–65.1)	1.58 (1.18–2.12)
No	51.3 (44.6–58.0)	–
Annual household income		
<\$25,000	61.3 (56.0–66.4)	–
\$25,000–\$49,999	58.8 (54.1–63.2)	1.11 (0.84–1.49)
>\$50,000	60.3 (56.1–64.3)	1.05 (0.79–1.38)
Unknown	64.2 (56.4–71.2)	0.89 (0.60–1.31)
Seat belt use		
Always	71.5 (68.8–74.0)	4.59 (3.59–5.86)
Not always	35.3 (30.7–40.3)	–

Table 1
Characteristics of respondents to the Behavioral Risk Factor Surveillance Survey, Montana, 2008

	Number of respondents	Weighted % (95% CI)
Sex		
Men	1,865	50.6 (48.1–53.0)
Women	1,238	49.4 (47.0–51.9)
Age (years)		
18–44	804	44.8 (42.3–47.4)
45–64	1,341	37.0 (34.8–39.2)
65+	932	18.2 (16.9–19.7)
Race		
American Indian	192	4.1 (3.4–5.1)
White	2,760	90.4 (88.9–91.7)
Other/unknown	151	5.5 (4.4–6.8)
Health planning region		
East	357	8.0 (7.1–9.0)
South central	456	20.5 (19.0–22.1)
North central	508	14.4 (12.9–16.0)
Southwest	854	26.1 (24.3–28.0)
Northwest	875	31.0 (28.9–33.2)
Education (years)		
<12	194	5.5 (4.5–6.7)
12+	2,904	94.5 (93.3–95.5)
Health insurance		
Yes	2,640	81.8 (79.6–83.8)
No	452	18.2 (16.2–20.4)
Annual household income		
<\$25,000	378	11.2 (9.7–12.9)
\$25,000–\$49,999	1,033	39.0 (36.6–41.4)
>\$50,000	820	26.9 (24.8–29.1)
Unknown	872	22.9 (21.0–25.1)
Seat belt use		
Always	2,212	69.9 (67.4–72.2)
Not always	857	30.1 (27.8–32.6)

support a primary seat belt law in Montana?” The response categories for this question were yes, no, don't know, and refused. The survey also included questions regarding the demographic characteristics of respondents including age, sex, race, education level, annual household income, county of residence, and health insurance status. Race was categorized into three groups, American Indians, whites, and other/unknown. County of residence was used to group respondents into the five health planning regions within the state.

2.3. Data analyses

Data analyses were conducted using SPSS version 15.0 complex sample design. Weighted prevalence estimates, 95% confidence intervals (CI), and odds ratios were calculated for support of a primary seat belt law, overall, and by selected characteristics. Multiple logistic regression analyses were conducted to identify factors independently associated with support for a primary seat belt law.

3. Results

Three-thousand one hundred and three adults responded to the survey. The characteristics of respondents are described in Table 1. Overall, 51% of respondents were men, 45% were aged 18 to 44 years, 4% were American Indian, and 70% reported always wearing their seat belt.

The majority of respondents supported a primary seat belt law, while 36% did not, and 4% were not sure. Women, older persons, American Indians, adults with health insurance, those in the Northwest health planning region of the state, and those who always wear their seat belt were more likely to support a primary seat belt law compared to men, younger persons, whites, adults without health insurance, those in the Eastern health planning region, and those who did not always wear their seat belt (Table 2).

Download English Version:

<https://daneshyari.com/en/article/587639>

Download Persian Version:

<https://daneshyari.com/article/587639>

[Daneshyari.com](https://daneshyari.com)