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Special Report from the CDC

Seat Belt Use in States and Territories with Primary and Secondary Laws – United States, 2006☆

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The Journal of Safety Research has partnered with the Office of the Associate Director for Science, Division of Unintentional Injury Prevention at the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia, USA, to briefly report on some of the latest findings in the research community. This report is the 16th in a series of CDC articles.

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ABSTRACT

Problem: Motor-vehicle crashes are a leading cause of death in the United States. In the event of a crash, seat belts are highly effective in preventing serious injury and death. *Methods:* Data from the 2006 Behavioral Risk Factor Surveillance System were used to calculate prevalence of seat belt use by state and territory and by type of state seat belt law (primary vs. secondary enforcement). *Results:* In 2006, seat belt use among adults ranged from 58.3% to 91.9% in the states and territories. Seat belt use was 86.0% in states and territories with primary enforcement laws and 75.9% in states with secondary enforcement laws. *Discussion:* Seat belt use continues to increase in the United States. Primary enforcement laws remain a more effective strategy than secondary enforcement laws in getting motor-vehicle occupants to wear their seat belts.

1. Introduction

Because motor-vehicle crashes are a leading cause of death among Americans (Centers for Disease Control and Prevention [CDC], 2006), CDC has a public health program to address this significant problem. CDC scientifically researches what works and partners with others to promote proven, evidence-based programs and policies that prevent crashes, injuries, and deaths. Through public health leadership, CDC aims to keep people safe on the roads everyday. Given the effectiveness of seat belts in preventing injuries and deaths, program responsibilities include surveillance of seat belt use and identification and evaluation of effective interventions to increase seat belt use. Other activities related to motor-vehicle injury prevention focus on teen drivers, older drivers, alcohol-impaired driving, Native American tribes, and pedestrians.

In the United States, seat belt laws allow for either primary enforcement (i.e., person can be stopped and cited simply for not wearing a seat belt) or secondary enforcement (i.e., person can only be cited for not wearing a seat belt if he/she has been stopped for some other violation). Although primary enforcement laws are more effective at increasing seat belt use and decreasing fatalities than secondary enforcement laws (Dinh-Zarr et al., 2001), only 25 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands had primary enforcement laws in 2006. New Hampshire had no law regulating adult use of seat belts, and the remaining 24 states had secondary enforcement laws.

Major efforts of CDC's Motor Vehicle Injury Prevention program regarding seat belts have included leading the *Guide to Community Preventive Services* reviews on motor-vehicle occupant safety (Task Force on Community Preventive Services, 2001). The Task Force concluded that seat belt laws, primary enforcement seat belt laws, and enhanced enforcement were effective and strongly recommended to increase seat belt use in the United States (Task Force on Community Preventive Services, 2001). CDC also conducts ongoing surveillance of self-reported seat belt use to monitor progress in reaching the Healthy People 2010 goal to increase seat belt use to 92% (U.S. Department of Health and Human Services, 2000). This report provides 2006 estimates of seat belt use by state and compares belt use in states with primary versus secondary enforcement laws.

☆ The findings and conclusions in this report are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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2. Methods

We used data from the 2006 Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is a state-based, population-based system that is supported by the CDC. The BRFSS operates in all 50 states, the District of Columbia, Guam, Puerto Rico, and the U.S. Virgin Islands. The survey is designed to collect information about health risk and protective behaviors as they relate to chronic disease and injury. BRFSS is a random-digit-dialed telephone survey of civilian, non-institutionalized adults (18+ years). The methodology for the BRFSS has been described in detail elsewhere (Mokdad, Stroup, & Giles, 2003).

In 2006, respondents were asked "How often do you use seat belts when you drive or ride in a car?" Responses included always, nearly always, sometimes, seldom, never, or never ride or drive in a car. We assessed the prevalence of always wearing a seat belt and never wearing a seat belt by state and by type of state seat belt law (primary or secondary). New Hampshire, the only state without a seat belt law for adults, was grouped

Table 1
Prevalence of Seat Belt Use by State, District, and Territory, Behavioral Risk Factor Surveillance System, 2006.

State/ Territory	Sample Size	Always Wears		Never Wears	
		%	95%CI	%	95%CI
Jurisdictions with Primary Enforcement Laws					
Alabama	3,225	82.0	79.9–84.0	1.4	0.9–2.3
Alaska	2,037	77.3	74.7–79.7	2.3	1.5–3.4
California	5,416	91.9	90.8–92.8	0.3	0.2–0.6
Connecticut	8,261	84.4	83.3–85.5	1.3	1.0–1.6
Delaware	3,978	85.5	83.5–87.2	1.7	1.2–2.5
District of Columbia	3,865	86.6	85.0–88.1	1.7	1.1–2.5
Georgia	7,458	82.5	81.0–83.8	1.8	1.4–2.3
Hawaii	6,396	91.7	90.5–92.7	0.7	0.4–1.0
Illinois	5,145	81.2	79.7–82.7	1.6	1.2–2.1
Indiana	6,400	79.3	77.9–80.6	2.4	2.0–3.0
Iowa	5,310	79.9	78.5–81.3	1.7	1.3–2.3
Kentucky	5,571	75.9	73.9–77.7	3.1	2.4–4.1
Louisiana	6,949	86.8	85.6–87.9	2.1	1.6–2.8
Maryland	8,621	87.8	86.7–88.9	1.6	1.2–2.1
Michigan	5,592	87.8	86.5–88.9	1.0	0.7–1.4
Mississippi	5,950	71.5	69.8–73.2	2.2	1.7–2.9
New Jersey	12,884	84.3	83.2–85.3	2.3	1.9–2.8
New Mexico	6,386	87.4	86.2–88.5	1.2	0.9–1.6
New York	5,714	83.9	82.5–85.2	1.9	1.5–2.5
North Carolina	15,487	86.7	85.8–87.5	1.1	0.9–1.3
Oklahoma	6,937	79.8	78.5–81.0	1.8	1.4–2.3
Oregon	4,770	90.6	89.4–91.7	0.6	0.4–0.8
South Carolina	8,892	78.2	76.8–79.4	1.8	1.4–2.3
Tennessee	4,329	83.0	80.9–84.8	3.0	2.2–4.2
Texas	6,664	89.6	88.2–90.9	0.7	0.4–1.1
Washington	23,468	91.5	90.9–92.1	0.4	0.3–0.5
Puerto Rico	4,639	88.6	87.2–89.9	1.1	0.7–1.7
Virgin Islands	3,139	77.5	75.5–79.3	2.1	1.6–2.9
Subtotal	193,483	86.0	85.6–86.3	1.3	1.2–1.4
*Jurisdictions without Primary Enforcement Laws**					
Arizona	4,675	81.9	79.3–84.2	2.2	1.5–3.3
Arkansas	5,496	69.9	68.3–71.5	4.0	3.3–4.8
Colorado	5,938	81.6	80.2–82.8	1.3	1.0–1.8
Florida	10,477	82.6	81.4–83.8	2.4	2.0–3.0
Idaho	5,245	73.2	71.5–74.8	1.7	1.3–2.2
Kansas	8,222	68.8	67.4–70.2	2.3	1.9–2.7
Maine	3,953	75.4	73.6–77.2	2.8	2.2–3.6
Massachusetts	12,235	76.2	74.9–77.5	3.9	3.4–4.6
Minnesota	4,240	80.2	78.5–81.8	1.4	1.0–2.1
Missouri	5,255	68.9	66.7–71.0	3.9	3.1–4.9
Montana	5,900	68.0	66.3–69.7	2.5	2.0–3.2
Nebraska	7,838	66.2	64.5–67.7	2.5	2.1–2.9
Nevada	3,517	80.9	78.6–83.0	2.2	1.6–3.2
New Hampshire	5,883	64.9	63.3–66.5	6.3	5.5–7.2
North Dakota	4,685	58.3	56.4–60.3	3.1	2.5–3.9
Ohio	5,687	74.1	71.6–76.5	2.8	1.9–4.2
Pennsylvania	12,879	71.6	70.0–73.3	3.5	3.0–4.2
Rhode Island	4,416	77.9	76.1–79.7	3.2	2.6–4.0
South Dakota	6,536	58.3	56.7–60.0	4.1	3.5–4.9
Utah	5,145	76.6	74.9–78.3	1.6	1.1–2.2
Vermont	6,924	78.8	77.5–80.1	2.1	1.7–2.6
Virginia	5,303	80.7	79.0–82.4	2.2	1.5–3.1
West Virginia	3,767	77.9	76.1–79.6	2.6	2.0–3.3
Wisconsin	4,659	69.0	67.0–70.8	3.4	2.7–4.1
Wyoming	4,922	63.1	61.4–64.8	3.5	2.8–4.4
Subtotal	153,797	75.9	75.4–76.4	2.8	2.6–3.0
Total	347,280	82.4	82.1–82.7	1.8	1.8–2.0

*Includes 24 states with secondary enforcement laws and 1 state (New Hampshire) with no seat belt law.