



National Highway Traffic Safety Administration Occupant Protection Division

WINTER, 2002

Motor vehicle crashes are the leading cause of death for Americans of every age from 4 to 33 years old.¹ On average, every 13 minutes, someone in America dies in a traffic crash; every 10 seconds someone is injured. Each year in America, traffic crashes claim about 41,000 lives and cause more than three million injuries. These crashes result in \$150 billion in economic costs, including \$17 billion in medical care and emergency services expenses, and \$107 billion in lost productivity and property loss. The Bureau of Labor Statistics reported that highway crashes continued as the leading cause of on-the-job fatalities in 1999, accounting for 21.9 percent of the total occupational fatalities. In 1994, NHTSA estimated that crashes on and off the job cost American businesses an estimated \$55 billion through lost productivity and other costs; NHTSA further estimated that work-related crashes cost employers \$110,000 per injury.² Such costs are passed on to consumers so that every person in America shares the economic costs of motor vehicle crashes, on average \$580 per person per year.

The National Highway Traffic Safety Administration's mission is to save lives, prevent injuries, and reduce traffic-related health care and other economic costs. The Occupant Protection Division is responsible for countermeasure programs development and related technical assistance relative to increasing the use of seat belts and child safety seats and public awareness of unrestrained occupant interaction with air bags. These activities support State and community program efforts in the functional areas of public information, education, usage requirement policies, State laws and regulations. This report serves as an update of the Occupant Protection Division's activities as of January 2002. The report is divided into three major sections: seat belts, child passenger safety, and air bags. Within each section, there are subsections on major issues (within that subject area), legislative issues, current programs, and products.

SEAT BELTS

Seat belts are the single most effective safety device in preventing serious injuries and reducing fatalities in motor vehicle crashes, having saved 11,889 lives in 2000 alone. Research has shown that lap/shoulder belts, when used properly, reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light truck occupants, seat belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent.³ If the national seat belt use rate increased from 68 percent (the rate measured by State surveys in 1996) to 90 percent, an additional 5,536 fatalities and 132,670 injuries would be prevented each year, resulting in an economic savings of about \$8.8 billion *annually*.⁴

Ejection from the vehicle is one of the most injurious events that can happen to a person in a crash. In fatal crashes, 75 percent of passenger car occupants who were totally ejected were killed. Seat belts are effective in preventing total ejections: only 1 percent of the occupants reported to have been using restraints were totally ejected, compared with 22 percent of the unrestrained occupants. Of 32,819 occupants killed in 1999 in passenger cars, light trucks, and large trucks, 18,741 (57 percent) were unrestrained.⁵

The national seat belt use rate observed in June 2001 was 73 percent; however, there is a wide range of seat belt use among various populations. For example, in recent years, the national seat belt use rate among African Americans has been 5 to 12 percentage points lower than that for whites.⁶ A Meharry Medical College study reported that 100 percent seat belt use among African Americans could save as many as 1,300 lives per year, prevent 26,000 injuries, and reduce societal costs by \$2.6 billion.⁷ In June 2001, overall seat belt use among pickup truck occupants was only 62 percent; in the Northeast, seat belt use among pickup truck occupants nationwide was only 38 percent. Young adults 16 to 24 years of age have a seat belt use rate that is 4 to 13 percentage points lower than adults 25 to 69 years of age.⁸ In 1999, among passenger car, light truck, and large truck fatalities aged 16-20 years, 63 percent were completely unrestrained.⁹ Males have seat belt use rates 10 to 13 percentage points lower than females and people living in rural areas have seat belt use rates about 5 percent lower than those living in urban areas.¹⁰

Legislative Issues

As of December 31, 2001, 49 States had adult seat belt laws in effect. Seventeen States, the District of Columbia, and Puerto Rico had primary (standard) seat belt laws and the remaining States had secondary laws. New Hampshire continues to have no adult seat belt law. A *primary* seat belt law is a law which allows a citation to be issued if a law enforcement officer simply observes an unbelted driver or passenger. A *secondary* seat belt law requires an officer to stop a violator for another infraction before being able to issue a citation for not buckling up. Primary seat belt laws are effective in increasing seat belt use, because the general public is much more likely to buckle up when there is the possibility of receiving a citation for not doing so.

The importance of primary laws in increasing seat belt use cannot be overstated. In June 2001, the overall shoulder belt use in States with primary seat belt laws was 78 percent compared to 67 percent in States without primary enforcement laws.¹¹ NHTSA continues

to provide information and technical assistance to support the efforts of States and national organizations to strengthen State laws regarding seat belt and child restraint use. Two NHTSA publications are excellent resources to educate States and organizations on the importance of primary seat belt laws: *Legislative History of Recent Primary Safety Belt Laws* and *Standard Enforcement Saves Lives: the Case for Strong Seat Belt Laws*. These publications may be ordered from NHTSA Headquarters or Regional Offices; the latter publication is also posted on the NHTSA web site at www.nhtsa.dot.gov.

Through strong legislation, America can achieve seat belt use rates at least as high as those seen in many other industrialized countries (85 percent), thereby saving thousands of lives and billions of dollars each year. Canada, through strong legislation and enforcement, achieved a national seat belt use rate of 92 percent among passenger car occupants in 2000.¹² NHTSA estimates that, among passenger vehicle occupants over 4 years old, seat belts saved 11,889 lives in 2000. However, if all passenger vehicle occupants over age 4 were appropriately restrained, an additional 9,238 lives (for a total of 21,127 lives) could have been saved in 2000.¹³

Current Products/Training

The Presidential Initiative for Increasing Seat Belt Use Nationwide—Fourth Report to Congress and Second Report to the President: This publication is the fourth Report to Congress and the second Report to the President on the status of the *Buckle Up America* Campaign to increase seat belt and child safety seat use nationwide. This publication highlights the activities of the campaign from April 1999 through December 1999 with sections describing legislation, enforcement, public support, grants, and outreach activities.

The Facts: Seat Belts and Hispanics: This fact sheet provides important information and statistics on injuries, fatalities, and the non-use of seat belts within the Hispanic community. This information is updated annually.

The Facts: Seat Belts and African Americans: This fact sheet provides important information and statistics on injuries, fatalities and the non-use of seat belts within the African American community. This information is updated annually.

Products/Training Under Development

Primary Enforcement Saves Lives: The Case For Strong Seat Belt Laws: The revised version of this booklet (originally published in 1999) updates the basic facts on primary enforcement seat belt laws, documents how these laws save lives, and provides success stories from the U.S. and other countries. The booklet also provides a sample “model law” and strategies for generating public support for primary enforcement. (Available March 2002)

Successful Seat Belt Use Strategies for Secondary Law States: This publication will be a practices guide emphasizing successful strategies used by six secondary law States that have a seat belt use rate of 73 percent or higher. (Available April 2002)

Occupant Protection Youth Facts Book: This publication will provide information and statistics on injuries, fatalities and non-use of seat belts for youth ages 0-20. It will also provide charts and a narrative emphasizing that motor vehicle fatalities for teens are four times higher than any other age group. (Available April 2002)

General Occupant Protection Video Package: Two videos covering occupant protection for teens and adults will be produced. Each video will be approximately 15 minutes in length and will highlight the importance of buckling up. Also included will be a section of B-roll, made up of the various segments of the video, for use by the media. (Available May 2002)

Pregnant Women and the Use of Seat Belts: This brochure will provide *basic* information on seat belt use during pregnancy and will be available in English and Spanish. It will be distributed to NHTSA Regions, State Highway Safety Offices, national traffic safety and health care organizations, and other interested parties. The brochure is also intended to educate health care personnel and patients regarding safe seat belt practices while pregnant. (Available April 2002)

The National Initiative for Increasing Seat Belt Use—Fifth Report to Congress and Third Report to the President: This publication will be the fifth Report to Congress and third Report to the President on the status of the *Buckle Up America* Campaign to increase seat belt and child safety seat use nationwide. This report will highlight the activities of the campaign from January 2000 through December 2001 with sections describing legislation, enforcement, public support, grants, and outreach activities. (Available July 2002)

Demonstration Projects

In the past, demonstration grants were awarded to the States to use as deemed appropriate, and did not focus on target groups known to have low seat belt usage rates. NHTSA has revised this approach and now awards grants to communities and coalitions that are positioned to influence groups known to have low usage rates. This approach supports highly visible enforcement with public education and media messaging targeted to a specific audience, rather than the general public. Some examples follow.

Teen Safe Driving Initiative: This demonstration program targets youth ages 15-20 years of age. Over 6,000 teens are killed in motor vehicle crashes each year and tens of thousands are injured. This initiative focuses on increasing seat belt use, reducing the incidence of impaired driving, and speeding through community-based demonstrations and the development of programs to respond to this problem. Funding was provided to four communities: Pennsylvania Driving Under the Influence Association, Harrisburg,

PA; Plymouth Police Department in Plymouth, MN; Spokane Regional Health District in Spokane, WA; and Frederick County Health Department Substance Abuse Prevention Services in Frederick, MD.

Rural Pickup Truck Driver Initiative: According to FARS data, almost 60 percent of traffic crashes occur in rural areas. As a group, pickup truck drivers have one of the lowest rates of seat belt use. In June 2001, the national average of seat belt use among passengers of pickup trucks was only 62 percent, compared to 76 percent among passengers of cars. In addition, drivers of pickup trucks need to be reminded of the dangers of transporting passengers in the cargo area of pickup trucks. Each year, about 200 people die as a result of riding in the cargo area of pickup trucks. Demonstration projects have been designed for FY02 that will increase seat belt use among rural pickup truck occupants and educate them about the dangers of riding in pickup truck cargo areas. Three communities have been awarded funding for these projects: The Rio-Grande Valley SAFE Communities Coalition, McAllen, TX; Avera Rural Health Institute, Sioux Falls, SD; and The University of West Florida, Pensacola, FL. Each site will develop a highly visible media and education campaign with law enforcement measures to specifically reach rural pickup truck drivers and passengers. A best practices guide will be published so that other rural sites can implement similar strategies to increase restraint use among pickup truck occupants in their communities.

Sport Utility Vehicle Initiative: Two grants have been awarded for developing demonstration projects to increase restraint use among SUV occupants. Grantees are Drive Smart Virginia (for a project in seven counties in central Virginia) and the Children's Hospital of Denver (for a project in the metropolitan Denver area). SUVs are rapidly increasing in popularity and are more likely to transport children than any other vehicle type. However, SUVs have the highest rollover rate of any vehicle type. According to NHTSA research, seat belts are 80 percent effective in reducing fatalities in rollover crashes involving light trucks (such as SUVs). This project will focus on increasing seat belt use among occupants of all vehicle types, but especially SUV occupants. A best practices guide on the successes and lessons learned for these projects will be published in FY 2003.

Community Grants to Increase Seat Belt Use: In FY 2001, Congress provided NHTSA with earmark funding for eighteen communities (municipal, county, and other local government entities) across the country to implement high visibility law enforcement programs within these communities to increase seat belt use. As noted previously, rural areas have seat belt use rates about five percentage points less than urban areas. NHTSA will provide additional Congressional earmark funding for similar projects in other communities during FY 2002.

Other Grant Programs:

Section 157 Grants: The Section 157 Innovative Grant Program provides significant funding support to States for high visibility seat belt enforcement programs. NHTSA will provide funds to States in the form of grants to increase seat belt use rates. In FY 2003, \$112 million is available for Section 157 incentive and innovative grants to increase seat belt use. An additional \$20 million is available for Section 405 incentive grants to States that implement stringent occupant protection laws and programs.

Metropolitan Law Enforcement Cooperative Agreements: Grants were awarded during FY 2000 to FY 2001 to four law enforcement agencies to develop programs to increase the use of seat belt and child safety seats within their metropolitan area by conducting combined high visibility enforcement campaigns and public information and education advertising campaigns. The four agencies are: Kansas City Police Department (Kansas, Missouri), Marion County Prosecutor's Office (Indianapolis, IN), Detroit Police Department (Detroit, MI), and Milwaukee County Sheriff's Office (Milwaukee, WI). The results of these projects were presented at NHTSA Headquarters in Washington on January 28, 2002.

Grants to the State Association of Chiefs of Police (SACOP) and the National Sheriff's Association (NSA): To assist additional law enforcement agencies in the *Buckle Up America* mobilization periods, NHTSA's Occupant Protection and Traffic Law Enforcement Divisions awarded three additional SACOP grants in FY 2001. These Cooperative Agreements were awarded to Utah, Oklahoma, and Rhode Island. NSA Grants were awarded to the States of Virginia, Maine, Oklahoma, California, Maryland, Montana, New York, South Carolina, Vermont, and Wyoming. A summary of best practices is under review. In FY 1999, five States were awarded SACOP grants and 10 States were awarded NSA grants.

Other Activities

The Buckle Up America Campaign: In 1997, NHTSA created the *Buckle Up America* Campaign, a massive public health and safety campaign that was designed to increase the national seat belt use rate to 90 percent by 2005 (from 68 percent in 1996) and to reduce child occupant fatalities (0-4 years) by 25 percent in 2005 (from 653 child occupant fatalities in 1996). Significant increases in seat belt and child restraint use have been achieved since the campaign began. In fact, the goal of reducing child occupant fatalities (0-4 years) by 15 percent by the year 2000 was reached one year early—in 1999. Reaching this goal ahead of time was in large part due to the rise in restraint use among children since the campaign began in 1997. The national seat belt use rate in June 2001 was 73 percent, the highest in our nation's history. This rate is significantly higher than 61 percent in 1996 before the campaign began.¹⁴

Operation ABC (America Buckles Up Children) Mobilizations: NHTSA will continue its support of the biannual *Operation ABC (America Buckles Up Children) Mobilizations*. This effort is a national event coordinated by the Air Bag & Seat Belt Campaign in partnership with NHTSA and law enforcement agencies to protect children from the lack

of child restraint use. The approach is simple: conduct weeklong waves of increased law enforcement activities in May and November, during the peak holiday travel periods of Memorial Day and Thanksgiving. The *Mobilization* is based on a highly effective law enforcement model that combines periodic waves of stepped-up enforcement with aggressive publicity highlighting the enforcement. The number of law enforcement agencies supporting this effort has also grown dramatically: from 1,000 agencies in 1997 to over 10,000 agencies during the November 2001 *Mobilization*.

NHTSA will continue to encourage States to embrace “Click It or Ticket” as the message or theme for their Buckle Up Campaigns. Following the success of this initiative in North Carolina, a similar campaign involving media saturation and highly visible enforcement was implemented in South Carolina in November 2000. As a result, seat belt use has increased from 66 percent to 74 percent during the campaign. Similar campaigns have been implemented in the Southeast (NHTSA Region IV) in spring 2001, with encouraging results. Kentucky, for example, experienced a 10 percentage point increase (from 60 to 70 percent) during its campaign in May 2001. Focus group testing has shown that “Click It or Ticket” resonates well with the hard-core non-user of seat belts. As part of the FY 2002 Conference Report, Congress directed DOT to allocate \$8 million of the Section 157 Innovative Grants to apply the “Click It or Ticket” model to twelve States during the May and November 2002 Mobilizations. The twelve States are: Alabama, Florida, Illinois, Indiana, Michigan, New York, Nevada, Ohio, Texas, Washington, West Virginia, and Vermont. These funds were directed to purchase advertising, and an additional \$2 million will evaluate the effectiveness of paid advertising on raising State seat belt use. This program can serve as a powerful witness of how media saturation and enforcement strategies can make a significant impact on a State’s seat belt use rate. The next *Mobilization* is scheduled for May 20-27, 2002.

Case Studies of Secondary Law States: In fall 2001, staff members from the Occupant Protection Division interviewed traffic safety professionals from six States that have secondary seat belt laws, but which have nonetheless attained a high seat belt use rate. During these interviews, NHTSA staff studied the traffic safety policies and programs of the various States. Information is being compiled in a best practices guide that will serve as a model for other secondary law States in their efforts to increase seat belt use. The proposed publication date for the guide is March 2002. States that are being studied are: Minnesota, Montana, Utah, Arizona, Nevada, and Washington State. Currently, 32 States have a secondary seat belt law.

International Association of Chiefs of Police (IACP) Chiefs’ Challenge: The IACP Chiefs’ Challenge Awards program is a traffic safety competition among law enforcement agencies, sponsored by the International Association of Chiefs of Police (IACP) in partnership with the National Highway Traffic Safety Administration, to promote enforcement, education, and support for three major traffic safety priorities: occupant protection, impaired driving, and speeding. Major media attention to traffic safety issues such as the *Operation ABC Mobilizations*, air bags and children, aggressive driving and the lowering of the impaired driving intoxication level to 0.08 BAC have heightened the public’s interest in and support of positive, prevention-oriented law enforcement efforts.

In the Chief's Challenge, law enforcement agencies compete against agencies of similar size for prizes and recognition. Each agency submits a nomination packet outlining activities for the competition year. The entries are judged by various law enforcement agencies and winners are given awards at the annual IACP conference each year. Agencies are evaluated on how they promote highway safety, both within the agency and in the community. Policies, training, public information and education (PI&E) and enforcement are all part of the judging criteria.

An exceptional part of the Chiefs' Challenge program is the participation of private sponsors who contribute significant corporate prizes to some of the winning departments. The top three winners of each category will be awarded for their efforts in highway safety. Each first place winner will be entered into a random drawing for the use of a new Ford Motor Company fully equipped law enforcement vehicle. All other entries will be eligible for the other random drawings for many law enforcement prizes donated by corporate sponsors.

African American Outreach Initiatives: As previously noted, African Americans have a national seat belt use rate that is 5 to 12 percentage points lower than whites.¹⁵ A 1999 study by Meharry Medical College, a 131 year-old historically black medical institution, reported that 100 percent seat belt use among African Americans could save 1,300 lives each year and prevent 26,000 injuries, resulting in a cost savings of \$2.6 billion.¹⁶ This report prompted the formation of the *Blue Ribbon Panel to Increase Seat Belt Use Among African Americans* in June 2000. This panel was created when Meharry partnered with NHTSA to invite distinguished members from the medical, academic, legal, business, athletic, law enforcement and civil rights communities to identify strategies to increase belt use among minorities.

The recommendations were released in December 2000 in a report entitled *Blue Ribbon Panel To Increase Seat Belt Use Among African Americans: A Report to the Nation*. This report called for education, training and improved communication strategies to increase seat belt use among African Americans and urged the American public to address the low seat belt use rates among African Americans as a public health issue. The panel addressed tough issues like the need for primary seat belt laws in States and the appropriate procedures for collecting, compiling and analyzing data on traffic stops to avoid differential enforcement. For the first time, the U.S. Department of Transportation partnered with a faith-based organization, the Congress of National Black Churches, to help educate African Americans about the safety benefits of seat belts and child safety seats. The National Organization of Black Law Enforcement Executives (NOBLE) highlighted and fully supported these recommendations during their leadership meeting one month later in January 2001 in Washington, D.C. NHTSA is currently reviewing these recommendations and will provide technical assistance for a national workshop to implement the recommendations and to develop resource materials identified as needed by the Blue Ribbon Panel. Many organizations representing African Americans have partnered with NHTSA to increase seat belt and child safety seat use among African

Americans because they know that by doing so, thousands of lives will be saved and millions of injuries will be prevented. Such organizations include:

- Alpha Kappa Alpha Sorority, Inc.
- Congress of National Black Churches
- Edward Davis Education Foundation
- Jack and Jill of America
- Meharry Medical College
- National Association for Equal Opportunity in Higher Education
- National Black Alcoholism and Addictions Council, Inc.
- National Black Caucus of State Legislators
- National Conference of Black Mayors
- National Council of Negro Women
- National Medical Association
- Sigma Gamma Rho Sorority

Hispanic Outreach Initiatives: Motor vehicle crashes are the leading cause of death for Hispanics from 1-44 years of age, and are the third leading cause of death for Hispanics of all ages surpassed only by heart disease and cancer.¹⁷ A recent medical study showed that Hispanic drivers have lower seat belt use rates than non-Hispanic whites, with correspondingly higher fatality rates in traffic crashes.¹⁸ Another recent medical study examined motor vehicle fatality exposure rates and found that, although black and Hispanic male teenagers travel fewer vehicle miles than their white counterparts, they are nearly twice as likely to die in a motor vehicle crash.¹⁹

Since 1990, the Hispanic population in the United States has increased by almost 60 percent.²⁰ As the Hispanic population continues to grow, a greater proportion of future crash injuries and fatalities will come from the Hispanic community. Hispanics currently make up almost 13 percent of the U.S. population and are projected to make up 22 percent by the year 2050. NHTSA recognizes the need for expanded efforts to increase seat belt use within the Hispanic community and will continue to produce culturally relevant educational materials and technical support to the Hispanic community. Many organizations representing Hispanics have partnered with NHTSA in this effort, including:

- ASPIRA Association, Inc.
- Hispanic American Police Command Officers Association
- Latino Council on Alcohol and Tobacco
- National Association of Hispanic Nurses
- National Hispanic Medical Association
- National Council of La Raza
- National Latino Children's Institute
- National Latino Children's Institute
- National SAFE KIDS Campaign²¹

CHILD PASSENGER SAFETY

Child safety seats, when used correctly, are extremely effective in preventing injuries and deaths during crashes. From 1993 through 2000, an estimated 2,472 young lives were saved by child restraint systems with 316 lives saved in 2000 alone. If child restraint use had been 100 percent in 2000 for children under 5, an additional 143 lives could have been saved.

Research on the effectiveness of child safety seats has found them to reduce fatal injury by 71 percent for infants and 54 percent for toddlers in passenger cars. For infants and toddlers in light trucks, the corresponding reductions are 58 percent and 59 percent, respectively. Recently, attention has been focused on the need for booster seats for children who have outgrown their child safety seats. If older children 4 to 8 years old are prematurely placed in adult belts, they can suffer serious internal and neck injuries, risk slipping out of the seat belt, and be ejected from a vehicle during a crash.²² NHTSA currently recommends that all children who have outgrown child safety seats be properly restrained in booster seats until they are at least 8 years old, unless they are 4'9" tall.

Restraint use among children has increased significantly since NHTSA's *Buckle Up America* Campaign began in 1997. In 1996, restraint use among infants (1-12 months) was 85 percent and restraint use for toddlers (1-4 years) was 60 percent. In 2000, restraint use among infants and toddlers had risen to 95 percent and 91 percent respectively.²³ However, even when child safety seats are used, there is a high misuse rate—up to 94 percent in one study conducted at 11 child safety seat checkpoints.²⁴ Also, premature graduation of children to seat belts continues to be a problem. A study of 2,077 children aged 2 to 5 years showed a 98 percent restraint use rate, but 40 percent of these children were restrained with seat belts.²⁵ Another study involving 149 children 4 to 8 years old observed at a random sample of day care centers showed only a 27.7 percent booster seat use rate with only 10 percent of children 6 to 8 years old restrained in booster seats.²⁶

Legislative Issues

Motor vehicle crashes are the leading cause of death in children of all races from 1-14 years of age.²⁷ Approximately one out of every three American children 5-15 years old rides completely unrestrained, putting millions of children at risk.²⁸ Despite this major public health problem, however, gaps in child passenger safety laws still exist leaving children unprotected. The laws vary from State to State with some laws covering only young children, some covering only the front seat, and some exempting pickup trucks and vans. Also, many States fail to address the issue of children riding as passengers in the cargo area of pickup trucks. More than 100 children and teenagers die each year as a result of riding in cargo areas of pickup trucks. The Occupant Protection Division continues to provide technical support and assistance to States desiring to upgrade their child passenger safety laws.

In November 2000, Congress enacted the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act in the wake of the Firestone tire investigation. An expanded booster seat education program was included in this legislation, which directs the DOT to undertake various activities to improve highway safety, including child passenger safety.

The agency's efforts to improve the performance of child restraints include child safety seat tests with dummies of various sizes in different crash modes, assessment of the benefits of booster seats for older children, and updating the test seat assembly for the child restraint standard (FMVSS No. 213). Furthermore, in support of this requirement, NHTSA will conduct focus group testing to ensure that child restraint ratings are readily understandable to consumers. The Occupant Protection Division has developed a five-year strategic plan to reduce deaths and injuries caused by failure to use the appropriate booster seat in the 4 to 8 year old age group by 25 percent, as required by TREAD legislation. This plan will be submitted in a report to Congress during Winter 2002.

Current Products/Training

Lower Anchors and Tethers for Children (LATCH): This camera-ready, black and white graphic piece describes the new standardized child safety seat system that will simplify child safety seat installation and enhance child passenger safety. The piece also answers common consumer questions. It is designed to be reprinted in magazine or news publications or can be copied as an envelope stuffer for target audiences. For more information on the LATCH system, click on: <http://www.nhtsa.dot.gov/people/injury/childps/csr2001/csrhtml/LATCH.html#mainContent>.

Lower Anchors and Tethers for Children (LATCH) Video: This six-minute video explains the LATCH system, previously described.

Child Transportation Safety Tips: This publication is actually a folio of reproducible black-and-white sheets on a variety of child transportation safety topics. Topics include child safety seats, booster seats, pedestrian issues, bicycle safety, school bus safety, safety seat recalls, and the "Quick Safety Seat Checkup." This publication is also available in Arabic, Chinese, French, Haitian Creole, Polish, Portuguese, Russian, Spanish, and Vietnamese. This publication is being updated and revised. The revised English version is expected in Winter 2002.

A Parent's Guide to Booster Seats: This brochure is designed to encourage parents to use a booster seat once a child has outgrown a child safety seat. It highlights the different kinds of booster seats, which kind each child should use and why, and how to buy one.

Standardized Child Passenger Safety Training Course: In 1998, NHTSA, the American Automobile Association (AAA), and other partners developed an intensive, four-day course on child passenger safety. The purpose of this course is to ensure that accurate and

consistent information about child passenger safety is disseminated to the general public by trained instructors and technicians. This course is open to anyone interested in conducting child passenger safety clinics; many of the graduates have been law enforcement officers, emergency medical services professionals, and firefighters. This course is extremely popular and has experienced phenomenal growth since its development in 1998. As of December 1, 2001, over 21,000 technicians and over 1,000 instructors have become certified nationwide.

Products/Training Under Development

Protecting America's Children: Strengthening Child Passenger Safety Laws This booklet can be used to educate decision makers about the benefits of strong child passenger safety laws. It will provide a comprehensive collection of historical information, projects, model legislation, and information to dispel objections to child passenger safety enforcement. (Available Spring 2002)

Child Restraint Inspection Station Guide: This guide will explain to States and organizations how to establish and administer child restraint inspection stations. Resources gathered from the Australian model, Daimler Chrysler programs, and community models in the United States are being used in developing this planning guide. This guide will also be available from NHTSA Regional Offices and State Highway Offices. (Available Spring 2002)

Are You Using It Right? This popular booklet illustrates the proper use of restraints and some of the common mistakes parents make when installing and using child safety seats booster seats, and seat belts. This booklet is currently being updated. (Available Winter 2002)

Standardized Child Passenger Safety Training Course: The Occupant Protection Division will continue to oversee the institutionalization of the National Child Passenger Safety Board to expand the standardized child passenger safety training course nationwide. This will include expanding a communication network and outreach to diverse and hard to reach populations, linking trained child occupant protection safety experts, continuing to update the curriculum, and examining technological avenues for future training opportunities.

Demonstration Projects

Innovative Programs to Increase Booster Seat Use: In FY 2000 and FY 2001, NHTSA awarded six cooperative agreements to support innovative programs to increase booster seat use among children 40-80 lbs and seat belt use among 8 to 15 years olds. The grantees were awarded second-year funding to support expansion and evaluation of existing efforts. A final project briefing was held in Washington, D.C. in November 2001. A best practice guidebook will be developed based on program successes and lessons learned from these innovative programs. (Available Spring 2002)

Other Activities

CPS Technical Bulletin (Safe Ride News): To keep certified child passenger safety technicians updated on various child passenger safety issues, NHTSA has a contractual agreement with Safe Ride News Publications, Inc. to publish a quarterly newsletter, "Safe Ride News." This bulletin is distributed to over 21,000 technicians and 1,000 instructors. Information focuses on the technical aspects of child passenger safety, child passenger safety program tips, updates to child passenger safety training programs, and certification and recertification issues.

Selecting, Installing, and Using web site: In 2000, NHTSA developed a consumer-friendly web site to educate parents and caregivers on the selection, proper use, and installation of child safety seats. This site also provides information on recalls of child safety seats. This new web site is constantly being updated and is extremely popular among the general public, receiving thousands of hits each month. This site can be accessed at <http://www.nhtsa.dot.gov/people/injury/childps/index.cfm>.

CPS TREAD Implementation Program: The objective of this effort is to meet the requirements of the TREAD Act of 2000 (described previously) which requires the creation of a five-year booster seat education plan, the development of consumer information on compatibility of child safety seats and vehicles, and the establishment of a child restraint rating system.

AIRBAGS

Drivers protected by air bags experience a reduced fatality risk of 29 percent in purely frontal crashes (12:00 point of impact on the vehicle), 20 percent in all frontal crashes (10:00 to 2:00), and 12 percent in all crashes. The combination of air bags and lap/shoulder belts is even more effective, resulting in an estimated 51 percent fatality reduction. In 2000, an estimated 1,584 lives were saved by air bags. From 1987 to July 1, 2001, an estimated 7,224 lives have been saved by air bags.

However, deployment of air bags has injured and even killed some people. As of July 1, 2001, NHTSA has confirmed 116 crashes where the deployment of the passenger-side air bag resulted a fatal injury to child 12 years old or younger in a crash with a speed change of less than 25 mph. Nineteen of these children were in a rear-facing child seat and the remainder were not. These confirmed fatalities have dropped from a high of 31 in 1997 to six in 2000 and zero in the first six months of 2001.

Beginning September 1997 (model year 1998), all new passenger cars were required to have driver and passenger air bags, along with manual lap/shoulder safety belts. The same requirement applied to light trucks beginning in September 1998. It is estimated that, as of 2000, more than 106 million air bag-equipped passenger vehicles were on the road, including 81 million with dual air bags. With more and more air bag-equipped

vehicles on the road, it is important for the public to be aware of the potential risks air bags pose to children under 12 years of age and small-statured people. The public must also be educated about the risks of side air bags. Side impact air bags can provide significant safety benefits to adults in side impact crashes. However, children and small-statured adults who are seated near a side air bag either in the front or rear seating areas may be at risk of serious or fatal injury, especially if the individual's head, neck, or chest is close to the air bag at the time of deployment. NHTSA, in partnership with the Air Bag & Seat Belt Safety Campaign, automakers, insurers, medical providers, health care organizations, and safety groups, has greatly increased public awareness about these issues.

ESTIMATED EFFECTIVENESS OF OCCUPANT PROTECTION SYSTEMS IN REDUCING FATALITY RISK FOR PASSENGER CAR DRIVERS	
System Used	Fatality Reduction
Air bag plus lap-shoulder belt	51%
Air bag alone	14%
Manual lap-shoulder belt	45%

Many of the air bag-equipped vehicles now on the road have older, higher-powered air bags that pose greater risks to occupants. These older vehicles are passed on to second and third vehicle owners who may not understand air bag risks as well as the original owners. Even the newest air bags do not eliminate all risk. A 2001 survey by the Air Bag & Seat Belt Safety Campaign indicated that public knowledge of air bag risks is decreasing—from 85 percent in 2000 to 78 percent in 2001.²⁹ NHTSA will continue to develop programs and materials to educate consumers who may be buying used cars with older, higher-powered air bags.

Legislative Issues

Through regulation, NHTSA has implemented air bag standards that have helped to save thousands of lives. The primary focus of regulatory action is to require that improvements be made in the ability of air bags to cushion and protect occupants of different sizes, belted and unbelted, and to require that air bags be redesigned to minimize the risks they pose to infants, children, youth and small adults. To further this effort, the agency has undertaken an aggressive research program to improve air bag technology.

Advanced air bag technology includes concepts such as recessed mounting, lighter air bag covers, lighter weight fabrics, and sensors to detect the weight of an occupant. NHTSA has conducted numerous public meetings to provide opportunities for open discussions and agreements concerning the advanced air bag notice. NHTSA believes

these interactions with our partners has permitted the agency's decisions to be based on the best data available. On May 12, 2000, NHTSA published a final rule that amended Standard No. 208, Occupant Crash Protection, to require that future air bags be designed to create less risk of serious air bag-induced injuries than current air bags, particularly for small-statured people and children; and to provide improved frontal crash protection for all occupants through advanced air bag technology.

During the first stage phase-in, from September 1, 2003 to August 31, 2006, increasing percentages of motor vehicles will be required to meet requirements for minimizing air bag risks, primarily by either automatically turning off the air bag in the presence of young children or deploying the air bag in a manner much less likely to cause serious or fatal injury to out-of-position occupants. During the second stage phase-in, from September 1, 2007 to August 31, 2010, test speeds for dummies will increase to simulate higher speed crashes in order to develop safer, more effective air bags in such crashes.

Programs/Products Under Development

Air Bag Education Initiative: This project will provide for the production of planners, posters, tool kits, videos, and other educational materials for the public to educate them regarding various air bag safety issues. It is anticipated that within 5 years, 70 percent of the U.S. automobile fleet will have air bags and that a large percentage of these cars will be entering the used car market. With this large influx of air bag-equipped vehicles entering into the used car market, it is crucial that NHTSA continue to produce materials that disseminate reliable information to consumers so that they can make informed, safety conscious decisions about purchasing a used vehicle equipped with an air bag. Purchasers of these used vehicles need to be educated about deactivated air bags, on/off switches, advanced air bags, vehicles with front passenger air bags, and newer vehicles with side air bags (in the front and rear seating positions). Educational materials and ongoing administrative support for periodic meetings to address these issues will be developed as part of this initiative. (Available Spring 2002)

UPCOMING EVENTS

- Child Passenger Safety Week, February 10-16, 2002 (Nationwide)
- International Child Passenger Technical Conference, April 20-24, 2002 (Sacramento, CA)
- Juvenile Products Manufacturers Association (JPMA) Conference, May 3-5, 2002 (Dallas, TX)
- *Operation ABC Mobilization*, May 20-27, 2002 (Nationwide)

- Lifesavers 20 June 9-11, 2002 (Lake Buena Vista, FL)
- *Operation ABC Mobilization*, November 24-30, 2002 (Nationwide)
- Lifesavers 21 March 9-11, 2003 (Chicago, IL)

OCCUPANT PROTECTION DIVISION STAFF

Phil Gulak, Division Chief, (202) 366-2708

Janice Hartwill-Miller, (202) 366-2684

Responsibilities: Enforcement Programs, Operation ABC Mobilizations, Section 157 Grant Programs, Community Demonstration Grant Programs, Blue Ribbon Panel-African Americans

Lori Miller, (202) 366-9835

Responsibilities: Air Bags, Child Passenger Safety- Policy and Regulations, CPS Consumer Website, The Transportation Recall Enhancement, Accountability and Documentation (TREAD), Blue Ribbon Panel- CPS, Youth Occupant Protection (8-15)

Tami Levitas, (202) 366-0652

Responsibilities: Child Passenger Safety Programs- Child Seat Installations & Use, TREAD, Booster Seat Demonstrations, Training and Education, Child Passenger Safety Legislative Issues

Ed Pacchetti, (202) 366-5198

Responsibilities: Teen Program Initiatives, Secondary Seat Belt Law State Programs, Youth Team Leader

Joseph Tanning, (202) 366-2695

Responsibilities: Injury Prevention Programs, Data Analysis, Sport Utility Vehicles, Seat Belt Legislative Issues, Public Health/Injury Prevention, Emerging Technologies

Paula Bawer (202) 366-2692

Responsibilities: Rural Pick Up Truck Driver Initiative, Rural and Pickup Truck Programs, Departmental inter-agency initiatives, Older Drivers, Public Health/Injury Prevention

Carmen Torrent (202) 366-6616

Responsibilities: Child Passenger Safety Programs, Diversity Issues, CPS Technical Support, Hispanic Bi-lingual/Cultural Support

Cynthia McNair, (202) 366-2708,

Responsibilities: Staff support, material support, inventory

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- ¹ Based on 1998 data; Traffic Safety Facts 2000, Overview DOT HS 809 329.
- ² What Do Traffic Crashes Cost? December 1996 DOT HS 808 478.
- ³ Traffic Safety Facts 2000, Occupant Protection, DOT 809 327.
- ⁴ The Presidential Initiative for Increasing Seat Belt Use Nationwide, 1997, DOT HS 808 576.
- ⁵ Traffic Safety Facts 1999, DOT 809 100; 119.
- ⁶ National Occupant Protection Use Survey (NOPUS) 2000 Controlled Intersection Study July 2001, DOT HS 809 318.
- ⁷ *Achieving a Credible Health and Safety Approach to Increasing Seat Belt Use Among African Americans*, Department of Occupational and Preventive Medicine, Meharry Medical College May 1999.
- ⁸ 2000 NOPUS and 1998 NOPUS, respectively.
- ⁹ Traffic Safety Facts 2000 DOT HS 809 327.
- ¹⁰ National Occupant Protection Use Survey (NOPUS) 2000 Controlled Intersection Study July 2001, DOT HS 809 318.
- ¹¹ Observed Shoulder Belt Use from the June 2001 Mini NOPUS, National Highway Traffic Safety Administration, August 2001, DOT HS 809 319.
- ¹² Survey of Seat Belt Use in Canada, July 2000: Table 2, TP2436, Road Safety Leaflet # RS2000-02 E, October 2000.
- ¹³ Traffic Safety Facts 2000, Occupant Protection, DOT 809 327.
- ¹⁴ June 2001 MiniNOPUS and Fall 1996 NOPUS, respectively.
- ¹⁵ National Occupant Protection Use Survey (NOPUS) 2000 Controlled Intersection Study July 2001, DOT HS 809 318.
- ¹⁶ *Achieving a Credible Health and Safety Approach to Increasing Seat Belt Use Among African Americans*, Department of Occupational and Preventive Medicine, Meharry Medical College May 1999.
- ¹⁷ Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 1998.
- ¹⁸ *Annals of Emergency Medicine*, December 2000; 36(6):589-596.
- ¹⁹ *Archives Of Pediatric & Adolescent Medicine*, 1998;152: 1209-1212.
- ²⁰ United States Census Bureau, 2000 Census data.
- ²¹ While not a Hispanic organization, the National SAFE KIDS Campaign has developed programs designed to reach the Hispanic community and is thus included.
- ²² Traffic Safety Facts 2000, Occupant Protection, DOT 809 327.
- ²³ National Occupant Protection Use Survey (NOPUS) 2000 Controlled Intersection Study July 2001, DOT HS 809 318.
- ²⁴ *Archives of Pediatric and Adolescent Medicine*, June 2000;154(6):606-9.
- ²⁵ *Pediatrics*, June 2000;105(6):1179-83
- ²⁶ *Pediatrics* 2000 Aug;106(2):E20
- ²⁷ Centers for Disease Control, 1998, National Center for Injury Prevention and Control
- ²⁸ National Occupant Protection Use Survey (NOPUS) 2000 Controlled Intersection Study July 2001, DOT HS 809 318.
- ²⁹ Crisis to Progress: 5 Years of Air Bag Safety in America, the Air Bag & Seat Belt Safety Campaign, September 2001, p. 15.