Protecting Children in Traffic

July/August 2015 • Vol. XXXIII, No. 4

KIDZ IN MOTION a Chance for Colleagues to Learn, Collaborate, and Connect

KIDZ IN MOTION returned to Orlando, Florida, in August for its 11th annual meeting. As the only national conference that focuses exclusively on CPS topics, this annual gathering of CPSTs, manufacturers, and other advocates is a unique opportunity to hone skills, network, and meet the manufacturers. As SRN's Denise Donaldson describes it, "KIDZ IN MOTION is an annual favorite for me because it consistently delivers an invigorating atmosphere that feels like equal parts CPS geek fest and reunion of like-minded friends."

This collaborative atmosphere has grown over the years, and the 2015 conference drew a near-record 258 attendees from across the country. Also on hand were 22 exhibitors with booths to display and demonstrate CPS products and services. In addition to five general sessions, 23 breakout workshops were offered, covering topics such as kids in emergency vehicles, social media and CPS, techniques for dealing with escape artists, and a writer's perspective on CR manuals. Preconference sessions, held on August 12, were titled "Knowing How to Know What We Know: Demystifying the Science of CPS" and the ever-popular "The Technician's Toolkit."

Planning is already underway for the 2016 conference, which will again be held at the Omni Orlando Resort at ChampionsGate, August 11–13, 2016. A day of preconference offerings will be held August 10. Find updates on the 2016 conference and other information at www.kidzinmotion.org.

How Current Is Your Toolkit? Need Ways to Offer CEUs?

Safe Ride News can help!
Go to www.saferidenews.com
(look under "SRN Products")



Student Transporters Gather for Annual School Bus Conference

The 22nd annual School Transportation News (STN) Expo, attended by over 1,200 school transportation professionals, was held July 25–29 in Reno, Nevada. The conference provides a great opportunity to hear from and interact with nationally recognized experts from the school bus industry during educational sessions, a trade show, and networking events. Especially informative for CPSTs are annual workshop tracks on the proper transportation of children in Head Start programs and those with special needs.

Frock, Wendy Thomas, and

Jennifer Penick.

Next year's conference, again held at the Grand Sierra Resort in Reno, Nevada, will be July 23–27. Also, be sure to check the STN website (www.stnexpo.com) for preconference offerings, such as NHTSA's standardized CPS Restraints on School Buses National Training.

Go to pages 6 and 7 for more news from this conference.

Contents

KIDZ IN MOTION, STN Expo1
Editorial: Global Standardization Needed
for Child Safety Aboard Aircraft 2
NHTSA Meeting on School Bus Safety 3
NHTSA Modifies Buy America Req3
NHTSA Releases CR Usage Report4
Commentary: NHTSA Misuse Findings 4
Motorcoach Safety Resources 6
Update on Wheelchair Securement 6
Recall: BRITAX ClickTight Convertibles . 7
IIHS Ratings on LATCH Ease of Use 8
Calendar



Denise Donaldson, Publisher & Editor

Deborah Davis Stewart, Editor Emerita

Safe Ride News is a subscriber-supported bimonthly publication for health and safety professionals and advocates. Mention of products in this newsletter does not signify a recommendation or endorsement by the publisher.

Publisher & Editor: Denise Donaldson
Editor Emerita: Deborah Davis Stewart
Graphic Design: Nancy Beaumont

Photos: Peter Schutte, BRITAX **Editorial Advisory Board:**

Marilyn Bull, MD, FAAP, Auto Safety Program, James Whitcomb Riley Hospital for Children, Indianapolis, IN

Corey Campbell, David Campbell & Associates Joseph M. Colella, Traffic Safety Projects Kathy Furneaux, Pupil Transportation Safety

Bill Hall, Highway Safety Research Center, University of North Carolina

Nancy Lang, Child Passenger Safety Consultant Miriam Manary, Senior Research Associate, Biosciences Division, University of Michigan Transportation Research Institute

Richard Stalnaker, PhD, Ristal Engineering Stephanie Tombrello, LCSW, SafetyBeltSafe U.S.A.

Audrey Eagle, Child Passenger Safety Advocate, Chrysler Group LLC

Lorrie Walker, Safe Kids Worldwide Elaine Weinstein, formerly with NTSB

© 2015 Safe Ride News Publications, LLC

This newsletter is copyrighted (ISSN #1523-8261). Articles may not be copied for distribution without permission of the publisher. If readers find a need to share this publication with others on a regular basis, please consider purchasing a discounted group subscription.

Safe Ride News Publications

PO Box 38 Edmonds, WA 98020 800-403-1424 • 425-640-5710 nancy@saferidenews.com www.saferidenews.com

Annual Subscription Rates: 1 year: \$58 • 2 years: \$106

POSTMASTER: Please send address changes to: Safe Ride News, PO Box 38 Edmonds, WA 98020

Editorial.

Best Practice for Children on Airplanes Still Seems Up in the Air!

However, an industry group takes a first step toward standardization of child safety recommendations aboard aircraft

During a busy summer of travel, I wrote several articles for this issue of SRN while waiting in airports and flying on airplanes. Like most CPSTs, I travel with an awareness of the families around me and always perk up when I see a CR. Alas, contrary to safety recommendations, I find that most CRs that make it as far as the gate are gate-checked rather than used on board. It's understandable that most parents aren't fully aware of best practice on airplanes; safety messages can be unclear and confusing in a system that allows children under age 2 to ride on a caregiver's lap. (And, let's face it, those safety messages need to be very compelling to overcome parents' understandable desire to save money by not buying a plane ticket for these infants.)

So my review of the recent recommendations from the International Air Transport Association (IATA) was especially timely, as it occurred while on a plane en route to Europe. While domestic travel is complicated enough for families, even those who understand and follow current child passenger safety recommendations, travel abroad poses additional challenges. In many cases, foreign carriers do not allow the use of CRs approved by another country, and families with the best intentions are often instructed instead to hold a baby on a lap or put the child in a seat with only a lap belt for restraint. Years ago, I experienced this myself while traveling from France with my preschooler. It was only through sheer stubbornness on my part, coupled with the good fortune that our carrier was British Airways (so I thankfully faced no language barrier), that the crew begrudgingly allowed my daughter to ride in her age-appropriate CR.

The IATA is an airline industry organization, established in 1945, that focuses on aircraft cabin safety issues, including standards, procedures, and training that promote passenger safety. Recognizing that



On a European flight this summer, a child seems to float above other passengers while napping in an airline-provided device strapped to a table that folds out from the bulkhead wall. This is just one of many solutions used by global airlines to accommodate unticketed babies. IATA seeks to harmonize safety recommendations as a first step toward improving safety for these small passengers on commercial aircraft.

the current lack of harmonized international regulations regarding CRs interferes with child safety, the organization's new document, titled "Guidance on the Safety of Infants and Children on Board," takes an initial step toward standardizing policies and practices. Its stated purpose is "further encouraging and promoting the use of approved CRs on board aircraft by creating heightened awareness on this important topic with both industry at large and members of the traveling public."

In particular, the organization seeks to create a solution for family travel that enables and promotes the safe use of CRs on board aircraft globally. The ambitious goal is a set of internationally recognized standards on the use of child restraints so that families can count on consistency in the rules as they travel between countries.

Continued, next page

2 • July/August 2015 ______ safe ride news

NHTSA Day-Long Meeting Explores Issue of Seat Belts on School Buses

On July 23, NHTSA convened an eighthour meeting to discuss the "current state of knowledge" regarding three-point belt systems (aka lap-shoulder belts) on school buses. The meeting's purpose was to identify operational and policy challenges and solutions regarding the use of lap-shoulder belts on buses and to explore innovative funding approaches that could "serve as a catalyst for change."

Much has happened in the more than 10 years since school bus seating systems

featuring lap-shoulder belts were first introduced. During that time, manufacturers have further innovated to make their seating more flexible (as all seating makers now offer systems that can be easily converted for use with or without seat belts or built-in harnesses) and to eliminate concerns regarding capacity limitations (as all now offer systems that can accommodate up to three children on one bench seat).

The full-day meeting, attended by Continued, page 8

Children on Airplanes, from p. 2

The document specifies that best practice for children is to ride in a crash-tested CR that meets the child's height and weight limitations whenever one is provided by the caregiver. When not provided, it states children under age 2 should be held on a caregiver lap, and children over age 2 should ride buckled up in their own seat. Since some countries require lap-held babies to additionally be restrained by a supplemental loop belt device, the document further specifies that cabin crew should provide the necessary training for caregivers when these are used. The document also recognizes the suitability of approved aviation-specific restraints for children. The two currently approved devices it notes are the CARES safety harness and an infant cradle system approved by some countries (outside the U.S.) for protection of newborns during turbulence.

Since the document acknowledges that some children might continue to ride unrestrained, many readers may believe these recommendations don't go far enough. However, one must understand the status quo being addressed. Currently, carriers that serve many parts of the world have not given any attention whatsoever to the subject of CRs aboard aircraft. Therefore. much of the document seeks to standardize the acknowledgement among companies from all countries that CRs are the first line for best practice aboard aircraft. No pun intended, but these are the baby steps that must be taken toward an ultimate solution. The document focuses less on details of proper use and more upon the need for proper training of crews, crew guidance

for caregivers on board, and the presence of informational cards and labels to assist passengers. It cites the U.S. Federal Aviation Administration website (www.faa. gov/passengers/fly_children) as a model in terms of providing guidance and support to those traveling with small children.

While the IATA's recommendations document is only an initial step, the organization states that it is committed to working with the International Civil Aviation Organization (ICAO) to achieve its goal of turning these recommendations into standards. Based on the tone of the document, it seems likely that the result will be very helpful in creating uniformity in the recognition of the importance of using CRs aboard aircraft and will help especially in promoting the training of crew and communication with the public. However, at this time the organization does not aim to establish a requirement that families actually use CRs while traveling on aircraft. Therefore, the need to develop public safety messages to encourage CR use when children fly will continue.

Of course, the urgency of these safety messages would have to increase substantially to overcome the significant barriers of cost and inconvenience for many families. Based on the number of children I see riding unrestrained or in a caregiver's arms, a very clear safety campaign would be needed to improve current attitudes and behavior.



NHTSA Loosens Grant Spending Restrictions

In June, NHTSA issued a public interest waiver of Buy America requirements for any manufactured product (other than an automobile) priced at \$5,000 or less. Buy America is a statutory requirement administered by the Department of Transportation (which oversees NHTSA) that "establishes a preference for domestically produced goods for use in Federally sponsored projects." The waiver allows CPS programs to use federal grant funds administered under Chapter 4 of Title 23 of the United States Code (in particular, Section 402 and 405 funds) to purchase equipment, regardless of country of origin. The waiver went into effect on July 30, 2015. No expiration date was stated.

Readers have likely noted that a number of Buy America waiver requests for the purchase of CPS equipment were submitted to NHTSA in recent months (see *SRN* Sept/Oct 2014 and March/April 2015). These waiver requests (some granted, some denied) each sought to make exceptions to allow specified items to be purchased using state highway funds, despite the fact that they were not made in the U.S.

Each time a waiver was requested, the requesting agency was required to undertake a time-consuming and resource-taxing application process in order to present the necessary evidence to justify the purchase of foreign goods. In addition, NHTSA was required to exercise due diligence for each waiver request, performing an independent review and market analysis to confirm that the item met one of the established exemption criteria (either a lack of availability domestically or a high cost differential).

In establishing this waiver, NHTSA sought to eliminate these administrative burdens, as well as to alleviate a situation that "has the effect of restricting or delaying the States' ability to acquire ancillary support systems..." It explained that the \$5,000 cap was in step with other government-wide requirements and would "balance the goals of Buy America with the life-saving goals of the State highway safety grant programs." NHTSA noted, however, that its regional administrators will, of course, continue to monitor all grant programs.

Reference: Go to www.regulations.gov and search for Docket No. NHTSA-2015-0065.

NHTSA Study on CR Use and Misuse

Released four years after data was collected, some study methodologies and findings spark concern

In May, NHTSA released the full report for the National Child Restraint Use Special Study (NCRUSS), with findings from data collected in the summer of 2011. The intention of the NCRUSS was to gauge the status of CR and booster use and misuse for children birth through age 8. It also sought to assess the attitudes and beliefs of those driving the children and measure their confidence level with regard to CR selection and installation.

A total of 4,167 vehicles were identified and checked. Fifty percent of children sampled rode in forward-facing CRs, 31 percent rode in booster seats, and 13 percent were in rear-facing CRs. A total of 6 percent of the children sampled did not use a CR or booster seat. The vast majority of children were observed sitting in the second row of the vehicle, with 37 percent of them sitting in the second row left seat (behind the driver), 12 percent in the second row center seat, and 47 percent in the second row right seat (behind the front passenger).

To determine misuse, teams of CPSTs assigned to 24 geographic areas located in 17 states were given specific instructions about how to make assessments. Since the data collection process was observational, assessments of proper use were limited to usage that was visible with the child in the CR or booster. Points that qualified as misuse were predefined by a group of CPS usage experts from within NHTSA, so the observers were instructed

to look for and record only those particular misuses. The CPSTs did not consult vehicle or CR owner's manuals when making assessments. While a CPST was observing and recording how the CR was used, a non-CPST researcher interviewed the caregiver to determine attitudes, beliefs, and confidence levels.

The findings show an overall CR and booster seat misuse rate of 46 percent. By device type, estimated misuse rates were 61 percent for forward-facing CRs, 49 percent for RF-only CRs, 44 percent for convertible CRs used rear facing, 24 percent for backless boosters, and 16 percent for highback boosters. (These findings inspired the editorial comments also found on this page.)

Those driving the children felt confident in their CR use, according to driver interviews. Nearly three-quarters (73 percent) felt either confident or very confident that the correct type of CR was used, and 83 percent were confident or very confident in the CR's installation. When asked to name all resources that were consulted to determine proper use, 61 percent said they had read the CR instructions, 29 percent said they'd read the CR labels, and 23 percent gathered information from the CR's packaging. Only 13 percent said they'd consulted the vehicle owner's manual, and 15 percent admitted that they hadn't used any resources to guide them in proper use.

Read the full report by going to http://www-nrd.nhtsa.dot.gov/Pubs/812142.pdf.

NCRUSS Study Looks at LATCH Usage

Several interesting observations in the NCRUSS study (described above) had to do with the use of LATCH, when available. For instance, it found a much higher misuse rate when a CR was installed with a seat belt rather than the LA attachment (80 percent misuse rate for rear-facing CRs that were installed with a seat belt versus 20 percent for those CRs installed using the LA attachment, and 87 percent misuse rate for forward-facing CRs installed using a seat belt versus 34 percent for those installed

with the LA attachment and tether).

SRN will cover these observations about the use and misuse of LATCH in more detail in a future issue. Of course, it must be noted that these findings are subject to many of the methodology limitations described on this and the next page. However, they do provide a glimpse into LATCH use that is a welcome update to NHTSA's prior LATCH data that was gathered over a decade ago, just a few years after LATCH was introduced.

Editorial Comments on the NCRUSS Misuse Findings

SRN values the importance of understanding CPS misuse levels in actual practice and appreciates efforts to study this topic. However, we were surprised by some of the findings of the recent NCRUSS (see article on this page), especially the study's overall CR and booster misuse rate of 46 percent.

CPSTs could simply be cheered by this new information, as this level of misuse is far lower than what is commonly seen anecdotally by CPSTs. However, we might not want to celebrate so soon. After reviewing the report, we understand how the researchers arrived at this figure, but question the appropriateness of the methodology used. It is the opinion of SRN, as well as many colleagues we've talked to in the field, that, unfortunately, a 46 percent overall misuse rate significantly understates the current situation. Therefore, we hope that the results of this study will be used if at all—only in context and in situations in which the study's significant limitations are fully clarified.

Many readers will likely agree that an overall misuse figure of 46 percent seems strikingly low compared to our experience in the field, so it is natural that we questioned how this figure was derived. Following are just a few of the aspects of the research that concern us:

- The overall misuse rate published in the report includes both CRs and boosters. Since boosters are simpler to use, they naturally have lower rates of misuse (in this study, 16 percent for highback and 24 percent for backless). Therefore, we don't feel it is appropriate to promote a single misuse figure that includes boosters. Since boosters account for nearly a third of the observations in this study, they weigh heavily in any of the statistical results in which they are included.
- Data collectors were instructed to base their assessments on observation, yet the findings include conclusions that would be difficult or impossible to draw accurately from visual inspection only, such as CR tightness and harness slack. Given the predominantly observational methods used, we are surprised that the report claims: "Data collection involved physical measurements providing

Continued, next page

4 • July/August 2015 safe ride news

Comments on NCRUSS, from p. 4



As CPSTs know, misuse is not always easy to see through simple observation. This danger-ously misrouted LATCH strap, found during a thorough inspection at a real-life checkup event, would not have been captured using NCRUSS data collection procedures.

objective information on issues such as the amount of slack of the harness straps to the lateral movement of an installed car seat at its belt path." We feel this implies that data collectors conducted a much more hands-on, thorough inspection of usage than was actually the case.

- Many potential (and potentially serious) misuses were not included in the study since, as CPSTs know, some aspects of misuse are difficult or impossible to determine by visual inspection with the CR installed and the child in the CR. For instance, judgments about whether the harness was twisted or misrouted reflected only the webbing at the front of the CR (and, even at that, only webbing that is not obscured by clothing, as is often the case across a child's hips). Misrouting of installation belts was considered a misuse for convertible CRs (on which the installation strap can be routed through either of two possible paths), but considered N/A for RF-only CRs (presumably due to these having only one belt path), despite the fact that caregivers do sometimes misroute belts on RF-only CRs (see photo). Because observers couldn't detach CR shells from bases, it was impossible to determine exactly how the installation belt (seat belt or LA strap) was routed. Furthermore, accurate determination of use of built-in lockoffs would have been impossible to judge on many models.
- The study defined as misuse only those errors that were very serious, allowing many errors (including many the CPST

We hope that the results of this study will be used—if at all—only in context and in situations in which the study's significant limitations are fully clarified.

curriculum identifies as misuse) to pass as proper use. One example is that the position of the harness at the shoulder had to be off by 2 inches or more to be deemed improper use. And, although tether use data was collected, failure to use the tether on a forward-facing CR was not included among instances of misuse.

- Owner's manuals were not consulted.
 While we understand the necessity of
 this for pragmatic reasons, determining
 proper use without consulting the manu als is difficult and inappropriate, even for
 a trained CPST (who is, after all, taught
 to always consult manuals). Today's vehicle and CR models have so many usage
 variations that it is impossible to general ize or to memorize them all.
- Another observation has more to do with the study's timing than methodology. Since study planning and data collection took place in early- to mid-2011, at the time of major updates to the CR selection guidelines promoted by both the American Academy of Pediatrics and NHTSA, applying findings to today's expectations is problematic. For instance, the study classified as "correct" the practice of allowing children as young as 12 months old to ride facing forward. In the years since the study was conducted, the practice of facing a 1-year-old forward has become far less acceptable. In fact, Dorel Juvenile, the largest CR manufacturer, now states on its convertible CR labels that forward-facing use may begin only after a child has turned 2.

Why analyze the study methodology so critically? Well, an overall misuse rate, especially one documented by NHTSA in a major, nationally representative study, can be a very important statistic. Going forward, it could be referred to for everything from media reports to making important policy decisions. Therefore, we feel that people ought to be aware of the statistic's shortcomings before making decisions based on it. Of par-

ticular concern is the potential effect that this new, low rate will have on the public and on policymakers.

For instance, how will caregivers react to media reports of this relatively low misuse rate, especially when this and other studies routinely show that most caregivers already have an inflated level of confidence in their own CR use? And, since data are the basis of budget and program planning, how will NHTSA and others who fund CPS programs react? We are concerned that reports of an unrealistically low misuse rate will be misconstrued, lessening support for CPS programs.

We also feel that the findings could be misleading if used for comparison purposes. For decades, we in the field have referenced studies from NHTSA and other organizations, such as Safe Kids, that found misuse rates of 75 percent or higher, and this has more or less matched our experience. Although it is only natural for people to compare the new misuse rate to these higher figures derived through earlier research, we (sadly) think that this kind of comparison would lead to false conclusions about the actual change in misuse over time.

So, while we appreciate that this study is clear about its limitations, and understand that it focuses on the most serious forms of misuse, we're concerned that what will ultimately stand out to most people is only the bottom-line misuse figure. We are concerned that, when this figure is referenced for purposes that don't also clarify the source (as is bound to happen), it could potentially do more harm than good.

It has been a few months now since the NCRUSS report was released, and we have been relieved to see that the findings have not been widely publicized. However, since it is a major, nationally representative survey on this subject, it will no doubt be referenced for a variety of purposes in the future. We hope that CPSTs will review the NCRUSS and consider the concerns expressed here when/if they encounter people who cite this statistic in the coming years.

Share Your Insights

Since many of the people NHTSA hired to collect data were CPSTs, we know some *SRN* readers may have been involved in this study. We welcome your input in reaction to our comments and concerns. To share your thoughts, email me at *denise@saferidenews.com*.

Motorcoach ______Wheelchairs

The articles on this page summarize workshops presented in July at the School Transportation News Expo. The annual conference provides an excellent opportunity for CPSTs to learn more about the particular CPS challenges that exist on school buses, and it also offers a chance to take NHTSA's standardized training for use of child safety restraint systems on school buses. Next year's conference will be held in Reno, Nevada, July 23–27. Find information at www.stnexpo.com.

Identifying Safe Motorcoach Options for Students and Others

Derek Graham, North Carolina state pupil transportation director, presented information on motorcoach safety for children. A motorcoach is a large, non-school bus that does not serve fixed routes (like city transit), but instead travels longer distances, usually on highways. While motorcoaches have a relatively good safety record compared to most other vehicle types, they do not have many of the safety features required of school buses. Nonetheless, groups of children frequently use these types of buses for field trips and sports outings, especially when the trip covers long distances.

Prompted by what was learned from investigations of crashes involving motor-coaches in recent years, the Federal Motor Carrier Safety Administration (FMCSA), a division of the U.S. Department of Transportation that oversees large trucks and buses, will require all new motorcoaches to have lap-shoulder belts as of November 2016 (see *SRN* July/August 2009 and Nov/Dec 2013). Despite this official deadline, virtually all bus makers have complied early by providing lap-shoulder belts on new buses since 2013, so these newer buses certainly have an added level of safety.

While equipment improvements such as these are important, many other factors contribute to overall carrier safety, including driver training, fitness, consecutive hours behind the wheel, and fleet maintenance. Graham described that, some years ago, he realized that whenever a school group in his state needed a motorcoach, the responsibility to initiate and make these arrangements typically fell to the trip coordinator (such as a teacher or a coach). This completely informal process, which is most likely common to districts across the country, fails to ensure that the event coordinator is guided toward hiring a company that has a proven safety record.

The FMCSA hopes to rectify this haphazard approach by establishing recommended procedures and a program called "Look Before You Book." A proper procedure involves:

- Selecting carriers only from a list of preapproved companies that is maintained and updated annually by an organization like the state board of education.
- Developing a contract for each specific trip that specifies details, such as the itinerary, number of drivers needed for the length of trip, and fees. It also should prohibit the subcontracting of contracted services
- Requiring a "departure walk-through" procedure, including a pretrip maintenance check by the driver or mechanic, and a meeting between the driver and event coordinator to check over credentials (such as the driver's license and DOT medical card) and discuss other details. The student passengers also should be briefed on safety features, just as they would on a school bus.

The FMCSA "Look Before You Book" program is a resource to assist with developing a list of approved carriers. By going to http:// www.fmcsa.dot.gov or downloading the free SaferBus app from a phone's app provider, any citizen can look up various aspects of a carrier's safety record, including incident history, hours-of-service compliance record, driver fitness, controlled substance/alcohol violations, and the vehicle maintenance record. A free PowerPoint presentation is also available at the site. In addition, the state of North Carolina shares two videos at www.ncbussafety.org/motorcoach, one depicting the pretrip briefing with student riders and another that shows the pretrip inspection and coordinator/driver meeting. (Note: These videos were made a number of years ago, so while they continue to have good information, they do not refer to some of the very latest developments, such as the lap-shoulder belts that are now required on motorcoaches by regulation.)

Challenges Continue for Proper Wheelchair Securement

The main takeaway message from a workshop on wheelchair securement was that, despite the fact that it has been three years since the upgrade of voluntary standards for transit-worthy wheelchairs, the manufacturers of wheelchairs have done very little to develop and market compliant products. Presenter Sue Shutrump of Trumbull County Educational Service Center in Ohio urged stakeholders, including special educators, therapists/other medical professionals, and parents, to let manufacturers know that upgraded, compliant systems are needed in the field.

Over the years, SRN has run many articles describing the voluntary standards that exist for wheelchairs and their securement. Details are also included in our publication. The School Bus Safety Handbook (available at www.saferidenews.com). In a nutshell, since 1996, wheelchair tiedown systems have generally complied with a voluntary standard developed by the Society of Automotive Engineers (J2249) that specifies how strong a system must be. However, tiedowns can do only so much if the wheelchair itself is not crashworthy. Therefore. a voluntary standard for wheelchair crashworthiness, called WC 19, was introduced in 2000, and over the years, some wheelchair models have been made that comply (or, at least, offer the option for compliance). Now, people who need wheelchairs have the option of using a device that is not

Continued, next page



Wheelchairs for children who weigh 50 pounds or less that meet today's upgraded version of WC 19 must have the option for purchasers to equip the wheelchair with a load-bearing, crash-tested five-point harness, like the one shown.

6 • July/August 2015 safe ride news

Wheelchairs ———Recalls

Wheelchairs, from p. 6



Wheelchairs bearing this symbol have been tested to comply with the upgraded version of WC 19, the voluntary standard for transit-ready wheelchairs.

a weak link in the proper-securement system.

However, after 2000 it became clear that a challenge remained: the proper use of the lap-shoulder belt occupant restraint system. Occupant restraints tended to be difficult to use for many reasons, including the fact that wheelchair designs often hindered or prevented routing the belts for proper occupant fit. Even when proper routing was possible, extra time was required, and the driver or attendant strapping in the occupant often had to touch or even jostle the occupant in the process, causing concern over potential violation of the occupant's personal space.

Finally, in 2012, a major upgrade to WC 19 was completed. To be compliant with the revised standard, the wheelchair now has to receive a high rating (either "good" or "acceptable") for occupant fit and ease of use with regard to use of the vehicleanchored lap-shoulder belt. Additionally, the purchaser of a compliant wheelchair has to be given the option of adding an integrated, load-bearing lap belt to which a shoulder strap anchored to the sidewall of the bus can be easily attached, or, if the wheelchair is marketed for children weighing 50 pounds or less, a crashworthy fivepoint harness must be offered. Such systems have been shown to be much easier to use correctly for every ride. Today, fully compliant WC 19 wheelchairs including either of these features are marked by the symbol shown above. Users must check that the symbol is present to be sure any belts or harnesses present are indeed load bearing and not intended only for postural purposes. (Note: If a fully compliant WC 19 wheelchair with an integrated lap belt or five-point harness is used, the four tiedowns that secure the wheelchair to the vehicle also must meet an upgraded version of J2249, called WC 18. Tiedown manufacturers have already developed these and are promoting their use.)

Shutrump expressed concern, however, that these new aspects of WC 19 regarding built-in occupant restraints have not caught on. In a classic Catch-22 situation, the public has not demanded these features, and therefore, wheelchair manufacturers have not committed resources toward their development or promotion. Without the development and promotion of the features, however, the public is largely unaware of their potential benefits. She theorized that a simple lack of communication might account for the low public awareness. She said it is also possible that ignorance of the facts regarding misuse might be creating apathy toward a solution. After all, if people are not inconvenienced by the status quo because they are simply misusing the existing occupant restraint systems, it is much more difficult to engage them in advocating for improvement.

Shutrump urged CPSTs who work with families with a child who must be transported in a wheelchair, whether in a passenger vehicle or school bus, to guide caregivers to helpful resources so they can advocate for their child. A very good place to start is the website www.travelsafer.org, which was developed by the University of Michigan and gives a layperson's description of the standards and other helpful information. More details, including a list of crash-tested wheelchair models, can be found at http:// wc-transportation-safety.umtri.umich.edu. These sites are resources that should also be shared with key staff working for local transportation providers.

Also, families and transporters should be taught that anyone who uses a wheel-chair is better off if transferred to sit in an appropriate vehicle restraint system for transit, rather than using the wheelchair, whenever possible. Therefore, this is the first option that should be considered when devising a transportation plan for a child who uses a wheelchair, and should be selected whenever medically feasible and practical for on-bus personnel to manage.

BRITAX Recalls Convertible CRs with ClickTight

Models: Advocate ClickTight, Boulevard ClickTight, and Marathon ClickTight

Model Numbers:

<u>USA</u>: E9LT95Q, E9LT95Z, E9LT95N, E1A025Q, E9LT86F, E1A135Q, E9LT86G, E9LT85Q, E9LT86A, E9LT86H, E9LT85S, E1A015Q, E1A016A, E1A016H, E1A116L, E9LT76P, E9LT71Q, E9LT76N, E9LT76B, E9LT75R, E9LT76L, E1A006B, E1A005R, EXA116L Canada: E9LV31Q, E9LV35R, E9LV36B, E0LV36L, E9LV36L, E9LV36B, E9LV36L, E9LV36L, E9LV36L, E9LV36B, E9LV36L, E9LV36L

<u>Canada</u>: E9LV31Q, E9LV35R, E9LV36B, E9LV36L, E9LV36N, E9LV45Q, E9LV45S, E9LV46A, E9LV46H, E9LV55N, E9LV55Q, E9LV55Z

Dates: August 1, 2014 (beginning of production) through July 29, 2015

Problem: The red harness-adjuster button may remain down (in the "release" position) after the harness is tightened, allowing the harness to loosen.

Remedy: BRITAX mailed a remedy kit to registered owners in mid-August. Unregistered owners should contact BRITAX to register and receive the kit. The kit includes a nontoxic lubricant, a label indicating that the remedy has been completed, and an instruction sheet for applying the lubricant.

Until the recall kit arrives, continue to use the CR if the buckled harness will not release slack when pulled at the shoulders. If slack does release, BRITAX recommends using a different CR until the recall issue is remedied. (Note: If a harness does not release slack during this test, continued use of the CR will not cause the recall issue to eventually develop.)

In September, BRITAX will offer kits for CPSTs to have on hand at events and fitting stations. To order, go to the BRITAX extranet page that can be accessed through one's certification profile at http://cert.safekids.org.

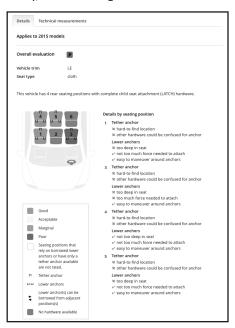
Contact: Call (888) 427-4829, email *Britax*. *Recall@britax.com*, or go to *www.BritaxClickTightConvertibleRecall.com*.



safe ride news July/August 2015 • 7

IIHS Tool Now Includes LATCH Information

Do people ask you for input when seeking a safe car to purchase for their family? Do you ever get comments from vehicle owners regarding the use of LATCH hardware? As CPSTs, we have long been able to point to crash test ratings conducted by NHTSA and the Insurance Institute for Highway Safety (IIHS) to provide helpful guidance on a vehicle's crash performance. But crashworthiness, while critical, is not the only factor of importance to families. Once the vehicle is actually put to use for a family's day-to-day needs, the more mundane issue of CR ease of use suddenly takes on much greater importance. And, unfortunately, there is no guaranteed correlation



Below: A screenshot of the Toyota Sienna's ratings page from the IIHS website suggests that the minivan would perform well in a crash, but might frustrate those who try to use its LATCH system. **Above:** The details page clarifies why the Sienna was given a poor rating.

between a vehicle's crashworthiness and the ease with which one can install a CR in it.

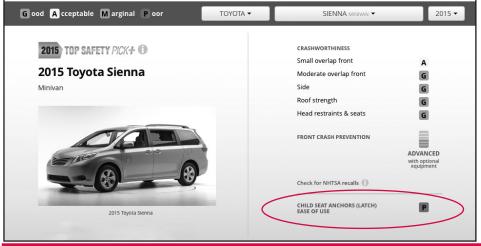
Of course, the hope was that, by now, the presence of LATCH would make CR installation more uniform among all vehicles, but this has not come to pass. One of the many reasons that reality has failed to meet expectations is that LATCH hardware varies in its placement, accessibility, and labeling among various vehicles, and often excessive force is needed to attach a CR properly. These key aspects of LATCH usability have been studied by the IIHS and the University of Michigan Transportation Research Institute over the past several years.

As reported in our last issue, the IIHS now has used these key aspects of LATCH usability to rate 102 vehicles for LATCH ease of use. For each vehicle that's rated, the rating has been added to the bottom of the same page that lists the vehicle's crash test rating, making it readily accessible to the public. (For example, see the screenshot below of the entry for the Toyota Sienna, which scored Acceptable and Good in crash and other ratings, yet scored a P for Poor for LATCH ease of use.)

The website also explains how the IIHS arrived at the ratings, providing general background information as well as detail for each rated vehicle. For instance, clicking on a menu button titled "Child Seat Anchors (LATCH)" on the Sienna's page brings up the complete model details (left).

While there are many ways that CPSTs might find this information useful, one hopes that these new ratings will, more importantly, alert vehicle manufacturers to LATCH features that should be improved through redesign. This will largely depend on the industry's perception of the public's reaction to the ratings.

To find the ratings, go to www.iihs.org and look under the Ratings tab.



Calendar

ABC Kids Expo

October 18–21, 2015, Las Vegas, Nevada www.theabcshow.com

Assoc. for the Advancement of Automotive Medicine Scientific Conference October 3–7, 2015
Philadelphia, Pennsylvania
www.aaam.org

National Orgs. for Youth Safety (NOYS) Annual Teen Safe Driving Summit October 19, 2015, Alexandria, Virginia www.noys.org

National Association for Pupil Transportation (NAPT) Annual Summit November 6–10, 2015, Richmond, Virginia http://naptonline.org/summit

Upcoming Focus Weeks

2015 CPS Week—September 13–19 **Seat Check Saturday**—September 19

National Teen Driver Safety Week— October 18–24

School Bus, from p. 3

NHTSA director Mark Rosekind, signals the agency's interest in taking a fresh look at this subject, and it was an opportunity to update policymakers and others on factual information regarding the value of lapshoulder belts on today's school buses. This often required debunking persistent arguments against lap-shoulder belt use that have either become moot due to equipment improvements or have been shown to be unfounded through actual experience. For instance, through school transportation directors' testimony, it was noted that there was a significant overall improvement in rider behavior (documented by a sharp decline in disciplinary reports) on buses with lap-shoulder belts, which in turn lessened driver distraction. This finding rebuts a common fear that belts could increase behavior issues (for instance, if used as weapons). Also reported was evidence that the use of seat belts promoted more orderly and effective emergency evacuation, rather than contributing to evacuation difficulties, as some had posited.

Video recordings of the day's meeting, as well as PowerPoint presentations and presenter biographies, can be found at http://www.nhtsa.gov/nhtsa/symposiums/july2015/index.html.

8 • July/August 2015 safe ride news