

September 30, 2009

Below is my report on the 5<sup>th</sup> Annual Kidz in Motion Conference in Fort Worth, Texas – August 29 – 31, 2009. There were sessions covering a wide range of topics related to child passenger safety. Three sessions were held simultaneously so no one was able to attend all programs. I have divided the report into two sections. Section I covers the sessions I attended and section II provides information on the sessions I was unable to attend. These sessions are on the CD so anyone interested can review the information supplied by the presenters.

## Section I

- Stocking the Toolkit (1)
- Interaction/Child and Auto Restraints \*
- Manufacturer's Panel 1 (2A), (2B PDF)
- Understanding FMVSS 213 Labeling Requirements (3 PDF)
- Non-LATCH Compatibility Issues (4)
- Manufacturer's Panel 2 \*
- LATCH Update 2009 (5 PDF)
- You Take The Call: Be a CRS Manufacturer \*
- Car Seat Manufacturing 201 \*
- Buck for a Buckle: Safe Tweens \*
- Hot Topics: Roundtable (6 PDF)
- Be Green: Recycling Car Seats Part 2 (7)
- CPS at AAP (8)

() = Presentation listed on CD are PowerPoint unless otherwise indicated.

\* = Not on CD

## Section II

- How much is your child worth (9)
- What Will Work (10)
- Everybody wants to know (11)
- How and what to do/Inspection Station (12)
- CPS Outreach to the NICU (13)
- A seat belt is a terrible thing to waste (14)
- Portland fit station collaboration (15)
- Passenger safety in our school buses (16)
- Right seat, right fit. Why won't they stay? (17)

In addition to the regular conference, there was a one day pre-conference session on Transporting Safe with an Early Start addressing the transportation needs of the NICU patient. NICU is Neo-natal Intensive Care Unit. Pre-conference sessions on the CD are:

- Hospital discharge CPS policy project (18), (19 PDF)
- Hospital discharge of high risk neonates (20)

## Section I details:

Stocking the Toolkit (1)

Presenters: from the Washington State Safety Restraint Coalition.

A review of the Code of Conduct and Commitment for CPST's and CPSTI's was presented. The code includes providing the highest level of service, being polite and professional, equal service to all, respecting the right of parents to make decisions for their children, and being a

role model for safety. We also need to take our training seriously, respect our colleagues but not be afraid to point out, in a professional manor, mistakes they may make. We also need to accept constructive suggestions that will improve our own actions.

A quick reference guide to FMVS Standards and Regulations was provided. This is a good review of the standards applicable to vehicles, CRS and safety belt systems. It is DOT HS 805 878 publication.

Items recommended to have available at all CPS inspections include the child restraint manual CD from Safety Belt Safe. I purchased the latest edition. Also, techs should have their training manuals, a current recall list and a copy of the LATCH manual. When parents make appointments for checkups they should be reminded to bring their vehicle and car seat owners manuals. The session also reminded us that although the new recommendation of remaining rear-facing until the second birthday is not a formal AAP policy, it is highly recommended. Tell parents that children are 5 times safer riding rear facing up to age 2. Another reminder was "when is a 60 lb child the same as a baby elephant?' In a 30 mph crash.

One of the aids the presenters use is a PVE pipe assembly that is 4' 9" that children can walk under. It eliminates the need for a tape measure.

Interaction Between Child restraint and Auto Restraint Systems. Richard Stalnaker

The child restraint seat has influenced the automobile's restraint system beginning with the first CRS in 1921 and continuing through the LATCH system in 2003. The presentation discussed this relationship, from the reasoning behind the invention of booster seats to why the American automobile was slow in introducing the rear center seat 3-point belt. From the first safety belt to the dual-depth airbags in 2006, the conflict has been between adult comfort, safety and CRS security in the automobile. This was a very interesting presentation. It is unfortunate that the presentation was not recorded.

Manufacturer's Panel 1

The participants were Chicco, Dorel, Evenflo, Huggable Images, Mia Moda, Safe Ride News and Volkswagen. Grandma Knows was scheduled to attend but did not. It was indicated that one of their products has received NHTSA approval but it was not clear which one. All the CRS manufacturers are doing more side impact testing to improve their seats.

Chicco, Julie Robins: Chicco will allow some non-regulated products. They want feedback from techs.

Dorel, Bryan M.: New seat 4-35 lbs. Safety Complete Air is up to 40 lb rear facing and 50 lb forward facing with a \$250 price tag.

Evenflo, Debbie Myers: Ninety percent of their workers engaged in car seats are technicians. A new seat, Generations, has a 65 lb harness. The Symphony has the Sure-Latch. We need to check stores to get a good look at one.

Huggable Images, Ira Craig: They discussed the various sizes including the new preemie doll (2A).

Mia Moda, C. Patten: They have a Viva Supreme- 4 to 22lbs with a 4 to 12 lb insert. The Viva Piccoling goes from 3 to 22 lbs.

Safe Ride News, Deborah Stewart: Safe Ride News presented info on the various publications they have. Their presentation is on the CD (2B PDF).

Volkswagen, Barbara Birkenshaw: She discussed engine breaking on new models. I have requested more information.

Understanding FMVSS 213 Labeling Requirements (3 PDF)

Presenter: Sarah Tilton, Britax

Data sources that influence labeling are FMVSS 213, seat design, Ease of Use rating system, consumers and advocates. There is confusion everywhere in 213 requirements. One example is the statement requirement, "Use only in a rear facing position when using it with an infant weighing less than 20 pounds. This sounds like the seat is rated only to 20 pounds. 213 does not use the term LATCH anywhere. It uses the terms, "top anchorage strap" and "vehicle's child restraint anchorage system, if available, or with a vehicle belt. The presentation shows the dilemma the manufacturer faces in following 213 and trying to make the labels understandable by parents. This would be a worthwhile presentation for all techs.

Non-LATCH Compatibility Issues (4)

Presented by Denise Donaldson, Safe Ride News

A number of conditions arise requiring non-LATCH installation of child restraints (CR). One is the need for multiple seats in a single vehicle seating row. Another is the use of CRs with children weighing more than the lower anchor limits (40-48 lbs). There is a serious concern about the sunset of the lockability standard for vehicle belts in LATCH positions, which is scheduled for 9/1/2012. NHTSA has been petitioned to rescind that sunset but there is no decision yet. Other concerns include the new head restraint standard requiring a forward tilt of the restraint and problems removing it in order to correctly install a CR. The 2009 Seattle Auto Show included vehicles with forward mounted seat belts with some being asymmetrical. There were also more rigid buckle stalks and many mounted at a 30 to 45 degree angle making it difficult to get a good secure installation of CRs. Center rear shoulder belts were mounted from ceilings and walls in addition to vehicle seats. Fold down arm rests were in 80% of the vehicles. Vehicle categories that fall outside FMVSS requirements are a concern. NHTSA has denied a petition to create a new Medium Speed Vehicle (MSV) category so the states will have to deal with safety regulations. The MSV has speed limits between 30 and 35 mph.

Manufacturer's Panel 2

The participants were: Sunshine Kids, Combe, Graco, Merritt Manufacturing, Recaro, Britax, Beam's Belts, and SafetyBeltSafe USA.

Sunshine Kids, Russ Berger: Radian is going to 45 lb rear facing, with more info to be provided later.

Combe, Vera Fullaway: Zeus Turn will now be Zeus 360 with rear facing weight 5 to 33 lbs. It turns from rear to forward without removing from the vehicle. The Coccoro convertible is now 5 to 33 lbs and will be 3 to 33 lbs with 20 to 40 lbs forward. The Shuttle 33 must use the base for weights 22 to 33 lbs.

Graco, Carol Helminski: They have the Snug Ride 35. They are side impact testing. The Elite is 20 to 100 lbs and the Turbo Booster is 3 to 10 years and 30 to 100 lbs.

Merritt Manufacturing, Shayne Merritt: The Rosevelt 35 to 115 lbs and 33.5 to 62 inches height. The seat has a Velcro head restraint that can be used with a head cap to help children with poor head control. Also available are a bilateral hip adjuster system for better fit and extra foam padding to position behind a child's back. The Churchill is a backless booster 65 to 150 lbs with a height from 4 to 6 feet. It uses lower anchors to restrain the base. Options include a vest for torso support, a hip inflection insert, and a padded support between the legs called a Stay-Put Pommel.

Recaro, Kristen Valentine: The German based company has the Signo G2 convertible with 5 to 35 rear facing and up to 70 forward facing. They also have the Como G2 and the Young Sport forward facing combination 40 lbs harnessed and 80 lbs booster. Their Vivo booster for 3 to 12 year olds goes 30 to 100 lbs.

Britax, Sarah Tilton: Britax does not allow non-regulated products. Their harness buckle is now double click (one click for each latch insertion). They have a new Click & Safe harness indicator. The New Advocate has side impact air cushions near the head area and the Chaperon infant is 4 to 30 lbs with a low birth weight foam insert. The Parkway SG booster is 40 to 120 lbs with a crotch attachment to the lap belt to reduce the possibility of the lap belt riding up on the child. The Britax Advocate Support can be reached through the Safe Kids web site as well as the Britax direct number.

Beams Belts is covered in a later section.

SafetyBeltSafe USA (SBS), Stephanie Tombrello: SBS provides the CR manufacturer's instruction CD under funding from NHTSA. They also have literature available and have an agreement with Toyota concerning tether anchor installations. Contact SBS for a voucher and get an anchor installed in your Toyota for \$5. Contact [Carseat.org](http://Carseat.org) for information.

Latch Update 2009 (5 PDF)

Presenters: Deborah Stewart, Safe Ride News and Mary Anderson CPSTI Team Ohio.

The NHTSA study in 2006 showed lower anchors (LA) use at 60% and tether anchor (TA) use at 55%. Of those who used the LATCH system 75% preferred it to vehicle belts. Data from the the Children's Hospital of Philadelphia (CHOP) and State Farm crash data in 2007 showed LA usage of 43.2% and TA usage of 28.7%. It is not clear if the decline is actual or the result of two very different methods of accumulating the data. CHOP also tested LA installations with 3", 7" and 12" slack in the lower anchor attachments. They found that use of the tether compensated greatly for the loose lower attachments. The misuses found included the use of both LA and vehicle belts together, wrong belt path, incorrect threading of LA attachments, incorrect tethering and incorrect use of attachments. These are the same errors we see in AZ.

Deborah spoke of the need for updating the LATCH manual every other year. There is a great deal of new information in each issue that is not found in either vehicle or CR manuals. Ten companies now allow LA or TA use with boosters. High weight harness systems are now in 19 retail models and some require TAs over 50 lbs. There have been changes in the use of non standard LA spacing in the center rear seating position. On Ford vehicles through the 2008 model year only specific models allow non standard spacing use. Beginning with the 2009 model year all models allow non standard spacing use as long as the spacing is 11" to 20" and allowed by the CR manufacturer. Twelve vehicle brands still do not provide a LA maximum weight limit.

The LATCH Working Group has developed standards for the identification of LA and TA locations. This is a vehicle manufacturer's agreement, not a NHTSA requirement. Beginning not later than 1/1/2010 the round dot with the LA symbol will be used for all hidden lower anchors and one of two similar symbols will be used for TAs. More boosters are allowing use of LAs. Use of both LA and vehicle belts is allowed only if both vehicle and CR manufacturers allow. Buckling the vehicle belt behind the CR to prevent entanglement is allowed. Some manufacturers allow passing the vehicle belt through the belt path of the CR and buckling as long as the belt is not tightened. This is going to be an ongoing development. We must make parents aware of the possible situation during CPS checkups

#### You Take The Call, Be a CR Manufacturer

Several CR manufacturers' representatives participated. They read actual calls received from customers and called on attendees to provide the answer to those questions. It was interesting to hear the questions and most attendees gave very good responses.

#### Car Seat Manufacturing 201, Bill Forbes, Evenflo

Evenflo provided all the parts for five car seats. An assembly line was set up with 5 attendees being the workers. Each was given instructions for the parts of the assembly they were responsible for. The 5 stages were:

1. Attach the labels to the shell and install the harness adjuster A-Lock with a screw.
2. Install the lower attachment and tether belts, hooking the LA clips to storage places on the shell and storing the manual in the shell.
3. Installing the padding.
4. Installing the harness system.
5. Placing the finished seat in a shipping bag.

It took us over 15 minutes to complete while we were told that the factory workers complete about 20 in that time. They are much better trained. The finished seats were marked with a label "WARNING Product Sample/Prototype Do Not Use since the seat was not factory assembled. The seat like many from Dorel does not have a very good manual storage location. Each of the "workers" received one of the seats. Our' will be in the SK trailer.

#### Buck for a Buckle, Safe Tweens

Presenter: Jeanne Cosgrove, Safe Kids Clark Co.

This program in Nevada addressed 8 to 12 year olds. Thirty five percent were riding in the front seat and half did not always buckle up. They did 270 events where they spoke with the kids and parents. Kids buckled in the rear seats received a dollar bill. I have emailed the presenter for additional information.

#### Hot Topics: Roundtable (6 PDF)

Leaders: Stephany Tombrello & Deborah Stewart

Topics:

NHTSA Rule Making on: Car manufacturer's developing seat recommendations; Side impact test regulations; Regulations based on Cameron Gulbransen Kids Transportation Act of 2007.

Updates on: Lockability of shoulder-lap belts; Entanglement issues; Anchor weight limits; Using lower anchors and vehicle belts together; Length of tether straps; Impact of

more forward facing high weight harness seats.

What's happening in the real world: Do we need to update our checkup forms, How do we deal with non-regulated devices?, Do they reflect the public's need?, Should manufacturers address these issues?, More recycling of safety seats.

Other issues: Education vs. "Fitting Stations"; Legislation – age/height for boosters vs. child's fit in vehicle belts.

Be Green: Recycling Car Seats (7)

Presenter: Tamara Franks, The Children's Hospital at Legacy Emanuel

Oregon is going Green. There is public interest in recycling. Over 2600 seats have been recycled, diverting materials from landfills. They recycle metal, hard foam, paper and plastic. They do not recycle mixed metal/plastic parts, fabric, soft foam or webbing. They started with four dropoff stations and have had growing pains. They now have more locations in Oregon and Washington. They now ask the public to remove the fabric and harnesses before drop off.

CPS at AAP (8)

Presenter: Rebecca Levin-Goodwin

The three types of information from the AAP are Policy Statements, Clinical Reports and Technical Reports. Policy Statements are organizational principals. They take years to issue or modify and are not considered a standards of care. Clinical Reports provide guidance for the clinician in rendering pediatric care. Technical Reports provide literature reviews and data analysis. The results may someday be included in policy statements. The recent information on keeping infants rear facing until two years old is a technical report. It is what we, as technicians, want to discuss with parents but not indicate that it is an AAP policy recommendation. It is based on analysis of actual crash data.

The AAP is trying a new approach to better engage their members. Pediatricians need to know two things. 1) Provide CPS education based on developmental milestones and 2) Know where to refer patients for more information. (That's us)

Section II details:

How much is your child worth. (9)

Presenters were Kim Wikschek & Brook Watson, Chicago Children's Hospital

This is a for-profit program that provides education to expectant parents. There is no information on the program's actual cost or revenues but it is an interesting idea.

What will work. (10)

Presenter was Tamara Franks, The Children's Hospital at Legacy Emanuel

Deciding between regular safety seats and specialized restraints is a challenge. Five case studies showing how seat decisions were made based on the child's condition.

Everybody wants to know. (11)

Presenter: Sue Emory, WA Safety Restraint Coalition

Questions parents are likely to ask. We should know the answers.

How & What to do: Inspection station. (12)

Presenter: Mari Hodges, Texas Children's Center for Childhood Injury Prevention

The greater Houston area has developed a permanent inspection station network. The presentation reviews the development of the network and training and maintaining the technicians, instructors and senior checkers to make the network work. In 2007-08 they checked over 4500 seats and supplied almost 1200 seats.

CPS outreach to the NICU. (13)

Presenter: Mary Kay Johnson, The Children's Hospital at Legacy Emanuel

A program providing education for parents including selection, direction, location and installation. They also provide instruction for NICU staff.

Seat belts are a terrible thing to waste. (14)

Presenter: Mike Bosley, Beam's Seat Belts

Although this is a promo for Beam's, there are interesting facts about safety systems. None of the enclosed videos work. The video files are not on the CD.

Portland fitting station. (15)

Presenter: Ruth Harshfield, ACTS Oregon

The development of a program to meet a county wide need for CPS.

Passenger safety in school buses. (16)

Presenter: Charlie Vits, IMMI

This is partly a information promo for Safe Guard/IMMI. There is a good review of the history of school bus safety and some new legislation.

Right seat, Right fit, Why won't they stay. (17)

A review of ways to improve consistent use of CRS and vehicle belts as children develop into adults.

Hospital CPS discharge policy project. (18)

The step by step development of an AAP policy on CPS related the hospital discharge procedures.

Hospital Discharge project evidence. (19 PDF)

Evidence collected on various aspects related to hospital discharge.

Hospital Discharge of the high risk neonate. (20)

A rather complete review of the costs of NICU and other population medical costs. Worth taking the time to study.

A list of attendees is available for anyone interested.

Boyd Tong

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