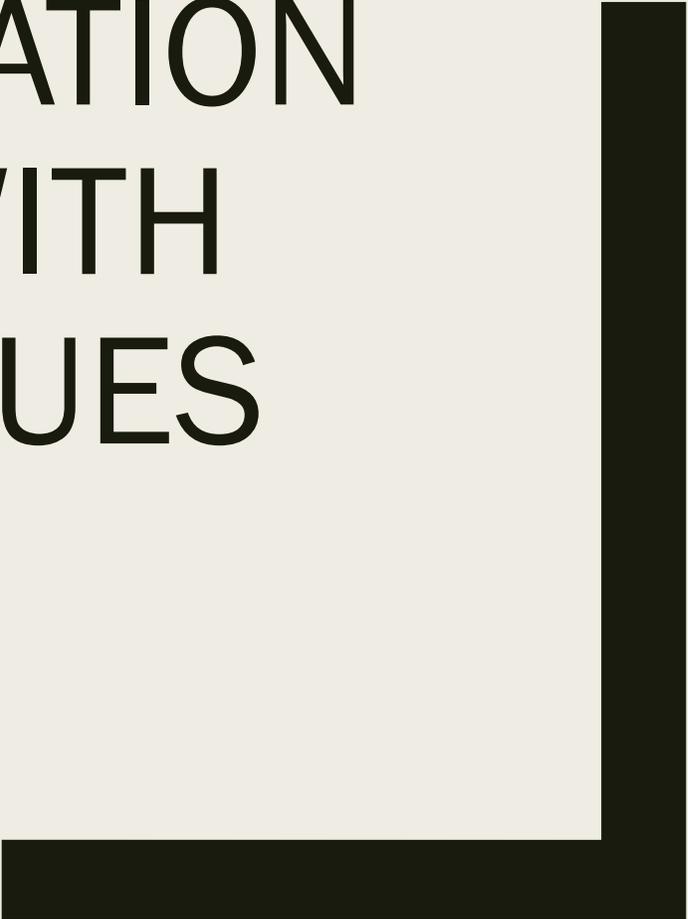




SAFE TRANSPORTATION OF CHILDREN WITH BEHAVIORAL ISSUES

Jason Skinner, MOTR, CPST
Automotive Safety Program



Background on Automotive Safety Program (ASP)

- Founded in 1981, as a joint venture between Riley Hospital for Children and Indiana University School of Medicine.
- ASP developed the National Center for the Safe Transportation of Children with Special Healthcare Needs in 2004.
 - *Provide resources, trainings, and research in special needs transportation*
 - *Provide children who have special needs in the state of Indiana with adaptive car seats/devices to ensure their safety during transportation*

What Are Behavioral Issues?

- Impulsiveness, distractibility, aggressiveness, and/or short attention span
- Escapes restraint
- Moves around vehicle
- Distracts driver
- Unbuckles other passengers

Reasons for Behavioral Issues

- Is this just part of “normal” development?
 - *Is the child stubborn in other areas that are age-appropriate?*
 - *Lack of communication skills?*
 - *Desire for independence?*
 - *Desire for attention (even if negative)?*
- Are the issues due to a medical condition?

Reasons for Behavioral Issues

- If part of “normal” behavior pattern:
 - *Is the child being put into the right type of car seat?*
 - Seat belt vs 5-pt harness
 - *Does the child fit into the car seat correctly?*
 - Too loose vs too tight
 - *Is the car seat being used correctly?*
 - Chest clip/harness straps in correct position?
 - Parents should not be encouraging children to buckle themselves on their own
 - *How is the child getting out of the car seat?*
 - Unbuckling chest clip or harness vs unbuckling seat belt altogether?

Reasons for Behavioral Issues

- If part of “normal” behavior pattern (cont.):
 - *Caregiver response*
 - Be consistent
 - Have someone else sit next to the child, if possible, to redirect behavior
 - Use rewards/distractors
 - Use behavior plan/contract, if appropriate

Medical Causes of Behavioral Issues

- Autism spectrum disorder
- Developmental delays
- ADHD
- Oppositional-defiant disorder (ODD)

Autism Spectrum Disorder

- Most commonly recognized in early childhood
- 1 in 68 children
- Delay in language
- Impairment in social interaction
- Frequent cognitive impairment
- Poor safety awareness

Autism Spectrum Disorder

- Narrow span of interests
- Repetitive behaviors
- Need for sameness
- Sensitive to certain textures and/or sounds

Autism Spectrum Disorder

- Bothered by touch
 - *Try tight fitting underclothes*
 - *Make sure harness/vest/seat belt is snug and flat to reduce sensory issues*
 - *Make sure harness/vest/seat belt is lying on top of clothing to prevent skin irritation*
- Screams with sirens
 - *Teach to cover ears or wear headphones*
- Too active in the car
 - *Involve in moving activities before travel*
- Chews on harness
 - *Use chewy tube or chew toys*



Autism Spectrum Disorder

- Choose seat with harness to highest weight
- Consider using lower anchors if child is unbuckling vehicle seat belt and is within the weight limits to use lower anchors
- Large medical seat with accessories that impede escaping behaviors
- Facilitate change gradually
- Utilize social stories (sample in Autism Fact Sheet)

Escape Behaviors



Escape Behaviors

- Although a child may meet height/weight guidelines of a booster seat, they may need a more restrictive restraint to curb escape behaviors



Escape Behaviors

- Families may resort to “home remedies” to keep child restrained
 - *Includes use of “non-regulated products” and modifying current restraint*
- Child may benefit from an intervention from a behavioral pediatrician or therapist



Rehabilitation Therapist Role

- Assess a child's physical capabilities and determine ways to improve their interaction with their environment
- Can offer individualized positioning guidelines if questions arise regarding how to position a child in a child safety seat
- Primary goal is to provide family-centered care to enhance participation in everyday activities by providing safe transportation options
- Can be achieved through use of conventional or specialized restraints

Rehabilitation Therapist Evaluation

- Obtain physician order to conduct evaluation
- Client and family interview
- Positioning assessment and intervention
- Recommendations
- Order equipment
- Deliver equipment

Assessing Car Seat Options for Behavioral Issues

- May need to try a variety of restraints to see which is the most difficult for the child to escape
- Full harness to higher weight
- Upright travel vest or large medical seat if no conventional method works

Specialized Restraint Options for Behavioral Issues

- Roosevelt Large Medical Seat



- E-Z-ON Vest w/ Zipper Back



Specialized Restraints

- Roosevelt:
 - Merritt Manufacturing
 - www.eztether.com
 - 35-115 pounds
 - 33.5-62 inches
 - Developed with chest clip guard and buckle cover to address behavior issues



Chest clip guard



Buckle cover

Specialized Restraints

- E-Z-ON Vest w/ Zipper Back:
 - *E-Z-ON Products, Inc.*
 - www.ezonpro.com
 - *2 years old and above*
 - *20-168 pounds*
 - *Alternative for children who have outgrown large medical seats*
 - *Alternative for vehicles that have limited space*

Specialized Restraints

- E-Z-ON Vest w/ Zipper (cont.):



Questions?

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