SAFE TRANSPORTATION OF CHILDREN WITH BEHAVIORAL ISSUES

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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
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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