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## Car Safety for Children with Cerebral Palsy

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Children with cerebral palsy may have positioning needs that can affect travel. This brochure answers some questions you may have about safely transporting your child.

## How long should my child ride rear-facing?



Figure 1

The American Academy of Pediatrics recommends you keep your child rear-facing as long as possible until they reach the maximum height and weight for the car seat they are using. Since some children with cerebral palsy have decreased muscle control, riding rear-facing helps support their entire body with increased protection,

especially the spine. Most rear-facing only car seats go up to 35 pounds and convertible car seats (Figure 1) allow children to ride rear-facing up to 40 to 50 pounds.

## What car seat should I use when I turn my child around?

Use a forward-facing car seat that has a 5-point harness until your child outgrows the maximum height or weight allowed by the manufacturer. Many forward-facing car seats allow children to remain in a harness system up to 65 pounds.



Figure 2

Some car seats have a built-in recline or semi-recline (Figure 2) feature that may be beneficial for positioning your child. A certified child passenger safety technician (CPST) may be able to give you information about car seats with multiple recline options. You can find a CPST in your area by visiting [cert.safekids.org](http://cert.safekids.org) and clicking on "Find a Tech".

### What if my child has trouble sitting up or needs more head support?



Figure 3

If your child fits well in a conventional car seat (rear-facing or forward-facing) and needs only minimal additional support, you might be able to place rolled blankets or towels along the side of your child's head or trunk to prevent your child from falling side to side - if allowed by the manufacturer of your car seat (*Figure 3*). Never put anything behind your child, under your child, or under the harness.

If your child needs more neck support, a soft cervical neck collar (*Figure 3*) may be used to help prevent the head from falling forward. A hard collar should be removed during travel - if possible and approved by the prescribing physician.

Never recline the vehicle seat more than allowed by the vehicle manufacturer.

### What if my child is too big for the car seats at the store?



Figure 4

Some children with cerebral palsy outgrow conventional car seats but continue to need additional postural support or head support. Your child may need a large medical seat (*Figure 4*). Large medical seats have harnesses for weights as high as 115-130 pounds and offer a variety of accessories that may meet your child's unique positioning needs.

It is important to work with your child's medical team to determine the best large medical seat. Large medical seats are usually ordered following a therapist evaluation through a local durable medical equipment vendor. Insurance providers may cover the cost if proper documentation is provided.

**My child has outgrown the large medical seat. However, when buckled in a seat belt, leans to the side or falls over. What should I do?**



Figure 5

Your child may be able to use an adaptive booster (Figure 5) with a positioning vest OR positioning harness for larger children who difficulty maintaining a seated position during travel.

Many adaptive boosters and adaptive vests are available to assist with positioning needs during transportation.

Please refer to the National Center Brochure with a comprehensive list of available adaptive restraints.

**What if my child has casts because of surgery or botox?**

Your child will need a car seat that has enough room to fit the cast. Your child might be able to use their own current car seat but make sure to try it before you leave the hospital. If the cast prevents your child from sitting, your child may need a adaptive child restraint. Ask your child's medical team if there is a adaptive car seat loan program at the facility that can help find the right restraint for your child (Lay Down EZ-ON vest / 503), Wallenberg, and Spirit Spica are potential adaptive options).

**What if my child has pain or pressure areas on skin when seated in a car seat?**

Contact your child's physician or rehabilitation therapist to help you determine what is causing the pressure or pain.

Your child may need a different car seat that fits better, may need to be repositioned in the car seat, or need a car seat that offers more padding.

Remember, do not add extra padding behind or below your child unless approved by the car seat manufacturer. Your child's car seat might not work as intended in a crash.

### **What if my child uses a wheelchair?**

If possible, your child should ride in the appropriate restraint in your vehicle (car seat, booster seat, etc.) If your child is transported in the wheelchair on the bus or an accessible vehicle, you can refer to the Ride Safe brochure - through the University of Michigan Transportation Research Institute (UMTRI), describing how to use a wheelchair as a transportation device.

### **Where should I put medical equipment in the car?**

Place medical equipment such as apnea monitors and oxygen tanks on the floor of the vehicle wedged with pillows, foam, or blankets (if allowed by the vehicle manufacturer - as they may interfere with advanced airbag sensors). Equipment can also be placed in unoccupied vehicle seats with the lap-and-shoulder belts restraining the equipment. There are currently no straps, belts, or bags commercially available that are specifically made for securing medical equipment in a vehicle.

### **When can my child ride in the front seat?**

The back seat is the safest place for all children 12 years old and under, even if your car does not have an airbag.



Figure 6

### **How should my child ride in a school bus?**

Best practice is for preschool-age children who weigh less than 40 pounds to use a car seat on a school bus. Talk with the school about your child's transportation needs. Make sure transportation staff are included in the IEP (Individual Education Plan) meeting. There are school bus specific restraints (*Figure 6*), large medical seats, or children may be asked to ride in their wheelchair.

### **How can I be sure my child is buckled up correctly?**

Always read and follow the directions that come with your car seat and your vehicle owner's manual. You can find a certified child passenger safety technician (CPST) who is trained in adaptive transportation (*Safe Travel for All Children* course) at [cert.safekids.org](http://cert.safekids.org). Click on "Find a Tech". In the CPS Technician search form, choose your state, and make sure to click "Special Needs" in the Extra Training field.

If there is not someone trained in adaptive transportation in your area, please call 800-543-6227 for further assistance.

FOR MORE INFORMATION CONTACT:  
National Center for the Safe Transportation  
of Children with Special Health Care Needs  
Indiana University School of Medicine  
800-543-6227  
[preventinjury.medicine.iu.edu](http://preventinjury.medicine.iu.edu)

Inclusion of products in this brochure does not imply endorsement.

Figure 2 source: [www.gracobaby.com](http://www.gracobaby.com)

Figure 4&5 source: [www.eztether.com](http://www.eztether.com)

Figure 6 source: [www.imminet.com](http://www.imminet.com)



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