

*Module:*    **Developmentally Appropriate Orientation and Mobility**

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## **Session 1: Foundations of Developmentally Appropriate Orientation and Mobility**

### **Handout J: Upper-Body Protection for Toddlers**

Sapp W. (2004). *Upper-body protection for toddlers*. Chapel Hill, NC: Early Intervention Training Center for Infants and Toddlers With Visual Impairments, FPG Child Development Institute, UNC-CH.

Upper-body protection refers to using an arm to protect the head and upper-body from contacting an object. Many early interventionists and preschool providers refer to this technique as using “bumpers,” because the child’s arm serves as a bumper to keep the child from bumping his or her face or chest. Many children with visual impairments are hesitant to move out into space because they fear falling or running into things. Upper body protection can help children decrease their risk of running into objects.

Note: There are as many ways to teach upper-body protection to toddlers as there are toddlers with visual impairments. The suggestions given below are general guidelines that have been found to be effective with some children. You will have to adapt these techniques and create new techniques to meet the unique needs of the children and families with whom you work.

#### **Upper-body protection**

Teaching upper-body protection to very young children is a gradual process, during which the child moves from simply putting her arms in front of her body while walking to using a formal upper-body protective technique. This learning process will take many years as the child develops gross motor strength, control, and endurance.

The first step in teaching upper-body protection is to explain to the child’s parents and caregivers the purpose of upper-body protection and to decide with the parents what term will be used to prompt a child to use upper protection. “Bumpers up” or “Hands out” are two simple options.

Depending on the cognitive development level and receptive language skills of a child, you may be able to explain upper-body protective technique in simple terms. “Put your arms in front of you when you walk. Now you won’t bump your head.” Even if you do not think the child will understand, it is best to talk to the child using simple, developmentally appropriate language.

To teach upper-body protection, begin with the child 2 or 3 feet away from a wall or the back of a soft piece of furniture such as a couch or upholstered chair. Using the language you and the parents agreed on, tell the child to use body protection. For the first few attempts, you may need to provide specific verbal directions as well, such as “Put your arms in front of you.” It is likely that many children will need some hand-under-hand assistance to understand what to do. Once the hands are positioned in front of the body, tell the child that she is going to “find the wall” or “walk to the wall.” Have the child walk to the wall. Just before the child makes contact with the wall, tell the child, “You are about to touch the wall.” Once the child touches the wall, praise the child excitedly (e.g., “Yay! Your bumpers found the wall. You didn’t bump your head!”). Continue to tell the child before she contacts an object until she becomes comfortable with using her arms to contact an object.

Once children understand what is meant by “Hands out” or “Bumpers up,” you can use a naturalistic approach. Accompany the child during independent exploration of the house or classroom and mediate normally occurring encounters with existing furniture and landmarks. As the child draws to within 2 feet of the television or a set of shelves, for example, tell the child what is ahead and give a reminder to put “Hands out” or “Bumpers up.”

At this stage the child should use two arms for upper-body protection. In formal upper-body protective technique, one arm is extended to cover both sides of the body. At this age, children’s arms are proportionately shorter than those of adults; children lack the upper-body strength and control necessary to use a one-handed technique. By using two hands, the child can better protect both sides of his body. Most 2-year-olds can learn to extend two hands at waist or chest level parallel to each other, 3 to 6 inches from the trunk, with fingers curled into a relaxed hand position. Some toddlers are able to extend their arms with their palms toward the approaching obstacle. Both of these techniques leave a space that is unprotected but provide more coverage than using only one arm.

Teach the parents to use the agreed-upon phrase (e.g., “Bumpers up”) every time the child approaches a chest- or head-high obstacle. Explain that, at first, the parent may need to be close enough to physically prompt the child to raise his arm. Do not worry if the child runs into some things. A few experiences gently bumping into objects will help children realize the usefulness of upper-body protection. Encourage the parents to let their child explore freely so that there are many opportunities to practice.

Be sure that interventionists, parents, and childcare providers encourage the child to use upper-body protection during naturally occurring routines. Almost every environment contains potential upper-body obstacles for toddlers. By reminding a child to use upper-body protection rather than verbally or physically preventing the child from running into objects, adults help the child gain confidence in his ability to travel and explore independently. Most appropriate modifications that can be used by toddlers will leave some areas of the upper-body and head exposed; therefore, supervision will continue to be important.

As the child matures through preschool and early elementary school, the child will be able to further refine upper-body protection described here into a formal one-handed upper-body technique.

### **Increasing upper-body strength**

Many children will have difficulty using upper-body protection because they lack the upper-body strength to hold their arms in front of their bodies for more than a few seconds. O&M instructors can play games and encourage parents to find functional ways to help children increase upper-body strength. Examples of games include crawling like different animals, turning somersaults by pushing off with the hands, and passing a heavy toy back and forth for “hot potato.” Talk with early interventionists and daycare providers for more games that require upper-body strength or that could be modified to increase upper-body strength. Common daily activities that may help increase upper-body strength include carrying a bag of groceries to the kitchen after a trip to the grocery store, carrying a can of food from the pantry to a parent who is cooking, pushing heavy doors open with parental assistance, and pushing a chair to the counter to climb on. Brainstorm with the parents to identify other naturally occurring opportunities in which the child can build upper-body strength. Most children enjoy doing what they observe adults do and exploring what their bodies are capable of doing.

### **When a child has physical impairments**

Many children with visual impairments also have physical impairments that can make it difficult to use upper-body protection. The two most common difficulties with upper-body protection that arise from physical impairments are lack of upper-body strength and limited range of motion. When a child has a physical impairment, always consult with the physical therapist or doctor to be sure that the movements are safe for the child. Assuming that there are no physical restrictions, the games and daily activities suggested above can help children gain upper-body strength. The physical therapist should also be able to provide additional suggestions for increasing upper-body strength and improving range of motion. During early intervention, most children will be using a modified upper-body protective technique; the child with physical impairments will be no different. Realize that for a child with severe physical impairments, the long-term goal may be to use a modified upper-body protective technique to accommodate the physical impairment.