

Module: **Developmentally Appropriate Orientation and Mobility**

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

Handout I: Hand Trailing for Toddlers

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

Hand trailing is lightly following a surface, such as a wall or a piece of furniture, to move from one place to another or to locate a specific landmark or object. There are many ways to teach children to hand trail. The methods listed below are not exhaustive but are intended as a starting point to give O&M instructors some developmentally appropriate suggestions for working with infants and toddlers with visual impairments or blindness.

Cruising

Cruising is when children walk, generally sidestepping, while keeping two hands in contact with a surface such as a piece of furniture for support. Most children cruise along furniture when they are first learning to walk. For children with visual impairments, cruising is an important precursor to trailing and should be encouraged. When cruising, children are learning to maintain contact with a surface while walking, a key component in trailing. Encourage parents to arrange furniture so that children can cruise around a room. Examples of this include keeping the space in front of a sofa clear so a child can cruise its length, and placing furniture close together so the child can cruise from one piece to another.

Once a child has mastered traditional two-handed cruising along furniture and is beginning to take some independent steps, the child can begin to cruise with only one hand. When the child gains this degree of postural stability, encourage parents to hold one of their child's hands while the child continues cruising with the other hand. This can help children gain confidence in walking forward while still being provided with support. Children can transition to one-handed cruising without adult support a few steps at a time. For example, one caregiver can hold the child's hand and encourage the child to cruise one-handed for a short distance. A parent or sibling can sit a few steps in front of the child and call the child. The parent holding the child's hand can gently pull away so the child can cruise one-handed for a few steps and reach the other person. As the child gains confidence, you can lengthen the distance the child cruises to reach the other person.

Once children no longer require the physical support of furniture during cruising, they can begin cruising along walls. Again, many children may prefer two-handed cruising along the wall, especially if this is the method they are still using with furniture. Parents can encourage

children to cruise along walls in many ways. Clearing space along a wall will allow the child the opportunity to cruise without tripping over objects on the floor. Creating short, meaningful miniroutes with cleared wall space can also help; for example, a child may be encouraged to cruise along the bathroom cabinets from the door to the tub at bath time. Parents can also encourage wall cruising by positioning furniture so the child can cruise from a piece of furniture directly to the wall.

Some children will be motivated to move and explore on their own. Other children will require prompting to cruise. There are many ways to encourage children to cruise, but the most important factor is to find something that will motivate the child. The motivation may be to reach a parent or sibling who is calling them. It may be to locate a favorite object or toy that is making noise or that the child knows is kept in a consistent location. The motivation may be to get to a favorite activity (e.g., cruising the kitchen wall to get to the highchair to eat). If a child is not cruising, provide motivating reasons for the child to cruise and provide reinforcement (e.g., reaching the parent, obtaining a toy, getting to eat) for cruising only a few steps. As the child becomes more confident in cruising, you can expect the child to cruise further before receiving reinforcement.

Trailing

Once children are walking independently, they can begin to practice trailing. Some children who experience one-handed cruising and wall cruising will transition into trailing with little assistance, but other children will need more encouragement.

To begin, identify miniroutes where a child can safely trail a wall without risk of tripping or hurting his or her hands. Remember, a miniroute may only be 2 or 3 feet long. Ideally, these routes will lead to something motivating to the child and will be routes the child can use many times a day. To identify miniroutes, talk with the parents and caregivers about the child's routine and jointly identify routes that are meaningful and realistic in the child's daily routine. As the child walks along the identified route, tell the child to trail the wall. With the parent, decide on the phrase you will consistently use, such as "Trail the wall," "Touch the wall," or "Hand on the wall." If the child touches the wall even for a few seconds, reinforce him or her by using specific praise with the same terms you and the parents chose. For example, if you tell the child "Hand on the wall," then praise the child with a phrase such as "I like the way you put your hand on the wall" or "You are doing a good job putting your hand on the wall." At first it may be necessary to use hand-under-hand modeling to show the child what you want her to do. At this initial stage, do not worry about proper hand and arm position.

Once the child begins touching the wall for brief periods, encourage the child to touch the wall for longer periods of time. Begin to verbally prompt the child to keep touching the wall for a few seconds longer than usual. For example, if a child usually touches the wall for only 3 seconds, praise him only when he maintains contact with the wall for 5 or more seconds. Place interesting objects on the wall for him to find so that he is motivated to keep his hand on the wall. Some children, especially those who are very young or who are tactually

sensitive, may find constant trailing difficult to sustain. For these children, intermittent or “touch trailing” will be acceptable.

Trailing from a wheelchair or stroller

Trailing provides opportunities for children 2 years old or older who are unable to walk and who are moved in wheelchairs or strollers to learn about their environment, learn about routes, and gain knowledge and skills for future independent or semi-independent travel (e.g., using a wheelchair or walking). All children with visual impairments, regardless of the severity of additional disabilities, should be encouraged to use trailing as means for independent travel.

The first issue in trailing from a wheelchair or stroller is positioning. The child must be positioned so that her hand can reach the wall to be trailed. If, after consultation with a physical therapist, this position is impossible, then provide the child with an object (e.g., a xylophone stick) that can be held and trailed against the wall. If parents are concerned about the object marking the walls, you can place a tennis ball or piece of felt over the end of the object, but this will reduce the amount of information the child receives from trailing and will make the object heavier to hold. If the child has difficulty holding the object, it may be necessary to adapt the handle so that the child can hold it. The occupational therapist or physical therapist can show you ways to adapt a handle for easier gripping.

Once the child is positioned to reach the wall or to hold a trailing object, follow similar procedures to the ones outlined above for children who are walking. Explain what you want the child to do. Provide hand-under-hand modeling as needed. Encourage the child to trail for short distances when being pushed in the stroller or wheelchair. To make trailing more meaningful and to give the child more control over the movement, ask the child to find a specific item or location while trailing. For example, tell the child, “Trail the wall. Let’s find the open door to the kitchen.” When the child gets to the kitchen door and loses contact with the wall, stop. Using child-friendly language, point out to the child that, having lost contact with the wall when he came to the open door, he is now at the kitchen. Then enter the kitchen and get the child a cup of milk. Alternatively, you can place interesting objects on the wall for the child to locate as he trails. If the child touches the objects only with the trailing object rather than his hand, the mounted objects should make interesting auditory sounds when tapped.

Exploration and practice

It is important that a child have multiple meaningful opportunities every day to practice trailing. Work closely with the parents so they can reinforce what you are teaching every day in the child’s natural environment. Remember, for toddlers it is more important to explore safely and independently than to use perfect trailing techniques all of time. At this age, O&M instructors should provide children with beginning skills so that they can be confident as they explore and so they will have the initial skills and concepts necessary to master formal mobility techniques when they are older.