



Older Individuals who are Blind
Technical Assistance Center

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ON BLINDNESS & LOW VISION



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Lesson 5: Orientation and Safety in the Home

Introduction

Many newly visually impaired people are concerned about safely getting from place to place and about avoiding accidents in the home. These two concerns are central to virtually every other daily activity. This lesson introduces several techniques for getting around in your home without injury. Many of these techniques use senses and other skills discussed in lessons 3 and 4. This lesson also offers many tips that aid in accident prevention.

Lesson Goals

- Demonstrate how to protect the upper and lower body in at least two situations.
- Navigate the home safely using protective techniques, trailing, and squaring-off.
- Compare and contrast the methods for locating dropped objects and systematically searching for items on a counter, table, desk, etc.
- List ways to make a home safer for a visually impaired person.

Orientation and Mobility

Orientation and mobility, commonly known as O&M, is specialized training that helps people with visual impairments learn or relearn the skills needed to travel safely and independently in the home and community. The importance of these skills can't be overstated; they impact every area of daily life. O&M instructors teach how to maximize the use of all of the senses to know where you are and to get to where you want to go. When necessary, these specialists train people to use a long cane to travel safely along sidewalks, cross streets, and ride public transportation. If outdoor travel skills would be beneficial, it is recommended to obtain an O&M specialist's services. It is not advised and can be unsafe to purchase a long cane and use it without proper training from a trained orientation and mobility specialist. There are particular techniques and skills needed to safely and effectively use a long cane as a person with a visual impairment.

Other orientation and mobility skills will be discussed in this lesson related to indoor and home orientation and safety. Services from an O&M instructor are not required for learning these other skills.

Indoor orientation and mobility are also essential. Techniques for People with Visual Impairments for indoor safety will be covered in the next section, but many of these can be adapted for outdoor travel as well.

Protective Techniques

The upper and lower protective techniques are essential for your safety as you move about the home environment. These techniques prevent injury to the head, face, and torso from collisions with open drawers and doors or tables, chairs, and anything else that might arise. When learning these techniques, keep in mind that only a long cane held diagonally in front of you or the use of a walker will protect the feet, calves, and knees.

Remember that only a long cane or dog guide will help a person detect stairs or other drop-offs.

In addition to using these techniques, it's essential to make sure all upper and lower cabinet doors and all drawers are completely closed at all times in your home. Leaving cabinet doors and drawers ajar can cause you to bump your head or bruise your body. Interior doors must be kept completely closed or completely open. Few things are more dangerous to a visually impaired person than a partially open door. It is important to ask everyone living in the house to follow these rules to ensure safety.

The Upper Body Protective Technique

When bending over, using the upper protective technique prevents accidents such as bumping the face on a counter, table, open cabinet door, or similar object. Even if a person has some usable vision, it's not worth taking the risk. It's better to make it a habit to use this technique every time.

To learn the upper protective technique, begin by positioning one of your arms so that it is parallel to the floor from shoulder to elbow. Next, bend that arm at the elbow, bringing the forearm diagonally across the body and bringing your hand about 10 inches in front of your face, with the back of your hand toward your face and your palm facing out. Point your fingers at a slight angle toward your face to protect them from injury. Maintaining this

position when you bend forward allows the forearm to serve as a buffer should you collide with any surface or object. If arthritis or lack of strength prevents a person from maintaining this position, it can be modified or wear a hat or visor to protect the face.

The Lower Protective Technique

To protect the torso using the lower protective technique, start by reaching the arm straight out in front at about a 45-degree angle, like reaching to shake hands with someone. While keeping it extended, angle the arm across your body diagonally and away from the body about a foot. Face the palm toward the body just below the waist with the fingers curled slightly inward. The back of the forearm and hand will protect the middle of your body from contact with chairs, tables, and other thigh-high objects. If a person cannot extend their arm to protect their body while using either of these methods, objects such as a paper towel tube, rolled up magazine, or ruler can be used to provide complete coverage.

Trailing

Trailing is a technique that allows a person to keep oriented by staying in contact with a wall or other surface in the environment. It can be useful in situations such as walking in a straight line down a hallway or navigating around the counter in the kitchen. Trailing also provides some protection from random objects. To use the trailing technique, stand approximately 6 inches from a wall. Extend the arm closest to the wall about a foot in front of your body at the hip level. Hold your hand with the palm toward the floor, and then cup your fingers in a loose fist toward the palm to protect your fingers from any object they might encounter. Place the side of this hand against the wall and allow it to move along the wall lightly as you walk forward.

Orient yourself by visualizing any landmarks that may be encountered along the wall. Perhaps there is a closet door or protruding object that your hand may come across along the way. Landmarks such as a closet door can be helpful with navigating. For example, if there are two similar hallways, but only one has a closet, it provides an easy way to differentiate. When you come to an open doorway, maintain your direction, and keep going. With a couple of steps, you will reach the other side, and you can

continue trailing the wall. For safety purposes when trailing, it's recommended that you use the upper protective technique with your other arm to prevent accidental collisions as you explore various parts of your home. Again, use something as an extension of your arm if necessary.

Squaring Off

This technique can be beneficial when going from one location to another across a large, open space. Squaring off involves aligning or positioning your body in relation to a specific object or location in a room and then walking in a straight line toward the item or location. For example, this technique can be used when the refrigerator is more than three steps across the kitchen from the stove. Place your back against the refrigerator door and walk straight across the opening toward the stove, visualizing it in front of you. As you approach the stove, use the lower protective technique to protect your body from crashing into the stove. Try this technique in other rooms of your home as well as the kitchen. This method will need to be adjusted depending on the landmark being used to square off. At times it may be necessary to align the side of your body or the back of your legs with an object before walking across the open space. This technique is helpful when learning a new environment or adjusting to a decrease in vision. Keep in mind that it's essential to use your other senses and concepts such as echolocation, which were discussed in previous lessons, to help with orientation. Eventually, with practice, as confidence develops, walking diagonally from one place to another across an open space without this technique may be comfortable.

Room Familiarization

The room familiarization technique can be used for new environments or places where a person is not used to navigating independently with vision loss. It is not uncommon to use this technique in the home after a decrease in vision. First, stand in the doorway and visualize the room if it is familiar or have someone describe the layout if it is a new environment. As items in the room are described or recalled, point to them with one hand while remaining in the doorway. Once a clear map of the space can be visualized, trail around the perimeter of the room. For people who use a long cane, it's recommended that they hold it in one hand diagonally across

their body while using the trailing technique with the other. The room features, such as furniture arranged against the wall, a closet, or a window, may serve as landmarks to aid your orientation. When a piece of furniture is located while trailing, stop and carefully examine it using tactile skills. Use search techniques and the grid pattern described in the previous lesson to determine if items are arranged on top of furniture surfaces. Continue around the room until everything along the perimeter of the room has been identified. Next, move to the center of the room and explore everything there. If a room has furnishings in the center of the room, such as a dining room or family room, use the squaring off technique along with the cane or lower protective technique until you locate the furniture.

Locating Dropped Objects

Many newly visually impaired or blind individuals experience frustration when trying to find things they've dropped on a counter, table, or, especially, the floor. The searching methods described in the previous lesson can be used for this, such as the grid pattern or concentric circle method. The fan technique described below is also an effective strategy. It's helpful to know all of these tools so that the appropriate one can be used depending on circumstances.

Fan Technique

When something drops, immediately listen to hear where it falls. Depending on what item falls and the type of surface it falls on, the sound will differ. Another thing to listen for is if the item rolls or slides once it hits the floor or other surface. When the sound is identified, face the sound, and point your finger in that direction. Pointing can help pinpoint the location and keep orientation as you begin to move. Take a few steps toward the suspected location.

Next, using the upper body protective technique, safely and cautiously bend at the knees, squat, or kneel to reach the floor with your hands. Begin making small, then progressively larger circular movements with your hands on the floor directly in front of you, then to the left and right. Move forward, continuing to use a fan-like pattern until you locate the item. A broom can be used to find the item for people who are uncomfortable or unable to bend over or squat. When you feel resistance or hear the broom

move the item, slowly and gently sweep the item out of the way toward a cabinet or stable piece of furniture, hold on, and then retrieve the item. Or use the broom and a long-handled dustpan to pick the item up or sweep the item out of the way and allow someone to pick it up later. People with hearing impairments who cannot pinpoint a dropped object's location by sound can use a broom with overlapping strokes in the area where the object fell. When resistance is felt against the broom, check to see if the object caused it. Practice dropping various items and locating them to get practice with this technique.

Safety Tips

Several basic home modifications and habits can be developed to make a visually impaired person safer in their home environment. These are a few suggestions based on what works well for many people. However, each person needs to determine which of these would be beneficial to adopt based on individual circumstances.

Non-slip rugs can be used in various ways around the home to help with orientation. They can serve as a tactile marker since they will contrast with the flooring's texture, but if high contrast colors are used, they may also serve as a visual cue to highlight an area. Rugs can be placed under groupings of furniture to give a tactile cue when walking through the room. Some individuals will also use small rugs in front of doorways, sinks, and other commonly used areas of the home. When using rugs for orientation, the most important thing is to make sure they will not become a tripping hazard. All rugs should be non-slip and be tacked down on the edges. It may not be recommended to use this method for people with mobility aids such as walkers.

Stairs, hallways, and frequently traveled pathways should be kept clear and free of all clutter. Many people have a habit of leaving something on the stairs that they plan to take up or down with them the next time they go. These can be dangerous habits. Safety needs to come first, so take the time to identify any walkways which are cluttered. Methods for organization will be covered in a later lesson, so the first step is to get items off the floor.

Lighting, contrasting colors, and textures can also be used around the home in various ways to create a safer environment. For people with some remaining vision, sufficient lighting should be used above stairways and other areas, presenting a safety hazard. High contrast colors and various textures can also be used in strategic areas. For example, non-slip tape in a contrasting color can be placed on the edge of steps to make them more visible. There is a type of tape, which feels a lot like sandpaper, which can be used outdoors for porches or decks.

Discussing safety concerns with people in the household and describing challenges related to vision loss can be beneficial. Most family members will be more aware and conscientious if they understand what changes need to be made. It can help to have family members participate in training lessons or do a blindfold experience to gain more insight. However, in households where people often forget to close cabinets, dishwasher doors, or push in their chairs at the table, methods may need to be utilized to maintain safety. The protective techniques learned earlier in this lesson are helpful, but people will rarely use them every time they walk through their homes once they are comfortable. Some devices can be put on cabinet doors, which will alert if a door has been left open for more than the programmed time. Magnetic door stops can be used on interior doors that do not stay open entirely independently. This will make it easier to keep doors fully open or closed and prevent someone from walking into a partially open door.

As an added safety measure, individuals can use their long cane in the home if they know that things are often left out or relocated. This is a common precaution when small children in the house leave toys on the floor.

Additional safety measures will be discussed in other lessons about particular tasks such as cooking or household chores. One basic concept is that sharp objects such as knives and scissors should never be left where the blades or points can come into accidental contact with any part of your body. For example, sharp knives should be placed behind the cutting board, not on it, when slicing vegetables, or placed behind the kitchen

faucet, not in the sink when washing dishes. There will be more information on this topic in later lessons.

The most important tip is remembering the rule, "Everything has a place and everything in its place." This rule will be described in detail in lesson 9, but it's mentioned here because its use can prevent accidents.

Summary

Understandably, you may be concerned about safely getting from place to place and avoiding accidents as a newly visually impaired person. Orientation and mobility, commonly known as O&M, is specialized training that helps people with visual impairments learn or relearn the skills needed to travel safely and independently in the home and community. This lesson reviewed several orientation techniques that can help ensure safety in the home and other environments. These include the protective technique, trailing, methods for finding dropped objects, and using room familiarization. It is again important to point out that a long white cane or a dog guide is an essential mobility tool for ensuring independence and safety in unfamiliar areas when functional vision cannot be used effectively. A qualified O&M specialist should teach the use of cane and mobility skills. With the right training and practice, a person with a visual impairment, including someone with no remaining vision, can travel independently.

Suggested Activities

To start incorporating these techniques into your daily life, try these activities:

- Using what was covered in this lesson, identify any safety concerns in or around your home.
- Discuss any problematic habits or concerns with other people in the house.
- Try using one of the protective techniques the next time you walk into the kitchen.