**Station #4 Vision Impairment**

Only 6% of people who are blind in the United States are under 24 years old. Many people in this group were born blind or were blinded when they were very young. They had to learn about the world through their other senses. People who become blind as adults have visual memories that help them understand the world. Blindness is more common in our older population. About 80% of people who are blind do not learn Braille because they lose their vision late in life. Braille is very difficult to read and write.

There are many people who are partially sighted or have a type of vision problem. A person is considered legally blind when she/he has less than 20/200 vision after correction. Many blind people do see some shapes, color or light. Some see well enough to read large print.

There are many causes of blindness. One out of every six blind people has lost his/her sight through accident. This is an especially common cause in young people. Other major causes of blindness are diabetes, cataracts, and glaucoma.

**Degree of Vision Loss**

* Low vision: The corrected vision is lower than normal, but some significant vision remains. They can read large print and see things held very close to their face.
* Functional blindness: This ranges from being totally blind to having some light perception. The available vision is not reliable and other senses must be used to function on a daily basis.

**Types of Vision Loss**

* Central vision loss: This is when you cannot see what is directly in front, but can only see what is at edge of the field of vision.
* Tunnel vision: This is when you can only see directly in front. Vision appears as if you are looking through a long tube.
* Cloudy vision: Images will appear as through a fog. The person will not see detail and will have difficulty seeing objects or people in the distance.
* Distorted or blurred vision: Images appear fuzzy and blurred. The person has difficulty identifying detail. Reading is difficult.

**Assisted Methods of Daily Living**

* Sighted guide: The person who is blind grasps the sighted guide's arm a little above the elbow and the guide assists in normal ambulation.
* Guide dog: A guide dog (or Leader Dog) provides "eyes" and offers more independence to people who are visually impaired. Each dog receives up to six months of training, which starts at one to two years of age. A guide dog is a working animal. Do not speak to or pet the dog to avoid distracting the dog.

* White cane: The white cane allows a person who is blind to maneuver more easily. The person who is blind taps the ground in front of him/her feeling for obstacles or where to step up or down. The sound that the cane makes as it is tapped also gives information to the person who is blind. Carpet, metal, concrete, and wood all sound differently when taped. The echo of the sound also provides information. Prescription canes are made to the exact length needed. Only a person who is blind can use a white cane.

**Vision Impairment – Station #4**

1. Blindfolded activities: Each student should put on a blindfold or close their eyes. Ask the student to:
   * String the beads. Do not help the student locate the beads or the end of the string. If a bead drops on the floor, wait to see if the blindfolded student can find the bead before assisting them. This simulates real life conditions.
   * Sort the socks. People who are blind do not get to see the laundry basket before they sort socks. Find a matching pairs of socks. While still blindfolded, clip the socks together. Now try to match and clip a second pair. Someone who is color blind or completely blind may use a clip to keep their socks in pairs when not in use. People who are blind use their sense of touch more than people who have vision. Think about how you may sometimes feel your way through a room if the room is dark. Many people with significant vision impairment use buttons or feel tags to identify their clothes.
   * Play tic-tac-toe with a friend. NO PEEKING! The students will need to speak to each other to determine the end of a turn and when to open their eyes to verify who won.
2. Different visions: Wear six (6) different goggles and a special pair of glasses that simulate various vision impairments. With the goggles in place:

* Try to read large print books and a small print display card. Can the student read the Leader Dog brochure?
* Look at the colorblind card while wearing the colorblind goggles. People who are colorblind do not have red eyes and they do not see things in red. This is a simulation exercise.

1. Use the magnifying glass and magnifying bar to read the story. Which device works better for you?
2. Look at the signature guides. These are placed over checks or credit card receipts. The person with vision impairment can feel where to write.

**Activities for the Vision Impairment Station (cont.)**

1. Listen to the talking alarm clock and talking watch. When someone's vision is poor, he can use hearing and touch to tell time.
2. Listen to the talking calculator. Close your eyes and do a simple math problem on the calculator. Could you do it correctly the first time?

**White Cane Activity – Safety Alert!**

**This activity requires a dedicated volunteer. While blindfolded or with eyes closed**, the student will use the white cane to maneuver in the hallway or along the side of the classroom. The student should stay on a level floor. The cane should be slid or tapped from side to side at shoulder width. As the left foot steps forward, the cane is moved to the right. This is how a person who is blind checks if the area is clear for the next step. Volunteers may need to practice this a few times in order to demonstrate it to a student. Tell the student to listen for the different sounds as the cane hits different surfaces. If possible, give the student a destination that cannot be seen before putting on the blindfold. Examples include: a desk and chair that is repositioned after the student is blindfolded, getting a drink from a drinking fountain (the student cannot see the water level), taking a specified item (place among several other items) off of a shelf that is several steps away.

**Optional**

There is a display board for this impairment station that offers more information. Encourage the students to look at the board if time allows.