Assistive Technology for Persons with Low Vision

Over 150,000 individuals in New Jersey, including senior citizens, experience visual impairments or low vision. Individuals with low vision can have difficulties in reading normal sized print, problems in distinguishing one color from another, or experience limited central or peripheral vision.

There are a wide range of AT devices and services for individuals with vision difficulties to help with reading, writing, using a computer, or engaging in activities in their homes, including recreational activities. Certain low vision devices may require a prescription from an optometrist to ensure the device's optimum use.

Devices for Reading

- Many books and magazines are available in **large print** through publishers. **E-readers** can display the text of electronic books in large print, and **digital talking books** can play audio versions.

- **Closed Circuit Television (CCTV)** systems can show an enlarged video display of most documents. Flatbed or handheld **scanners** can also scan and display documents at greater magnification.

- **Magnifiers** are available in a wide range of shapes, sizes and specifications, from thin plastic sheets to powerful lenses.

- **Book stands** can help individuals with low vision get a closer look at books and documents without experiencing fatigue from holding a book up to his or her face for extended periods.

- **Variable lamps** allow a reader with low vision to adjust the lighting to maximize readability of a document.

- A **light box** provides illumination from below and can be helpful for some individuals with low vision.

For some individuals with low vision who need higher contrast, **colored transparent overlays** can help make documents more readable

Devices for Writing

- An **illuminating pen** has a light attached that lights up the writing surface. Writers with low vision that have a better view of the writing surface can write more legibly.

- **Bold line paper** makes the lines on ruled paper larger and easier to see, resulting in more readable handwriting.

- Large print **check registers** can help people with low vision manage their finances more successfully.

Devices for Using a Computer

- Most **operating systems** for computers allow users to customize the way that backgrounds, menus, and other control features are displayed. Users can make the fonts on operating systems larger, utilize high contrast between backgrounds and controls, and display more readable colors.

- Most **computer monitors** support different resolutions that can make the display more readable and text appear larger. Computer monitors also come in a wide array of sizes; a larger monitor may help some individuals with low vision read more easily.

- **Computer keyboards** with large print can help make typing or writing e-mails easier.

- Most **internet browsers** allow a user to adjust the size of text displayed on websites. However, this technique may not work on websites that have a fixed font size. Additionally, users can create a customized **cascading style sheet (CSS)** that they can use to display websites in a consistent font size and custom color format.

- **Magnifying software** can help individuals with low vision get a closer look at their screens. Some operating systems, such as Microsoft Windows, have magnifying software built in.

- The American Printing House for the Blind offers a **specialized font** called APH font, which was specifically designed to be more readable for users with low vision. The font is available for free download at the APH website.

Devices for Daily Living

- Various **clocks and watches** are available with large faces to be more readable. For individuals with more serious vision loss, a tactile watch or a talking watch may be more helpful.

- **Telephones** with large buttons can make phone calls easier. Some **cell phones** also have larger buttons or lighted displays.

- TV **remote controls** are also available with large buttons for easier use.

- A **digital scale** with a large readout can help a person with low vision better manage their health.

- Large print **playing cards**, and other recreational items like dominoes and board games can help people with low vision socialize with others.

- An **audio labeler** uses adhesive stickers to save audio messages on items around the house. Touching a specially-designed pen to the sticker plays back the message, enabling the user to identify the item easily.

- **Barcode readers** can also identify items that have a UPC bar code on them and read back information that identifies the item.

- **Sunglasses may** block out certain colors or types of light.

- **Magnifying desk lamps** combine a magnifier with a powerful lamp to make manual tasks easier to perform. Additionally, **magnifying mirrors** can help with grooming and other self-care tasks.

Resources

The **New Jersey Commission for the Blind and Visually Impaired (CBVI)** can provide access to information and demonstrations of assistive technology. Contact CBVI at call (973) 648-2324.

The **New Jersey Foundation for the Blind (NJFB)** provides programs to specifically address recent vision loss. Contact NJFB call (973) 627-0055.