Accommodation and Compliance Series: Low Vision

Job Accommodation Network
PO Box 6080
Morgantown, WV 26506-6080
(800)526-7234 (V)
(877)781-9403 (TTY)
jan@askjan.org
AskJAN.org

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Preface

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JAN’S Accommodation and Compliance Series

Introduction

JAN’s Accommodation and Compliance Series is designed to help employers determine effective accommodations and comply with Title I of the Americans with Disabilities Act (ADA). Each publication in the series addresses a specific medical condition and provides information about the condition, ADA information, accommodation ideas, and resources for additional information.

The Accommodation and Compliance Series is a starting point in the accommodation process and may not address every situation. Accommodations should be made on a case by case basis, considering each employee’s individual limitations and accommodation needs. Employers are encouraged to contact JAN to discuss specific situations in more detail.

For information on assistive technology and other accommodation ideas, visit JAN's Searchable Online Accommodation Resource (SOAR) at https://AskJAN.org/soar.

Information about Low Vision

Vision impairments result from conditions that range from the presence of some usable vision, low vision, to the absence of any vision, total blindness. Low vision is a term that describes a person with a vision impairment that cannot be improved by correction but has some usable vision remaining. Legal blindness is defined as 20/200 or less in the better eye with the best possible correction. Errors of refraction, diseases of the eye, and other vision-related conditions are usually the cause of vision loss. Each of these categories includes more specific disorders, which are described below.

• Common Errors of Refraction
  o Myopia (Nearsightedness): Close objects look clear while distant objects appear blurred.
  o Hyperopia (Farsightedness): The ability to see objects clearly at a distance while close objects appear blurry.
  o Astigmatism: Due to the irregular curvature of the cornea, vision is blurry for both near and far objects.
  o Presbyopia: The eye lens becomes less elastic (associated with aging) and produces blurred vision when focusing on near objects.

• Common Diseases of the Eye
  o Cataracts: Clouding of the eye’s lens that causes loss of vision.
  o Glaucoma: Pressure inside the eye is elevated and can cause damage to the optic nerve, which results in damage to peripheral vision.
Macular Degeneration: There is a disturbance of blood vessels in the eye resulting in progressive loss of central vision.

Retinitis Pigmentosa: There is a degeneration of pigment in the eye that is needed to absorb light and create visual images, leading to “tunnel vision” and night blindness.

Retinopathy (due to Diabetes): Retinopathy typically affects the blood circulation of the retina, which causes blotchy vision.

Other Vision Related Conditions

Night Blindness: Night blindness results from pigmentary degeneration of the retina, which leads to difficulty seeing in low light.

Color Vision Deficiency: A color vision deficiency occurs when cone cells of the retina, which provide daylight and color vision, are affected and there is difficulty distinguishing among colors. Typically this only involves certain hues, for example a red–green deficiency; total color blindness (achromatic vision) is rare.

Lack of Depth Perception: A lack of depth perception is often caused by the loss of sight in one eye, resulting in difficulty with foreground/background discrimination.

Floaters: Floaters are small specks or clouds moving in the field of vision.

Low Vision and the Americans with Disabilities Act

The ADA does not contain a definitive list of medical conditions that constitute disabilities. Instead, the ADA defines a person with a disability as someone who (1) has a physical or mental impairment that substantially limits one or more "major life activities," (2) has a record of such an impairment, or (3) is regarded as having such an impairment. For more information about how to determine whether a person has a disability under the ADA, see [How to Determine Whether a Person Has a Disability under the Americans with Disabilities Act Amendments Act (ADAAA)](#).

Accommodating Employees with Low Vision

People with low vision may develop some of the limitations discussed below, but seldom develop all of them. Also, the degree of limitation will vary among individuals. Be aware that not all people will need accommodations to perform their jobs and many others may only need a few accommodations. The following is only a sample of the possibilities available. Numerous other accommodation solutions may exist.

Questions to Consider:

1. What limitations is the employee experiencing?
2. How do these limitations affect the employee and the employee’s job performance?
3. What specific job tasks are problematic as a result of these limitations?

4. What accommodations are available to reduce or eliminate these problems? Are all possible resources being used to determine possible accommodations?

5. Once accommodations are in place, would it be useful to meet with the employee to evaluate the effectiveness of the accommodations and to determine whether additional accommodations are needed?

6. Do supervisory personnel and employees need training?

Accommodation Ideas:

Limitations

Low Vision

- Accessible Mobile Phones
- Accessible Telephones
- Apps for Individuals with Vision Impairment
- External Computer Screen Magnification
- Head-mounted Magnifiers
- High Visibility Floor Tape and Paint
- Large Button Phones
- Large Visual Display for Telephone
- Lighted Reading Glasses
- Low Vision Office Supplies
- Magnification (Hand or Stand)
- Optical Character Recognition (OCR) Systems - Scan
- Portable Video/Electronic Magnifiers
- Screen Magnification and Screen Reading Combined
- Screen Magnification Software
- Sewing Aids for Individuals with Vision Impairment
- Stair Tread/Textured Tape
- Tactile Timepieces/Watches
- Talking Alarm Clocks
- Talking Bar Code Scanner/Reader
- Talking Blood Glucose Monitors
- Talking Blood Pressure Monitors
- Talking Cash Register
- Talking Coin Counter/Sorter
- Talking Color Detector
- Talking Copier
- Talking Credit Card Terminal
- Talking Money Identifier
- Talking Scales
- Talking Telephones
- Talking Watches

**Work-Related Functions**

**Commute**

- Flexible Schedule
- Ridesharing/Carpooling
- Telework, Work from Home, Working Remotely
- Transportation Assistance
- Van Conversion

**Parking**

- Flexible Schedule
- Telework, Work from Home, Working Remotely
Situations and Solutions:

The following situations and solutions are real-life examples of accommodations that were made by JAN customers. Because accommodations are made on a case-by-case basis, these examples may not be effective for every workplace but give you an idea about the types of accommodations that are possible.

A freezer operator with low vision had difficulty reading visual notifications, both electronic and in print.
The employee was accommodated with handheld portable magnifiers.

A buyer for a department store has low vision.
A buyer for a department store has low vision and was accommodated with a CCTV magnification device for reading paper documents and screen magnification software for her computer.

A claims representative for an insurance agency was having difficulty reading files due to a vision impairment caused by multiple sclerosis.
His employer purchased a stand magnifier and added task lighting to his workstation.

A technician/educator with a school system had low vision and was having difficulty viewing information from a computer screen.
Because the employee benefited from magnification, an inexpensive screen magnification software package was purchased.

A computer programmer with Addison’s disease was dealing with progressive vision loss.
He was accommodated with magnification and software to enlarge his computer screen.

A paralegal with Marfan syndrome was experiencing fluctuating vision, therefore she was having trouble viewing her computer screen.
The employer noticed her having a hard time and purchased screen reading software which allowed her to continue performing her computer tasks.

A custodian with low vision in a public school setting was having difficulty viewing the carpeted area he was vacuuming.
A lighting system was mounted on the custodian's industrial vacuum cleaner and the custodian was provided a headlamp.

A data entry clerk with diabetes was having problems with vision.
Her employer installed additional lighting in the file room and purchased a glare filter for her computer monitor to reduce eyestrain.

A typist with low vision was having some difficulty distinguishing among certain character keys.
She was provided with a glare guard for the computer monitor and large print keyboard labels, which significantly enhanced accuracy.
A customer service representative for a financial institution had long-term blurry vision from a stroke and could no longer read his computer screen. The employer provided screen reading software for his computer so that information present on the screen and information inputted into the system would be read back to him.

An assistant for a disability program had complete loss of vision in one eye and low vision in the other. The assistant was having problems reading printed paper copies. A portable magnifier and a CCTV were used to magnify materials.

An investigator was having problems balancing between reading text and his computer screen due to diabetic retinopathy. Accommodations were made so he could use task lighting, a glare filter for computer monitor, and closed circuit television with a split screen to view text and the computer monitor at same time.

An assistant manager for a nonprofit had complete loss of vision in one eye and low vision in the other due to a stroke. The individual was having problems reading printed paper copies and emails. A portable magnifier, stand magnifier, and a closed-circuit television (CCTV) were used to magnify materials.

An employee working as a law office clerk was having trouble reading the text on the memos she has being given by the lawyers in her office. She disclosed that she had low vision due to albinism and requested that the memos be provided in large print. The employer made a policy that memos must be written in a minimum of 18 point font and also provided a stand up magnifier to assist in reading hand-written items.

A worker in a manufacturing plant had color vision deficiency and used corrective lenses that helped her to distinguish color during day-to-day tasks. Unfortunately, they did not fit well under the safety goggles that she was required to wear at work. She requested that her employer provide prescription eye goggles with the same type of lenses for use at work. The employer provided her with customized prescription goggles to wear at work.

A social worker with Type 2 diabetes was experiencing vision loss. The individual requested a reduced workload. The employer contacted JAN looking for alternatives to lowering productivity standards. JAN suggested stand magnification equipment for reading print materials and screen magnification software for reading from the computer screen.

A preschool teacher needed to read books aloud to students during circle time. She had difficulty describing and talking about the pictures in the books because of her color vision deficiency. She wanted to be able to describe the pictures accurately in order to help the children learn their colors. She was sometimes able to get help from a teaching assistant, but wanted a more independent solution. A JAN consultant
discussed free and low-cost apps for identifying colors and suggested that she use an app to familiarize herself with the colors used on various pages in advance. The teacher also made index cards with notes about the pictures that she wanted to describe and taped them to the back cover of each book while reading.

A dental office hired a receptionist with a vision impairment to work in the front office.
The new employee had acquired a service animal, but did not yet have accrued vacation time that could be used for service animal training. The employer allowed the receptionist to take unpaid leave to attend service animal training.

An engineer with color vision deficiency needed to work on multiple projects.
The engineering firm where he worked printed materials related to each project on a different color of paper in order to help everyone stay organized. The engineer was not able to distinguish colors, and did not find the system useful. A consultant from JAN discussed numerous accommodation ideas including organizing the paperwork differently, handwriting the color or first letter of the color in the upper right corner of the master copy so that it would be there on all photocopies, and providing a handheld color identifier to the engineer so that he could use it identify the color of each paper on his own. The employer provided a high-end handheld color identifier.

A health care worker with lupus had low vision.
She was having difficulty viewing her computer screen and paper copies. The individual was accommodated with a large monitor, screen magnification software, hand/stand magnifier for paper copies, and a closed circuit television system.

A maintenance director at a residential building had color vision deficiency and needed to repaint and touch up the paint in various rooms.
He had particular difficulty distinguishing between white paint and light green paint. As a result, he sometimes found it hard to choose the correct shade of paint for touchups and noticing when he had missed a spot while painting. A JAN consultant provided information about handheld color identifiers and apps for smart phones that could help with color identification. The consultant also discussed that a coworker might be able to help the maintenance director identify the correct can of paint before starting a task and could also help with checking for spots that he may have missed. The employer chose to restructure the maintenance director’s job to reduce the amount of painting for which he was responsible, and also allowed him to seek assistance from a coworker to ensure use of the correct shade of paint and to check for missed spots.

Products

There are numerous products that can be used to accommodate people with limitations. JAN’s Searchable Online Accommodation Resource at https://AskJAN.org/soar is designed to let users explore various accommodation options. Many product vendor lists are accessible through this system; however, JAN provides these lists and many more that are not available on the Web site upon request. Contact JAN directly if you
have specific accommodation situations, are looking for products, need vendor information, or are seeking a referral.
Resources

Job Accommodation Network
West Virginia University
PO Box 6080
Morgantown, WV 26506-6080
Toll Free: (800) 526-7234
TTY: (304) 293-7186
Fax: (304) 293-5407
jan@askjan.org
https://askjan.org

The Job Accommodation Network (JAN) is a free consulting service that provides information about job accommodations, the Americans with Disabilities Act (ADA), and the employability of people with disabilities.

Office of Disability Employment Policy
200 Constitution Avenue,
NW, Room S-1303
Washington, DC 20210
Toll Free: (866) 633-7365
odep@dol.gov
https://www.dol.gov/agencies/odep

The Office of Disability Employment Policy (ODEP) is an agency within the U.S. Department of Labor. ODEP provides national leadership to increase employment opportunities for adults and youth with disabilities while striving to eliminate barriers to employment.

Alaska Center for the Blind and Visually Impaired
3903 Taft Drive
Anchorage, AK 99517-3069
Toll Free: (800) 770-7517
Direct: (907) 248-7770
https://www.alaskabvi.org/Pages/default.aspx
Our mission is to equip Alaskans with vision loss to meet their life and work goals. Celebrating 35 years in 2012, the Alaska Center for the Blind and Visually Impaired serves over 300 people of all ages annually with new techniques for communication, mobility, and daily living when loss of eyesight interferes with activities or employment.

American Council of the Blind
1703 N. Beauregard St.
Suite 420
Alexandria, VA 22201
Toll Free: (800) 424-8666
Direct: (202) 467-5081
Fax: (703) 465-5085
info@acb.org
http://www.acb.org

The American Council of the Blind strives to increase the independence, security, equality of opportunity, and quality of life, for all blind and visually-impaired people.

American Foundation for the Blind
2 Penn Plaza,
Suite 1102
New York, NY 10121
Direct: (212) 502-7600
Fax: (888) 545-8331
http://www.afb.org

The American Foundation for the Blind removes barriers, creates solutions, and expands possibilities so people with vision loss can achieve their full potential.
Arizona Center for the Blind and Visually Impaired
3100 East Roosevelt St.
Phoenix, AZ 85008
Direct: (602) 273-7411
http://www.acbvi.org/

Arizona Center for the Blind and Visually Impaired (ACBVI) has been providing services for individuals since 1947. ACBVI is committed to "enhancing the quality of life for people who are blind or otherwise visually impaired." Our services are available to adults who are legally blind or visually impaired as well as those who have a degenerative eye condition which may eventually become a visual impairment. These services are offered separately or concurrently according to the individual needs of the qualifying client.

Georgia Center for the Visually Impaired
739 West Peachtree Street, N.W.
Atlanta, GA 30308
Direct: (404) 875-9011
Fax: (404) 607-0062
http://www.cviga.org/

The mission of the Center for the Visually Impaired is to empower people impacted by vision loss to live with independence and dignity.
Learning Ally
20 Roszel Road
Princeton, NJ 08540
Toll Free: (800) 221-4792
http://www.learningally.org/

We are a national not-for-profit dedicated to bringing parents, teachers and the community together to empower dyslexic, blind or visually impaired students to succeed.

National Center for Biotechnology Information
8600 Rockville Pike
Bethesda, MD 20894
pubmedcentral@ncbi.nlm.nih.gov

The National Center for Biotechnology Information advances science and health by providing access to biomedical and genomic information.

National Federation of the Blind
200 East Wells Street
Baltimore, MD 21230
Toll Free: (410) 659-9314
Fax: (410) 685-5653
https://nfb.org/

The ultimate purpose of the National Federation of the Blind is the complete integration of the blind into society on a basis of equality. This objective involves the removal of legal, economic, and social discriminations; the education of the public to new concepts concerning blindness; and the achievement by all blind people of the right to exercise to the fullest their individual talents and capacities. It means the right of the blind to work along with their sighted neighbors in the professions, common callings, skilled trades, and regular occupations.
Our mission is to enhance employment and independent living outcomes for individuals who are blind or visually impaired through research, training, education, and dissemination.
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