

JAN

Job Accommodation Network

Practical Solutions • Workplace Success

Accommodation and Compliance Series

Accommodation and Compliance Series: Employees with Colorblindness/Color Vision Deficiency

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Employment Policy, U.S. Department of Labor

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 <http://askjan.org/soar>.

Information about Colorblind/Color Vision Deficiency

Color Vision Deficiency (CVD) is the inability to distinguish between some colors and shades. Most people with this condition can identify some colors. Few people are totally "color blind." Color filters, such as a special red contact lens worn on one eye or prescription glasses may be used to help some people with a color deficiency. In addition, talking products are available that will scan a color and announce a description of the color (originally designed for individuals who are blind).

Colorblind/Color Vision Deficiency and the Americans with Disabilities Act

The ADA does not contain a list of medical conditions that constitute disabilities. Instead, the ADA has a general definition of disability that each person must meet. A person has a disability if he/she has a physical or mental impairment that substantially limits one or more major life activities, a record of such an impairment, or is regarded as having 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 Colorblind/Color Vision Deficiency

People with color vision deficiency 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 with arthritis 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. Has the employee been consulted regarding possible accommodations?
6. 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?
7. Do supervisory personnel and employees need training?

Accommodation Ideas:

Limitations

Color Vision Deficiency (Color Blindness)

- Color Contrast Overlays
- Color Identification
- Color Vision Deficiency Information & Products
- Job Restructuring
- Policy Modification

Work-Related Functions

Access Information

- Accessible Mobile Phones

- Accessible Telephones
- Additional Training Time / Training Refreshers
- Adjustable Desk Top Workstations for Office Settings
- Aide/Assistant/Attendant
- Alternative Input Devices
- Alternative Keyboards
- Alternative Mice
- Alternative Mice - Limiting Tremors
- Amplified Stethoscopes and Related Products
- Assistive Listening Devices (personal)
- Assistive Listening Devices and Sound Field System
- Audio Descriptive Services
- Bone Conduction Technology
- Braille Notetakers and Personal Digital Assistants
- Braille Printers & Embossers
- Breath and Mouth Controlled Alternative Computer Input Devices
- CART Services
- CART Services - Remote
- Closed Circuit TV (CCTV)
- Color Contrast Overlays
- Color Identification
- Color Vision Deficiency Information & Products
- Computer Braille Display
- Enlarged Keyboard Tops and Labels
- External Computer Screen Magnification
- Eye Controlled Alternative Computer Input Devices
- Head Controlled Alternative Computer Input Devices
- Keyguards
- Large Button Phones
- Large Visual Display for Telephone
- LCD Pen Tablet Displays

- Line Guides
- Low Vision Enhancement Products
- Magnification (Hand or Stand)
- On-Screen Keyboards
- One-Handed Keyboards
- Portable or Handheld Readers
- Prism Glasses/Bed Spectacles
- Screen Magnification Software
- Screen Reading Software and Training
- Speech Recognition Software
- Talking Coin Counter/Sorter
- Talking Global Positioning Systems (GPS) and Maps
- Talking Money Identifier
- Talking Scales
- Talking Thermometers
- Training Modifications

Situations and Solutions:

A federal employee who needed to work around hazardous materials needed to identify hazardous materials by means of color coded labels.

He also needed to respond appropriately to colored lights. A JAN consultant discussed use of a handheld color identifier to identify the labels and also suggested that the employee could check with an ophthalmologist to see if they were a candidate for special lenses designed to help with improved color detection. The employer purchased a handheld color identifier and ask the employee if they would be willing to check with an ophthalmologist to see if color enhancing lenses or another solution could assist them in responding appropriately to colored lights. He was temporarily excused from the task involving lights until he could check with his ophthalmologist.

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.

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.

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 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.

Products

There are numerous products that can be used to accommodate people with limitations. JAN's Searchable Online Accommodation Resource at <http://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

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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

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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.

Color Oracle

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<http://colororacle.org/index.html>

Color Oracle is a free color blindness simulator for Window, Mac and Linux. It takes the guesswork out of designing for color blindness by showing you in real time what people with common color vision impairments will see.

Color Oracle applies a full screen color filter to art you are designing – independently of the software in use. Eight percent of all males are affected by color vision impairment – make sure that your graphical work is readable by the widest possible audience.

Mayo Clinic

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The Mayo Clinic's mission to inspire hope and contribute to health and well-being by providing the best care to every patient through integrated clinical practice, education and research.

MedlinePlus

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<https://www.nlm.nih.gov/medlineplus/>

MedlinePlus is the National Institutes of Health's Web site for patients and their families and friends. Produced by the National Library of Medicine, the world's largest medical library, it brings you information about diseases, conditions, and wellness issues in language you can understand. MedlinePlus offers reliable, up-to-date health information, anytime, anywhere, for free.

Created by the U.S. National Library of Medicine

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Remedy's Health Communities

<http://www.healthcommunities.com>

Remedy Health Media is America's fastest growing health information and technology company. We are a leading provider of clinical resources and wellness tools that help millions of patients and caregivers live healthier, more fulfilled lives.

Our mission is to empower patients and caregivers with the information and applications needed to efficiently navigate the healthcare landscape and as a result, to permit better health outcomes through use of our products and services.

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