

# JAN

Job Accommodation Network

Practical Solutions • Workplace Success

## Accommodation and Compliance Series

# Accommodation and Compliance Series: Colorblindness/Color Vision Deficiency

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



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## Preface

The Job Accommodation Network (JAN) is funded by a grant from the Office of Disability Employment Policy, U.S. Department of Labor. JAN makes documents available with the understanding that the information be used solely for educational purposes. The information is not intended to be legal or medical advice. If legal or medical advice is needed, appropriate legal or medical services should be contacted.

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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 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 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 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 who have color vision deficiency 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**

#### Color Vision Deficiency (Color Blindness)

- Color Contrast Overlays
- Color Identification
- Color Vision Deficiency Information & Products
- High Visibility Floor Tape and Paint
- Job Restructuring
- Policy Modification

### **Work-Related Functions**

#### Access Information

- Accessible Mobile Phones

- Additional Training Time / Training Refreshers
- Aide/Assistant/Attendant
- Color Contrast Overlays
- Color Identification
- Color Vision Deficiency Information & Products
- Large Button Phones

## 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 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 <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](mailto: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](mailto: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.

### **Color Oracle**

RMIT University  
Melbourne  
[bernhard.jenny@rmit.edu.au](mailto:bernhard.jenny@rmit.edu.au)  
<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**

13400 E. Shea Blvd.  
Scottsdale, AZ 85259  
Direct: (480) 301-8000  
<http://www.mayoclinic.org/>

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**

8600 Rockville Pike  
Bethesda, MD 20894  
[custserv@nlm.nih.gov](mailto:custserv@nlm.nih.gov)  
<https://medlineplus.gov>

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.

### **National Center for Biotechnology Information**

8600 Rockville Pike  
Bethesda, MD 20894  
[pubmedcentral@ncbi.nlm.nih.gov](mailto:pubmedcentral@ncbi.nlm.nih.gov)  
<https://www.ncbi.nlm.nih.gov/>

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

**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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