

## Keep C.A.L.M. and Check Contrast

### Why Check Contrast?

Color is a powerful visual tool—we use it to emphasize, organize, and enhance our presentations and documents. But not everyone perceives color the same way.

#### For example:

- ❖ Red-green color blindness is common, affecting ~8% of men and 0.5% of women of Northern European ancestry.
- ❖ Some users may not see any color at all due to achromatopsia.
- ❖ Others may struggle due to temporary factors like screen glare or visual fatigue using apps like F.lux or Twilight.
- ❖ Even in bright sunlight, low contrast text becomes hard to read—something almost everyone has experienced.

If your visuals rely only on color, you risk excluding part of your audience and reducing the clarity of your message.

### Your C.A.L.M. Guide to Accessible Contrast

#### **C: Consider Color Limitations**

Assume not all users see color the same way. Avoid using color alone to convey meaning.

#### **A: Assess Contrast Ratios**

Use tools to check the contrast between text and background—especially for headings, body text, and data visuals.

#### **L: Label with More Than Color**

Use patterns, textures, or labels along with color to reinforce meaning in charts, maps, and visuals.

#### **M: Make It Work for Everyone**

Good contrast benefits everyone—including users with screen filters, mobile devices in sunlight, or low vision.



More tips on page 6a

## Tell Me How

### Use Contrast Checker Tools

You don't need to calculate contrast ratios manually. Tools like:

- ❖ WebAIM Color Contrast Checker
- ❖ Colorable, Accessible Colors, or Microsoft Accessibility Checker
- ❖ Let you enter text and background colors to test their accessibility.

### Know the Standards

- ❖ Regular text should meet a contrast ratio of at least 4.5:1
- ❖ Large text (18pt or 14pt bold) should meet at least 3:1
- ❖ Decorative text or logos have different guidelines but should still be readable

### In Data Visualizations

- ❖ Choose high-contrast palettes
- ❖ Combine color with textures or labels
- ❖ Ensure all key data points are distinguishable—even without color

## Need More Help?

**Watch Episode #17 of Google's Allycasts:** <https://www.youtube.com/watch?v=LBmLspdAtxM>

For information on how to check for accessible colors. This is a great next step for practical tips and demos.

## In Summary

### Poor contrast = lost information.

Good contrast improves readability, comprehension, and user experience for everyone. Checking contrast is simple, powerful, and essential to effective communication.



**We're here to support your accessibility efforts!**

### Need Help?

Call 804-333-6789 or email  
[rcchelp@rappahannock.edu](mailto:rcchelp@rappahannock.edu)