Color Contrast: A Brief Introduction

Accessibility Video Tutorials

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What we will cover in this video

In this video, we will discuss & demonstrate:

✓ What is color contrast and why does it matter?

✓ What are the Web Content Accessibility Guidelines for using color and for color contrast?

✓ How can tell if color contrast is accessible using Microsoft Office and the WebAIM Color Contrast Checker Tool?

What is Color Contrast?

- Colors are not inherently "inaccessible" or "accessible", on their own. What matters for accessible color *contrast* is the combination of foreground and background colors together.

- Color Contrast is the difference in hue between colors that are used together.

  1. This is an example of high color contrast.

  2. This is an example of low color contrast. ← low color contrast

- The first example shows colors that are most different from each other. The second example shows colors that are very similar to each other.

  - **Higher color contrast = more accessible**

What are the Web Content Accessibility Guidelines?
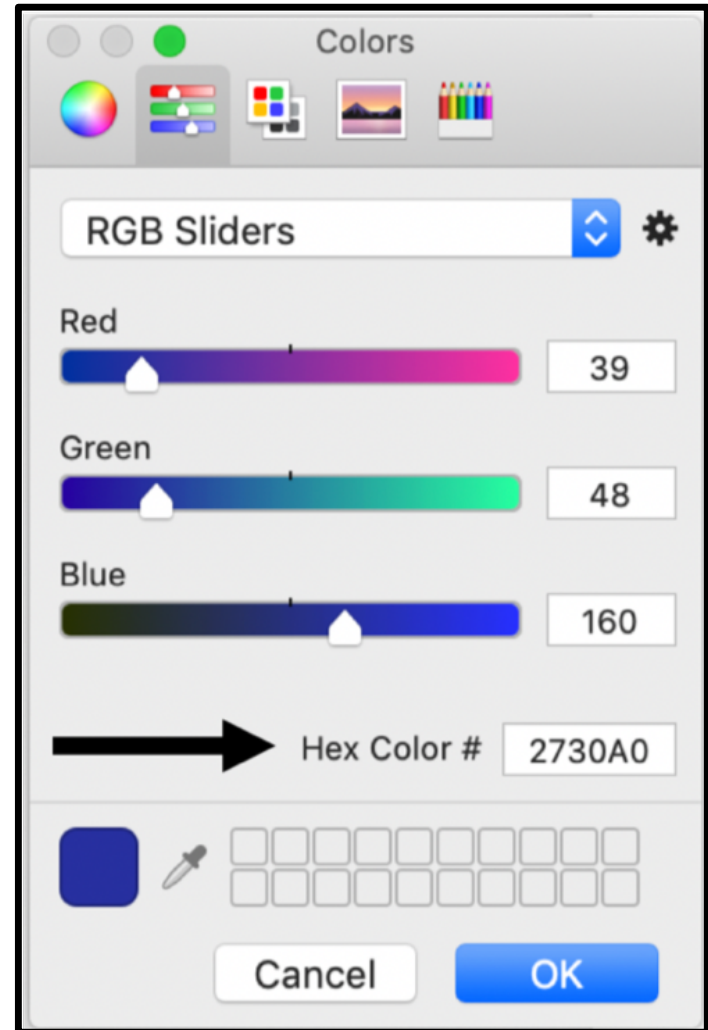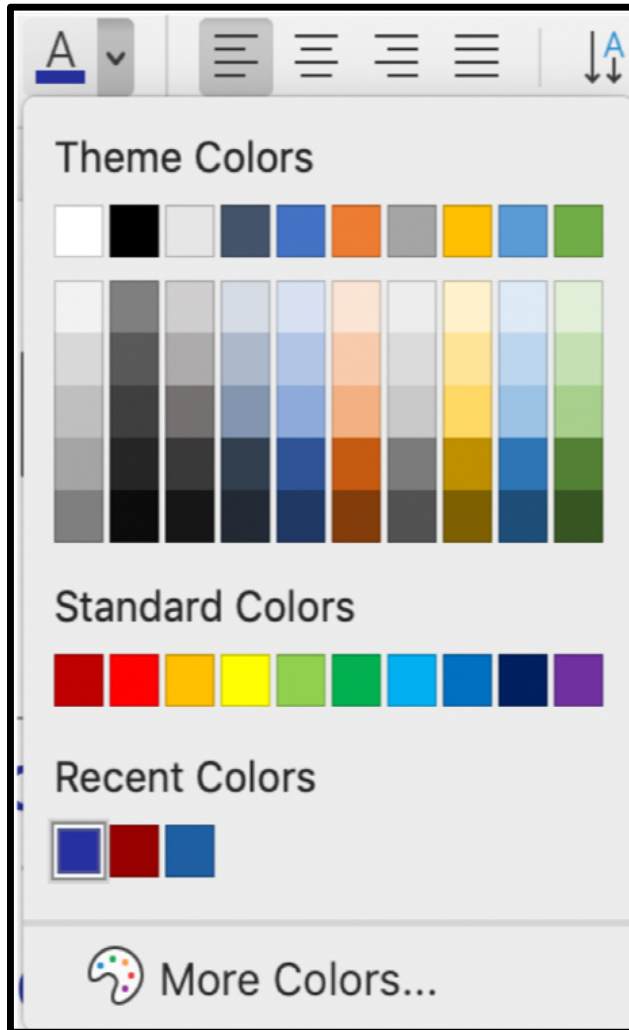
WCAGs for Color Contrast

[Web Content Accessibility Guidelines](#) for Color Contrast

- The **color of text** and the color of the background should have a contrast ratio of at least 4.5:1 for "Regular Text". Regular text is size 14 point.

- For "Large Text", which is 18 point or larger, the contrast ratio should be 3:1.

- For graphics and images, color contrast should also have a ratio of 3:1 with its background.
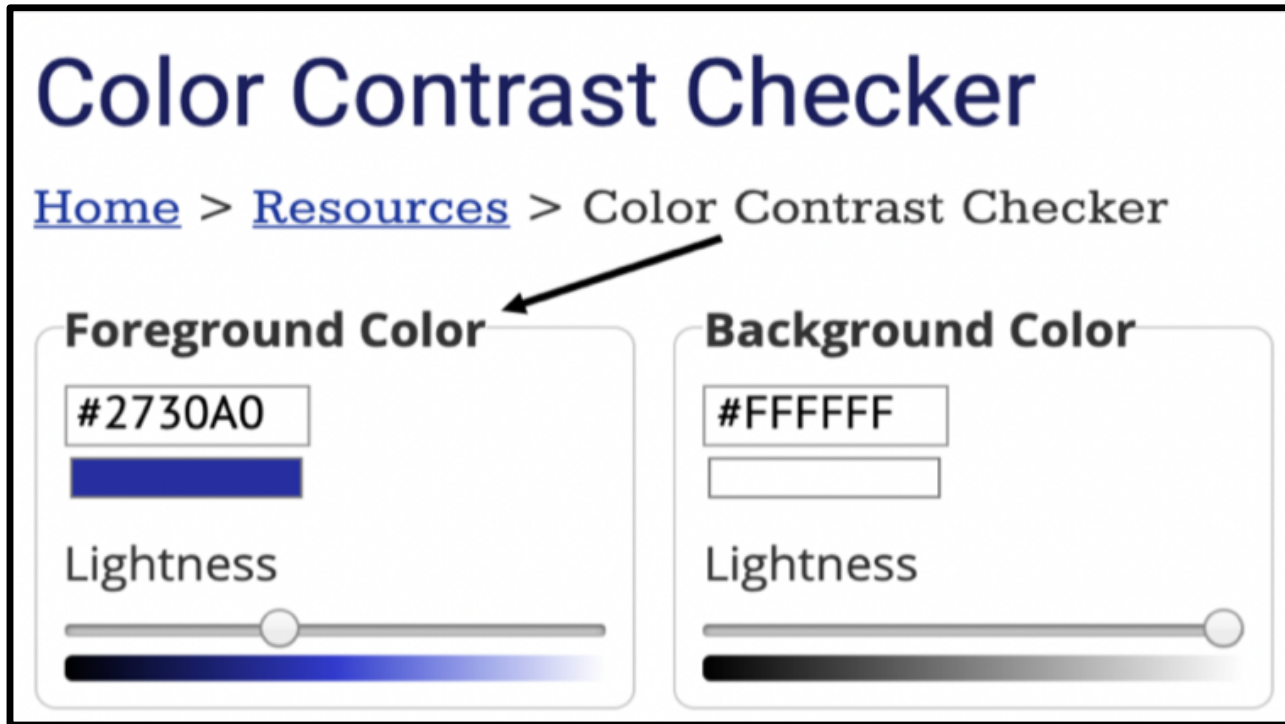
- These are the WCAG AA standards.

How can I check for color contrast?

Using Microsoft PowerPoint and the WebAIM Color Contrast Checker Tool

Step 1: Find the Hex Number

Step 2: Use the WebAIM Color Contrast Checker Tool

Results of from the WebAIM Color Contrast Checker Tool

Color Contrast Checker

Home > Resources > Color Contrast Checker

Foreground Color

#2730A0
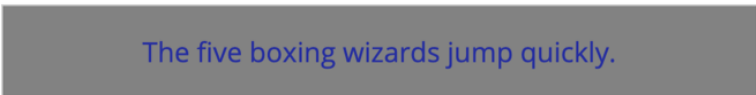
Lightness

Background Color

#FFFFFF

Lightness

Contrast Ratio
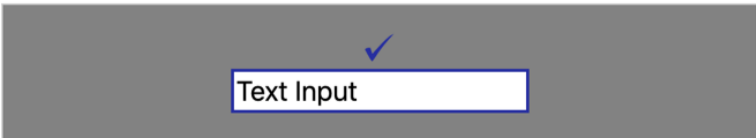
10.41:1

permalink

Normal Text

WCAG AA: **Pass**
WCAG AAA: **Pass**

The five boxing wizards jump quickly.

Large Text

WCAG AA: **Pass**
WCAG AAA: **Pass**

The five boxing wizards jump quickly.

Graphical Objects and User Interface Components

WCAG AA: **Pass**

✓

Text Input

- This color contrast is accessible!

- It passed the AA and AAA [Web Content Accessibility Guidelines](#) criteria.
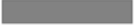
Inaccessible Color Contrast

Remember!

Higher Ratio =

More accessible color contrast

10.41:1 is higher than 2.7:1.

It is more accessible.

Using Tools in Microsoft Office

Microsoft Office Accessibility Checker Tool

Microsoft Office Accessibility Checker Tool

- This tool will not resolve the contrast issue for you, but it offers helpful information.

- You can find the Accessibility Checker in the *Tools* menu: "**Check Accessibility**"
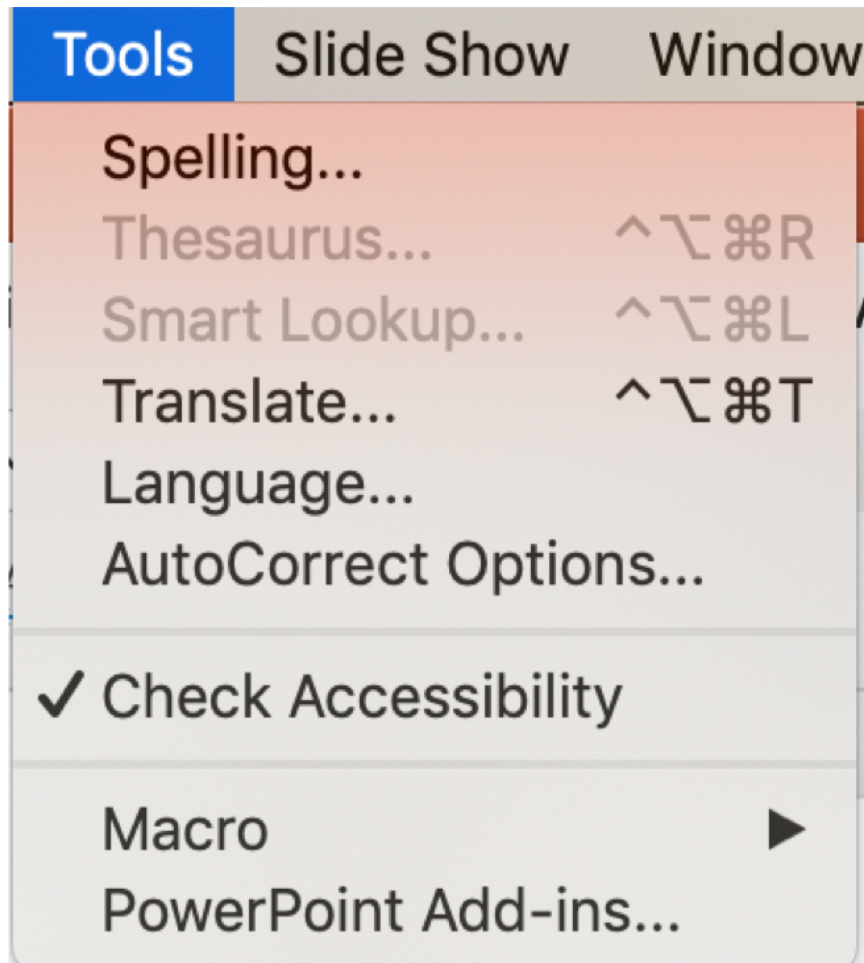
Accessibility Checker Results

- The results of this Access Check are warning us that we have inaccessible contrast.

- It tells us where this occurs in the presentation (on slide 2).

Accessibility Checker

Inspection Results

▼ Warnings
　▼ Hard-to-read text contrast
　　Content Placeholder 2 (Slide 2)
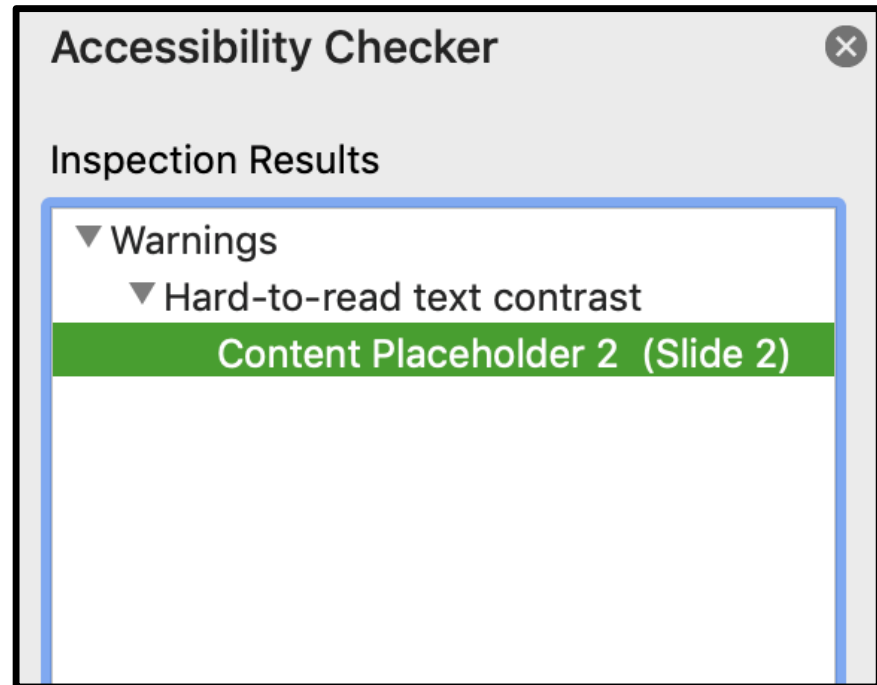
To Recap: Color Contrast

- Color is not inherently inaccessible, but we can choose to use color accessibly or inaccessibly.

- High color contrast is more accessible than low color contrast.

- You can find Hex numbers in Microsoft Word, Outlook, and PowerPoint, Adobe, and more.

- You can use the Microsoft Office Accessibility Checker tool to find inaccessible color contrast in your document.

- You can use Hex numbers and the WebAIM Color Contrast Checker Tool to determine color contrast.

- You can reference the Web Content Accessibility Guidelines to learn more about how to use color accessibly.

Thank you!

For more information and videos about accessible content, visit: www.endabusepwd.org

Ending abuse of people with disabilities is a team effort.

Contact us for support:

End Abuse Email Address: cvs@vera.org

End Abuse Phone Number: (212) 376-3096

End Abuse Toll Free Phone Number: (855) 274-8222