

Provincial Addiction & Mental Health

# Accessibility Considerations for AMH Communication

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## Purpose

This resource has been designed to help addiction and mental health (AMH) researchers communicate the results of their research to broad audiences in an accessible way.

## Introduction

To effectively communicate addiction and mental health research and information, we must ensure our resources are accessible to everyone.

This document compiles best practices for accessibility, including awareness of specific limitations for those who have:

- Limited English skills
- Dyslexia
- Colour blindness
- Cognitive disabilities
- Hearing impairment
- Visual impairment
- Autism

It also includes recommended tools to help with accessibility, including resources for:

- Choosing colours
- Enhancing readability
- Ensuring content is accessible for screen readers
- Adding video captions and transcripts

These tools are listed in the “Quick reference” section just below, and are discussed in more detail in the sections that follow.

# Quick reference: Accessibility tools

## Colour choice

Thoughtful colour choice is important for those with visual impairments and cognitive disabilities.

- Use the [Coblis Color Blindness Simulator](#) to see how your images will look to people with different types of colour blindness.
- Check the contrast between your background and text colours with [Contrast Ratio](#). Enter your hexadecimal colour codes to see the results. You want at least 7.0 for body text, and 4.5 for large text (such as headers and titles).

## Readability

Paste your text into the following tools to **check the grade level** of your writing. For a general audience, a Grade 8 reading level is fine. Each tool also has suggestions to improve readability.

- Online-Utility.org: [Readability Calculator](#)
- [Hemingway App](#)

To **test your document's readability with real people**, try a cloze test with a sample of about 250 words. This [cloze test creator](#) will automatically generate a version of your document with every fifth word deleted. You can then see how well test readers can fill in the blanks.

- 60% correct answers means the reader will understand 90% of the material.
- 40-59% correct answers means the reader will understand 75% of the material.
- Under 40% correct answers means the material is too difficult for this reader.

## Screen reader accessibility

People with visual impairments may be using a screen reader to have your documents and webpages read to them. Use these tools to help the screen reader do its job well.

- Council of Ontario Universities: [Alternative Text](#)
- Microsoft Office Support: [Create accessible Office documents](#)
- Adobe Help: [Create and verify PDF accessibility \(Acrobat Pro\)](#)

## Video captions and transcripts

Ensure accessible videos for those with hearing impairments by providing text alternatives.

- YouTube Help: [Add your own subtitles & closed captions](#)
- YouTube Help: [Tips for creating a transcript file](#)
- The National Center on Disability and Access to Education: [Captioning YouTube Videos](#)

## Best practices for all audiences

The concept of “universal design” encourages the design of products and environments to be usable by all people, regardless of age or ability. The following best practices in content and design benefit everyone, including audiences with special needs.

- Use a plain language approach. In particular:
  - Write concisely and use common words.
  - Keep sentences and paragraphs short.
  - Avoid idioms and metaphors.
  - Write at a grade eight reading level (or lower).
  - Clearly label key messages and next steps.
- Left-align text (not justified).
- Keep line length short: no more than six inches, or about 60-70 characters. Use wide margins or columns as needed.
- Emphasize text with bold. Avoid using italics, underlining, or uppercase letters for emphasis.
- Avoid background graphics and watermarks.
- Ensure there is enough contrast between background colours and text colours.
- Keep designs simple, with plenty of white space and only two to three colours.

## Useful tools for all audiences

1. **Check readability** with online tools such as:
  - [Readability Calculator](#)
  - [Hemingway App](#)
2. Test your document (or a sample of about 250 words) with readers using a **cloze test**. This [cloze test creator](#) will automatically generate a version of your document with every fifth word deleted.
  - 60% correct answers means the reader will understand 90% of the material.
  - 40-60% correct answers means the reader will understand 75% of the material.
  - Under 40% correct answers means the material is too difficult for this reader.
3. **Check the contrast** between your background and text colours with [Contrast Ratio](#). Enter your hexadecimal colour codes to see the results. You want at least 7.0 for body text, and 4.5 for large text (such as headers and titles).

# Best practices for specific conditions

## Readers whose first language is not English

**Prevalence:** More than 40% of Canadians are not native English speakers

**Communication challenges:**

- Slang, metaphors, and idioms
- Unfamiliar cultural practices and contexts

**Best practices:**

- Aim for a reading level of grade four to six.
- Use positive language (for example: “at least” instead of “no fewer than”).
- Reinforce concepts with concrete visuals.

## Dyslexia

**Prevalence:** 5-10% of the population

**Communication challenges:**

- Recognizing words
- Reading fluency
- Reading comprehension
- Reduced likelihood of reading, which can lead to limited vocabulary and background knowledge
- Distractions while reading

**Best practices:**

- Limit multimedia distractions and use plenty of white space.
- Reinforce concepts with concrete visuals.
- Use a simple, sans serif font (such as Arial, Verdana, or Tahoma), in at least 14-point size.
- Use 1.5 line spacing.
- Avoid dashes, which interrupt the flow of the sentence.
- Reduce glare by using a cream or off-white background (not bright white), and print on matte paper.

## Colour blindness

**Prevalence:** 8% of men and 0.5% of women

**Communication challenges:**

- Colour-coded information such as charts, maps, and call-outs

**Best practices:**

- Don't rely on colour alone to convey a message. For example: use a combination of colours and icons, or colour and underlining for web links.
- Avoid problematic colour combinations:
  - Don't pair green with red, brown, blue, grey, or black.
  - Don't pair light green with yellow.
  - Don't pair blue with purple or grey.
- Charts: Use patterns (such as stripes, grids, and dots) to show contrast in bar charts, and clearly label the amounts represented.

**Useful tools:**

- Use the [Coblis Color Blindness Simulator](#) to test how your images will look to people with different types of colour blindness.

## Cognitive disabilities

**Prevalence:** 4% of the population

**Communication challenges:**

- Attention and concentration
- Memory problems
- Literal interpretation
- Slower information processing
- Reduced reasoning and problem-solving skills
- Information overload

**Best practices:**

- Reinforce concepts with concrete visuals.
- Repeat important information.
- If requesting responses, accept it in multiple formats (online, phone, paper).



## Hearing impairment

**Prevalence:** 3.2% of the population

**Communication challenges:**

- Audio components of videos

**Best practices:**

- Provide captions and/or transcripts for all videos.

**Useful tools:**

- YouTube Help: [Add your own subtitles & closed captions](#)
- YouTube Help: [Tips for creating a transcript file](#)
- The National Center on Disability and Access to Education: [Captioning YouTube Videos](#)

## Visual impairment

**Prevalence:** 2.8% of the population

**Communication challenges:**

- Reading smaller text and tightly spaced letters and words
- Reading long lines of text (if peripheral vision is impaired)
- Reading long documents, which may cause eye strain
- Reading documents or webpages that are not optimized for screen readers

**Best practices:**

- Use coloured text sparingly, and only for things like titles and headings.
- Use a minimum 12-point font, but ideally larger.
- Use at least 1.25 line spacing.
- Use decorative fonts sparingly. Choose simple fonts like Helvetica and Arial.
- Use spaces between paragraphs (not just indents).
- Avoid wrapping text around images.
- Include descriptive and useful alternative text (“alt text”) for all images.
- Use periods between each letter of an abbreviation, as some screen readers may try to read them phonetically.

**Useful tools:**

- Council of Ontario Universities: [Alternative Text](#)
- Microsoft Office Support: [Create accessible Office documents](#)
- Adobe Help: [Create and verify PDF accessibility \(Acrobat Pro\)](#)

## Autism

**Prevalence:** 1% of the population

**Communication challenges:**

- Understanding idioms, metaphors, similes, and irony
- Connecting ideas, identifying the main point, and drawing conclusions
- Understanding complex sentence structures with multiple clauses
- Filtering out less important information, which can lead to information overload

**Best practices:**

- Reinforce concepts with concrete visuals.
- Limit multimedia distractions and use plenty of white space.

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