

# Digital Accessibility Practices: A Comprehensive Resource Guide for Canada

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### Introduction

Digital accessibility ensures that people with disabilities can use digital products, such as websites, mobile applications, and electronic documents. This guide aims to provide comprehensive practices to help developers, designers, and content creators in Canada make their digital content accessible to all users.:

### Importance of Digital Accessibility

Digital accessibility is crucial for ensuring equal access to information and services for all users, regardless of their abilities.

#### Benefits include:

- Inclusivity: Provides equal opportunities for people with disabilities.
- Legal Compliance: Adheres to Canadian laws and regulations, such as the Accessible Canada Act and the Web Content Accessibility Guidelines (WCAG).
- Enhanced User Experience: Improves usability for all users, including those with temporary disabilities or situational limitations.
- Market Reach: Expands potential audience and consumer base.

## Legal and Ethical Considerations in Canada

- Accessible Canada Act (ACA): Enacted to achieve a barrier-free Canada by 2040. This legislation requires organizations under federal jurisdiction to identify, remove, and prevent barriers to accessibility.
- Canadian Human Rights Act: Prohibits discrimination on the grounds of disability and mandates accommodation for people with disabilities.
- Web Content Accessibility Guidelines (WCAG): Provides a set of guidelines for making web content more accessible and is often referenced in Canadian accessibility regulations.
- Provincial Legislation: Various provinces have their own accessibility laws, such as the Accessibility for Ontarians with Disabilities Act (AODA).

### Principles of Digital Accessibility

#### 1. Perceivable

- Text Alternatives: Provide text alternatives for non-text content.
- Time-based Media: Provide alternatives for time-based media.
- Adaptability: Create content that can be presented in different ways.
- Distinguishability: Make it easier for users to see and hear content.

### 3. Understandable

- Readable: Make text content readable and understandable.
- Predictable: Make web pages appear and operate in predictable ways.
- Input Assistance: Help users avoid and correct mistakes.

### 2. Operable

- Keyboard Accessible: Make all functionality available from a keyboard.
- Enough Time: Provide users enough time to read and use content.
- Seizures and Physical Reactions: Do not design content in a way that is known to cause seizures.
- Navigable: Provide ways to help users navigate, find content, and determine where they are.

### 4. Robust

Compatible: Maximize compatibility with current and future user tools.

### **Designing Accessible** Content

### **Text and Typography**

Readable Fonts: Use clear, readable fonts and appropriate sizes.

Contrast: Ensure sufficient contrast between text and background.

**Headings:** Use headings to structure content logically

### **Images and Multimedia**

Alt Text: Provide descriptive alt text for images.

Captions: Include captions and transcripts for videos.

Audio Descriptions: Provide audio descriptions for visual content.

### **Navigation and Layout**

Logical Structure: Organize content in a clear, logical structure.

**Consistent Navigation:** Use consistent navigation across pages.

Link Text: Use descriptive link text to convey the purpose of the

link

### Web Accessibility Standards

**Web Content Accessibility Guidelines (WCAG):** Follow WCAG 2.1 standards at the AA level, which is a common benchmark for accessibility compliance.

**Canadian-specific Guidelines**: Adhere to guidelines provided by the Government of Canada's Treasury Board Secretariat, which includes additional criteria relevant to Canadian contexts.

**European Standard EN 301 549:2021:** Canada has officially adopted the European standard EN 301 549:2021 Accessibility requirements for Information and Communication Technologies (ICT).

#### **About the Standard**

The purpose of the standard is to eliminate barriers to accessibility that people with disabilities may experience in ICT products and services.

- Describes accessibility for web-based technologies, non-web technologies, and hybrid technologies.
- Describes procedures to test and evaluate each accessibility requirement.
- Ensures each accessibility requirement is suitable for everyone.

The adoption of the European standard EN 301 549:2021, which is already being used internationally, brings Canada in line with global best practices. Releasing it as a National Standard of Canada also aims to encourage collaboration among all levels of government. It will also facilitate the broader adoption, use, and implementation of ICT best practices across the country. This approach contributes to an inclusive and barrier-free ICT field.

### **Testing for Accessibility**

### **Manual Testing**

- \* Keyboard Testing: Ensure all functionalities are accessible via keyboard.
- Screen Reader Testing: Test with screen readers like JAWS, NVDA, and VoiceOver.
- Color Contrast Analysis: Check color contrast using tools like the WebAIM Color Contrast Checker.

### **Automated Testing**

- \* Accessibility Checker Tools: Use tools like WAVE, Axe, and Lighthouse to identify accessibility issues.
- Browser Extensions: Employ extensions like Accessibility Insights for quick assessments.

### **Tools and Resources**

### **Design Tools**

Adobe XD: Incorporates plugins for accessibility checks. Sketch: Supports accessibility guidelines and plugins.

### **Development Tools**

React Accessible Components: Libraries and components designed with accessibility in mind.

ARIA (Accessible Rich Internet Applications): A set of attributes that define ways to make web content and web applications more accessible.

### **Learning Resources**

<u>W3C Accessibility Guidelines:</u> The primary source for understanding and implementing web accessibility.

<u>WebAIM (Web Accessibility in Mind):</u> Offers tutorials, checklists, and articles on various aspects of web accessibility.

<u>Inclusive Design Research Centre (IDRC):</u> Provides resources and research on inclusive design practices.

### **Case Studies**

#### **Government of Canada**

<u>Canada.ca Redesign</u>: Focused on creating a user-friendly, accessible website that meets WCAG 2.1 AA standards. The redesign involved extensive user testing, including people with disabilities, to ensure accessibility.

### **Large Corporations**

<u>CBC (Canadian Broadcasting Corporation)</u>: mplemented accessibility features across its digital platforms, including closed captions and described video for online content, and an accessible mobile app interface.

### Future Trends in Digital Accessibility

**Artificial Intelligence:** Al-driven tools to automatically detect and fix accessibility issues.

**Voice Interfaces:** Growing use of voice-activated assistants for improved accessibility.

**Virtual Reality (VR) and Augmented Reality (AR):** Developing accessible VR and AR experiences.

Personalization: Enhanced personalization options to cater to individual

accessibility needs.