No One Left Behind

Deaf Community Interview Insights & Recommendations for Accessibility in Canada's Emergency Public Alerting System

Prepared for
TBNC CRTC 2025-180

DEAF WIRELESS CANADA COMMITTEE

COMITÉ POUR LES SERVICES SANS FIL DES SOURDS DU CANADA

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Land Acknowledgement

“From coast to coast to coast, we acknowledge the ancestral and unceded territory of all the First Nations, Inuit, and Métis peoples that call this land home.”

Acknowledgement & Credits

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Foreword

We gratefully acknowledge the team of transcribers whose careful work transformed hours of American Sign Language (ASL) and Langue des signes québécoise (LSQ) interviews into accessible English and French transcripts. Their dedication and attention to detail made it possible for the Research Analysis team to fully understand and honour the voices and perspectives of all participants. Without their exceptional skill, commitment, and perseverance, the Research Analysis team would not have been able to achieve the depth and quality of this report.

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En français

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I. Executive Summary

1. **ES1** Imagine being in a crisis where every second matters, yet the alerts arrive in forms that Deaf, DeafBlind, and Hard of Hearing people cannot understand. For many Deaf, DeafBlind, and Hard of Hearing Canadians, it is a daily reality rather than an occasional problem. When emergency alerts exclude Deaf, DeafBlind, and Hard of Hearing people, they lose their sense of safety and face fear, confusion, and uncertainty. The Deaf Wireless Canada Consultative Committee (DWCC-CSSSC) based this report on the lived experiences of these individuals. In response to the Canadian Radio-television and Telecommunications Commission's (CRTC) call to strengthen Canada's Public Alerting System (CRTC 2025-180), this study reveals that accessibility gaps persist, endangering safety, weakening trust, and impacting peace of mind. The findings suggest a future where emergency communication encompasses everyone.

2. **ES2** In capturing the full diversity of experiences across Canada's Deaf, DeafBlind, and Hard of Hearing communities, DWCC designed a research approach that went beyond numbers. DWCC combined demographic data, in-depth interviews, and existing research to ensure lived experiences shaped each step of the process. Twenty-three participants from nine provinces shared their perspectives through American Sign Language (ASL), Langue des signes québécoise (LSQ*)*, and text-based communication, reflecting a range of languages, cultures, and regions. The research team grounded the study in Canadian and international accessibility standards, including the Accessible Canada Act,[1] the Canadian Charter of Rights and Freedoms (Charter),[2] Article 11 of the Convention on the Rights of Persons with Disabilities (CRPD),[3] and the 2023 Policy Direction,[4] underscoring Canada's responsibility to ensure equitable access for all.

3. **ES3** Across Canada, participants reflected a full range of intersectional experiences within Deaf, DeafBlind, and Hard of Hearing communities. The

[1] Government of Canada. (2019). *Accessible Canada Act (S.C. 2019, c. 10).* Department of Justice.
[2] Government of Canada. (1982). Canadian Charter of Rights and Freedoms, Part I of the Constitution Act, 1982, being Schedule B to the Canada Act 1982 (UK), c 11.
[3] United Nations. (2006). Convention on the Rights of Persons with Disabilities. Article 11: Situations of risk and humanitarian emergencies.
[4] Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy, SOR/2023-23, Government of Canada

research team gathered pre-interview data in Appendix B, showing that most participants (86%) identified as Deaf, and DeafBlind participants (4.5%) added vital depth to the findings. The majority communicated in ASL (78%), while others used LSQ (13.6%) and both ASL and Indigenous sign languages. Two participants listed English as their first language, showing that the research team valued all linguistic identities through an inclusive communication approach. Alert Ready delivered alerts through television, radio, and compatible wireless devices. The research team also included rural and northern voices, reflecting a truly national picture. Most participants were women (60%) and included Indigenous, immigrant, and racialized members whose overlapping experiences deepened understanding of accessibility barriers and the complex realities within their communities.

4. **ES4** Across every region, participants described being "*the last to know*" when emergencies occurred, exposing significant gaps in accessible public alerting. None of the participants had ever seen a National Public Alerting System (NPAS) message provided in ASL or LSQ, because the system does not yet offer alerts in sign language. Broadcasters often failed to provide consistent captioning and interpreter visibility, leading viewers to receive unclear or unreliable information. Access also differed by device, with users of Android, iOS, and Wi-Fi-only devices reporting uneven results. Many relied on family members or neighbours who could hear, or on social media for vital updates, creating an informal relay system that highlights how deeply inequities continue to shape access to life-saving information.

5. **ES5** Looking beyond Canada, DWCC identified clear global patterns of exclusion in emergency communication. The barriers faced by Deaf and DeafBlind Canadians are both technical and attitudinal, reflecting deep structural and cultural exclusion. Canada's alerting system remains largely audiocentric, relying on sound as the primary cue for public warnings. Officials built the system around written English and French instead of inclusive, bilingual, and visual communication that integrates English, French, ASL, LSQ, and Indigenous sign languages. This approach leaves many people without equal access to timely, clear, and reliable information. Around the world, several countries are leading the way by embedding sign language access directly into their emergency systems. International frameworks such as the United Nations Convention on the Rights of Persons with Disabilities (CRPD),[5] the Sendai Framework for Disaster Risk Reduction,[6] and guidance from the

[5] United Nations. (2006). Convention on the Rights of Persons with Disabilities.
[6] United Nations Office for Disaster Risk Reduction. (2015). *Sendai framework for disaster risk reduction 2015–2030.* United Nations.

World Federation of the Deaf (WFD) and the World Association of Sign Language Interpreters (WASLI)[7][8] reinforce this principle. Access to emergency information in national sign languages is not optional. It is a human right and a cornerstone of public safety. This global perspective provides the foundation for DWCC's vision of systemic change, outlined below.

6. **ES6** Informed by these findings, DWCC sets out a vision for systemic change in how emergency communication is designed and delivered across Canada. Deaf, DeafBlind, and Hard of Hearing Canadians are not only included but also play a leading role in shaping each stage of this process. This future depends on more than access alone. It calls for shared decision-making with Deaf-led organizations, accountability at every level, and equitable representation in policy, technology, and public response planning. This vision centers on inclusion, linguistic accessibility, and genuine partnership with the communities it serves, ensuring that no one will be left behind in a crisis.

7. **ES7** To achieve equal access during emergencies, DWCC calls for national ASL and LSQ standards that guarantee accessibility in every alert and televised briefing. All broadcasters and streaming platforms must maintain consistent visibility of interpreters and caption quality. Governments and Deaf community organizations should create a shared library of pre-recorded ASL and LSQ videos to provide instant sign-language instructions during urgent alerts. DWCC also recommends creating a National DDBHH Emergency App that combines video, text, and tactile notifications to ensure everyone receives alerts in a format they can immediately understand. Designers should develop templates in plain language with clear icons, working directly with DeafBlind Canadians to ensure real accessibility. Lasting change depends on placing Deaf and disability organizations at the centre of planning, implementation, and evaluation, making co-governance the norm rather than the exception.

8. **ES8** Across Canada, DWCC's research confirms uneven accessibility within the Public Alerting System, placing Deaf, DeafBlind, and Hard of Hearing Canadians at greater risk during emergencies. The challenge is to move beyond technical improvements toward shared decision making, representation, and inclusion. Embedding sign language access, plain-language design, and Deaf participation as core NPAS features will

[7] World Federation of the Deaf, & World Association of Sign Language Interpreters. (2015). *Communication during natural disasters and other mass emergencies for Deaf people who use signed language.* WFD/WASLI Joint Guidelines.
[8] World Federation of the Deaf (WFD), & World Association of Sign Language Interpreters (WASLI). (2021). *Guidelines on access to information in national sign languages during emergency broadcasts* (Version 6 Jan. 2021). World Federation of the Deaf.

transform Canada's alerting system into one Canadians can trust. It would ensure that alerts reach everyone at the same time and that no one is excluded. These recommendations provide the Commission with a practical and sustainable path toward a rights-based system that guarantees life-saving information reaches every person in Canada, regardless of their language or hearing status.

ES9 Extending this commitment to broadcasting, DWCC notes that participants reported difficulty seeing interpreters clearly during televised emergencies. These experiences reveal gaps in broadcast accessibility that affect safety. To strengthen accessibility, the Commission should adopt national ASL and LSQ standards, as recommended by DWCC, for interpreter visibility, size, and placement on the screen. Enforceable rules and a shared commitment across broadcasters would ensure interpreters remain visible and unobstructed, providing equal and timely access to emergency information for DDBHH Canadians.

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II. About DWCC

9. As a national advocacy organization, the Deaf Wireless Canada Consultative Committee (Comité pour les Services Sans fil des Sourds du Canada, or DWCC-CSSSC) ensures that Deaf, DeafBlind, and Hard of Hearing Canadians are fully included in every part of society.

10. This report uses the term DDBHH (Deaf, DeafBlind, and Hard of Hearing) as an inclusive expression that also recognizes Indigenous Deaf individuals. Rooted in the community's diversity, this terminology acknowledges that, for many Indigenous people, cultural identity remains central to their Deaf experience.

11. The Canadian National Society of the Deaf-Blind (CNSDB) guided DWCC in adopting the word order DDBHH during their collaboration in the 2016 CRTC proceeding (TNC 2016-116). The phrase "Deaf-Blind," shortened to DB, is intentional because individuals who identify as Deaf-Blind generally align culturally with the Deaf community rather than the Hard of Hearing community. DWCC follows CNSDB's direction and continues to use the order DDBHH in all national advocacy work.

12. Across Canada, spelling and terminology vary. In British Columbia, for example, organizations such as the Deaf-Blind Planning Committee (DBPC) and the Deaf, Deaf-Blind and Hard of Hearing Well-Being Program use the hyphenated form "Deaf-Blind," as does the Canadian National Society of the Deaf-Blind (CNSDB). Elsewhere in Canada, including parts of Alberta and other provinces, organizations and individuals prefer the single-word form "DeafBlind." Both forms describe the same lived experience and reflect the evolution of language, regional identity, and organizational history.

13. Across this community, experiences and identities are diverse. The DDBHH population includes Indigenous and 2SLGBTQIA+ members, people with cognitive or developmental disabilities, neurodiverse individuals, immigrants learning English or French as a second language, people with varying degrees of hearing loss, those with intersecting disabilities, DeafBlind individuals, and native ASL and LSQ users.

14. DWCC respects the rights of Indigenous peoples and supports culturally and linguistically appropriate services, including interpretation in Indigenous Sign Languages. Through its inclusive definition of DDBHH, DWCC affirms its

commitment to representing people whose identities intersect across cultures, genders, and abilities.

15. Since its founding in 2015, DWCC has assembled a national team of over 15 members with a combined century of lived and professional experience representing Deaf, DeafBlind, and Hard of Hearing communities. DWCC's advocacy centers accessibility and equity in telecommunications and broadcasting policy, leading to significant impact across more than thirty public proceedings before the CRTC.

DWCC's Mandate

16. DWCC's mandate is to advance accessible, equitable, and inclusive telecommunications and broadcasting for Deaf, DeafBlind, and Hard of Hearing Canadians. The organization represents community voices through policy engagement, consultation, and accessibility research, shaping national conversations and promoting fair and affordable wireless data plans that support ASL and LSQ use.

17. This mandate includes:

a. Advocating for fair and affordable wireless data plans that support ASL and LSQ users' two-way video communication.

b. Promoting industry-wide accessibility in promotions for wireless products and services.

c. Eliminating price differences for identical accessible wireless plans and devices within each company.

d. Guaranteeing functional equivalency in all wireless products, services, and apps.

e. Making wireless emergency services fully accessible, including emergency alerts, 9-8-8, and direct text-to-911, while providing wireless data plans that fit ASL and LSQ users' communication needs.

f. Educating the public nationwide about existing accessible wireless and mobile communication options.

g. Advancing accessibility in broadcasting to ensure DDBHH communities receive equitable representation and inclusion across television, streaming, and digital media platforms.

18. DWCC applies an accessibility lens to all its work to ensure Deaf, DeafBlind, and Hard of Hearing Canadians are included in every stage of telecommunications and broadcasting.

19. As part of its ongoing evolution, the organization is updating its name and mandate to reflect changing social and regulatory priorities and to deepen its commitment to accessibility. This rebranding aligns with the Accessible Canada Act [9] and its vision of a barrier-free Canada by 2040.

20. Through research, consultation, and lived experience, DWCC produces evidence-based recommendations grounded in the realities of Deaf, DeafBlind, and Hard of Hearing communities. Members conduct literature reviews, surveys, interviews, and report writing. Over time, DWCC has submitted numerous studies to the CRTC to ensure data and lived experience shape national accessibility policy.

21. Within its team, DWCC brings together members with a broad range of CRTC experience, from senior members with nearly four decades of involvement to newer participants who joined through the Video Relay Service (VRS) Review proceeding (TNC CRTC 2021-102)[10]. This blend of perspectives strengthens DWCC's representation and capacity.

22. Two senior consultants and one junior consultant collaborated to produce this interview report, with editors ensuring accuracy, clarity, and accessibility throughout.

III. Context of the Proceeding

23. DWCC submits this report in response to the CRTC's *Telecom and Broadcasting Notice of Consultation CRTC 2025-180 (the 2025-180 proceeding), Improving the Public Alerting System*, released on July 15, 2025.[11] The report presents research findings, lived experiences, and community-based recommendations that make public alerting accessible and practical for Deaf, DeafBlind, and Hard of Hearing Canadians.

[9] Government of Canada. (2019). *Accessible Canada Act (S.C. 2019, c. 10).* Department of Justice.
[10] Canadian Radio-television and Telecommunications Commission. (2021, March 4). Consultation: Review of video relay service (VRS) regulatory framework (CRTC Telecom Notice of Consultation (TNC) 2021-102).
[11] CRTC, *Telecom and Broadcasting Notice of Consultation CRTC 2025-180: Improving the Public Alerting System*, 15 July 2025delivering.commitmentdemonstrates

National Public Alerting System (NPAS)

24. As Canada's coordinated emergency-alert framework, the National Public Alerting System (NPAS) enables emergency officials to issue alerts during events that pose a threat to life, health, or property. Federal, provincial, and territorial governments, emergency-management agencies, broadcasters, and telecommunications providers collaborate to operate NPAS.

25. Designed to reach the public rapidly, NPAS delivers urgent information through multiple communication channels. Alerts cover a wide range of emergencies, from natural disasters such as tornadoes, earthquakes, and floods to environmental and biological threats like extreme heat, poor air quality, and public health crises. The NPAS also includes civil emergencies such as terrorist attacks, active-shooter situations, and nuclear threats. Authorities use NPAS to issue AMBER Alerts that mobilize public assistance when a child has been abducted and immediate action is needed.

26. Under the NPAS framework, Alert Ready delivers most alerts by broadcasting messages on television, radio, and compatible wireless devices. These alerts provide timely, location-specific information, enabling people to take immediate protective action. Alerting authorities, broadcasters, and wireless providers must coordinate closely to issue messages quickly and consistently nationwide.

27. The CRTC oversees NPAS and requires wireless, cable, satellite, television, and radio providers to deliver emergency alerts to the public, ensuring accountability and timely warnings.

28. Although NPAS aims to reach everyone, accessibility barriers still limit its effectiveness for Deaf, DeafBlind, and Hard of Hearing people. Visual alerts sometimes lack clarity or contrast, and officials often release critical information only in audio format without accompanying text or interpretation. These gaps delay or block access to life-saving information, so governments must prioritize accessible design, equitable delivery, and meaningful consultation with affected communities.

29. DWCC leads national engagement and research that documents accessibility barriers within NPAS. DWCC collected firsthand accounts through community surveys and interviews to document the obstacles Deaf, DeafBlind, and Hard of Hearing people face when receiving alerts. These perspectives call for clearer message formats, stronger visuals, and accessible language, including ASL, LSQ, and Indigenous Sign Languages. By centering lived experience,

DWCC ensures that policy discussions and system updates address real community needs.

30. As part of its Consumer Protection Action Plan[12], the CRTC launched this consultation to review and strengthen Canada's National Public Alerting System. The CRTC aims to identify ongoing barriers and implement practical solutions to ensure that all Canadians, including Deaf and DeafBlind communities, receive timely and equitable emergency information.

31. The CRTC invited public feedback on several priority areas:

a. Improving the accessibility of the alerts for persons with disabilities, including those who are Deaf, DeafBlind, and Hard of Hearing Canadians.

b. Ensuring alerts are available in both official languages while recognizing Indigenous and other languages spoken across Canada. The languages include ASL, LSQ and Indigenous Sign Languages.

c. Closing coverage gaps so wireless alerts reach all regions equally.

d. Reviewing the frequency and design of public alert tests.

e. Strengthening oversight to ensure that broadcasters and service providers comply with alerting requirements.

32. DWCC conducted national research on accessibility and inclusion within NPAS to support this process. The study identified key barriers, evaluated public awareness and confidence in alerts, and developed evidence-based recommendations to help the CRTC improve equity and safety in alert delivery.

33. Using both quantitative and qualitative methods, DWCC's national study captured the lived experiences of Deaf, DeafBlind, and Hard of Hearing Canadians. The first phase included a national survey, which provided broad insights and comparative data at the provincial level. This report focuses on the second phase and presents qualitative findings from interviews with DDBHH participants representing diverse ages, regions, and intersectional identities.

[12] Canadian Radio-television and Telecommunications Commission. (2025). Consumer Protections Action Plan. https://crtc.gc.ca

IV. Background

34. This phase of DWCC's research lays the foundation for the findings in this report. Before turning to analysis, the section outlines the context, scope, and limitations that shaped the study. It explains how the team framed participant contributions within the CRTC proceeding, upholding transparency, ethical standards, and accessibility goals.

A. Disclaimer

35. This report draws on participant interviews and supporting research to present qualitative findings that reflect the voices of Deaf, DeafBlind, and Hard of Hearing participants. These insights reveal systemic accessibility issues but do not represent every experience across Canada.

B. Scope and Relevance Disclaimer

36. ASL & LSQ The research team designed the study to ensure the interview questions reflected the consultation's objectives. In practice, participants often expanded the discussion beyond the notice, raising broader accessibility barriers experienced by Deaf, DeafBlind, and Hard of Hearing Canadians.

37. Participants described other accessibility issues, such as the lack of sign language interpretation during broadcasts and inconsistent captioning. Although these issues fall outside the scope of the CRTC notice, they remain inseparable from the lived realities of receiving or not receiving emergency alerts. If the Commission were to exclude these experiences, it would weaken the accessibility record and obscure key factors affecting Canada's alerting system.

38. DWCC presents these observations to demonstrate how the National Public Alerting System operates for Deaf, DeafBlind, and Hard of Hearing Canadians, and to highlight where the system falls short. This inclusion follows section 2(d) and 17(c) of the 2023 Policy Direction to the CRTC[13] and section 5(3)(b) of the Telecommunications Act[14]. It also upholds the proactive duty provisions of the Accessible Canada Act[15] and the Canadian Human Rights Act[16] duty to accommodate persons with disabilities.

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[13] Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy, SOR/2023-23, Government of Canada.
[14] Government of Canada. (1993). Telecommunications Act (S.C. 1993, c. 38), section 5(3)(b).
[15] Government of Canada. (2019). *Accessible Canada Act (S.C. 2019, c. 10).* Department of Justice.
[16] Government of Canada. (1982). Canadian Charter of Rights and Freedoms, Part I of the Constitution Act, 1982, being Schedule B to the Canada Act 1982 (UK), c 11.

39. DWCC emphasizes that participants' insights are crucial for understanding accessibility gaps in Canada's National Public Alerting System and ensuring that policy reflects the lived experiences of all Canadians. Including these voices strengthens the public record and grounds policy decisions in evidence and lived experience.

40. This report is intended to inform future discussions on accessibility policy. It does not provide a technical assessment of how the National Public Alerting System operates or performs.

C. Potential Perceived Bias

41. During the research process, one of the collaborators also participated as an interviewee. The research team decided collectively to include this individual, recognizing their lived expertise and unique insight into accessibility barriers in public alerting. Later, another interviewee joined the report-writing team and applied their expertise to gather background information on disaster history, conduct literature reviews, and edit the report to strengthen its accuracy and clarity.

42. Given these dual roles, the team acknowledged the potential for perceived bias. The team maintained objectivity by applying standardized questions and consistent coding methods across all interviews. Team members cross-reviewed findings together to ensure that no single perspective influenced the results.

43. DWCC's ethical framework guided this approach and reaffirmed its commitment to transparency and integrity in representing the lived experiences of Deaf, DeafBlind, and Hard of Hearing Canadians.

D. Conflict of Interest

44. The research team confirms that no financial, organizational, or personal conflicts of interest affected the design, conduct, or analysis of this report. All collaborators acted in good faith and upheld DWCC's principles of transparency, accessibility, and accountability throughout the research process. Beyond internal ethics, the team also examined the available literature to identify existing knowledge gaps.

E. Limitations of Literature Review

45. The existing literature offers little research on the accessibility of emergency alerts for Deaf, DeafBlind, and Hard of Hearing Canadians. Most studies

examine broadcast captioning or general accessibility, rather than the National Public Alerting System (NPAS), leaving significant gaps in understanding how public alerting functions in practice.

46. Within Canada, reports by organizations such as the Canadian Hearing Society, the Neil Squire Society, and DWCC provide key national perspectives on accessibility. Internationally, frameworks developed by the World Federation of the Deaf, the World Association of Sign Language Interpreters, and the United Nations reinforce global standards for inclusive communication and equitable access to emergency information. Appendix E lists all external sources and reference links.

47. Comparative studies from Canada, the United States, and Europe reveal both systemic barriers and practical models that enhance emergency alerting for Deaf, DeafBlind, and Hard of Hearing communities. Despite these advances, critical data gaps persist, particularly regarding DeafBlind accessibility, Indigenous Sign Languages, and regional variations in alert testing across Canada.

F. Terminology Note

48. This report adopts the term “Emergency Alerts” for clarity and consistency within ASL and LSQ contexts. This choice aligns with the terminology most widely recognized within Deaf, DeafBlind, and Hard of Hearing communities. Federal and regulatory documents use the equivalent term “Public Alerts,” and this report uses both interchangeably to bridge community and policy language.

49. Understanding the urgency and impact of accessible emergency alerting requires a brief look at Canada’s history of major disasters and emergencies. Examining these events illustrates how public alerting practices have evolved, yet also how inequitable access to critical information continues to endanger Deaf, DeafBlind, and Hard of Hearing communities.

V. History of Disasters and Emergencies in Canada

A. Overview

50. Over the past decade, Canada has faced numerous emergencies and natural disasters that have shaped how the country communicates during crises. These events shaped national preparedness strategies and revealed accessibility barriers that persist in public alerting systems. Each incident has

provided lessons that continue to guide efforts to strengthen emergency communication and ensure equitable access across Canada. Appendix D provides a comprehensive table of disasters compiled over the past decade.

B. Scope and Framing (2015–2025)

51. Between 2015 and 2025, Canada's National Public Alerting System (NPAS), publicly known as Alert Ready, expanded its reach through television, radio, and mobile delivery. The introduction of Wireless Public Alerting (WPA) in 2018 marked a significant turning point, enabling faster, location-based notifications. Despite these advances, accessibility barriers still affect Deaf, DeafBlind, and Hard of Hearing Canadians.

52. For users of American Sign Language (ASL) and Langue des signes québécoise (LSQ), text-based alerts often fail to provide access in their primary languages. Television broadcasters frequently omit sign-language interpretation and neglect the visual cues that convey urgency. To achieve full inclusion, public alerting must go beyond text-based messages and deliver both linguistic and visual clarity, enabling everyone to respond quickly and confidently.

C. System Timeline (Signals and Standards)

53. NPAS's evolution shows Canada's ongoing commitment to delivering emergency information quickly and reliably. Accessibility, however, has not kept pace with technological innovation. For Deaf, DeafBlind, and Hard of Hearing communities, increased speed and network coverage do not replace the need for communication that is clear, understandable, and fully accessible. This imbalance between technological progress and accessible design shows why inclusive alerting must remain a national priority.

54. On the next page is a snapshot table of Canada's NPAS Key Milestones and Impact on DDBHH Accessibility.

Table 1. Canada's NPAS Key Milestones and DDBHH Access

Year	Milestone	Impact on Accessibility
2014–2015	The CRTC required broadcasters to carry emergency alerts, launching *Alert Ready* nationally.	This milestone established national consistency in emergency alerting but depended entirely on text and audio formats, excluding ASL and LSQ users and leaving visual accessibility unaddressed.
2018	The CRTC made Wireless Public Alerting (WPA) mandatory for mobile carriers.	Extended emergency alert coverage to mobile users nationwide, improving reach and timeliness. However, alerts still lacked sign language and plain-language integration, limiting accessibility for many DDBHH users.
2019–2024	Officials implemented technical updates to NPAS and conducted regular national alert tests.	Despite improvements in reliability through technical upgrades and regular national testing, alerts remained difficult to interpret due to complex written language and limited visual support.
2025	CRTC consultations focused on accessibility, including the integration of ASL and LSQ.	Initiated the first sustained national dialogue recognizing Deaf inclusion in emergency policy, with consultations explicitly addressing ASL and LSQ integration within public alerting.

55. Overall, the evolution of NPAS demonstrates that technical progress has often advanced faster than accessibility. Agencies responsible for alert formats frequently made decisions without consulting individuals who use alternative communication methods, creating gaps that they corrected only after problems arose.

56. Furthermore, while the CRTC's universal service objective, as articulated in Telecom Regulatory Policy CRTC 2016-496, aims to ensure that Canadians in all regions have access to voice services and broadband Internet access on both fixed and mobile wireless networks, this policy notably omits explicit reference to video services. The framework fails to account for the accessibility

needs of Deaf individuals who rely on video calls to communicate in ASL or LSQ. When the policy focuses mainly on voice and broadband, it risks ignoring the crucial role of video-based services, which Deaf communities depend on as their primary mode of communication.[17]

57. Innovation can drive improvement, but it cannot guarantee accessibility when systems exclude diverse languages and communication needs. The past decade of emergencies highlighted the real consequences of designing systems without full participation from Deaf, DeafBlind, and Hard of Hearing Canadians.

58. Looking ahead, emergency management policy must incorporate accessibility standards from the outset. Public safety agencies must guarantee equal access for all, regardless of language, ability, or communication mode.

D. Ten-Year Disaster Arc in Canada (Key Events and Lessons)

59. Over the past decade, major crises have repeatedly tested the Alert Ready system and revealed persistent accessibility barriers for Deaf, DeafBlind, and Hard of Hearing Canadians. These events exposed how technical progress often outpaced inclusive communication.

60. In 2016, the Fort McMurray wildfire left many Deaf residents without access to essential updates. Because officials failed to include captions and interpretation during televised briefings, Deaf residents had to rely on friends, text messages, or social media to understand what was happening.

61. Two years later, tornadoes struck Ottawa during the ASL & LSQ Rally for Recognition. Officials again failed to provide accessible alerts, leaving Deaf residents and visitors isolated from emergency instructions at a time when the rally itself was advocating for the recognition of Canada's sign languages.

62. When the COVID-19 pandemic began in 2020, governments often broadcast briefings and mobile alerts without interpreters or captions. Deaf organizations' sustained advocacy eventually persuaded governments to include ASL and LSQ interpretation, though progress remained inconsistent across provinces and territories.

63. Despite these lessons, officials failed to provide clear, tactile communication during subsequent crises, including the 2020 Nova Scotia mass casualty event, the 2021 heat dome, and multiple climate-related disasters. Officials

[17] Canadian Radio-television and Telecommunications Commission. (2016, December 21). Telecom Regulatory Policy CRTC 2016-496.

continued to treat accessibility as an afterthought instead of a core part of public safety.

64. Across every emergency, Deaf Canadians had to fight for access only after the crisis had begun. These experiences show the urgent need to replace reactive fixes with proactive, systemic inclusion at every stage of emergency management.

E. Challenges in Data Access and Consistency

65. Documenting Canada's disaster history (see Appendix D) exposes significant gaps and inconsistencies in government records. Public Safety Canada's disaster database, the country's leading information source, lists events only up to 2020.

66. As a result, the national record omits significant crises from the past five years, including the COVID-19 pandemic, the Nova Scotia mass shooting, the 2021 heat dome, and recent wildfires and extreme weather, which remain absent from the national record. This lack of documentation makes it challenging to evaluate the evolution of emergency alerts and their accessibility.

67. Researchers often need to consult provincial or municipal sources to reconstruct events. Across jurisdictions, agencies store records in different formats and usually keep them as non-searchable PDFs or archived press releases. Due to inconsistent records, comparing accessibility across regions is nearly impossible.

68. To address these challenges, Canada would benefit from national standards for disaster documentation. Agencies should ensure that every record includes consistent terminology, searchable metadata, and notes showing whether broadcasters provided captioning or sign language interpretation.

69. Without a uniform approach, policymakers cannot accurately identify what works or where to improve without consistent records. Public Safety Canada must lead coordinated efforts to close these information gaps and build a transparent, accessible national record of emergencies.

F. Accessibility Progress and Ongoing Gaps

70. Wireless emergency alerts now reach most Canadians; yet many Deaf and Hard of Hearing people still face access barriers. Following years of advocacy by DWCC and the Canadian Association of the Deaf, governments still limit

alerts to text, excluding ASL or LSQ video. This limitation prevents sign language users from receiving vital details during emergencies.

71. In contrast, the United States has made measurable progress. Since October 2023, mobile providers there have included ASL video templates within wireless alerts, helping ensure Deaf users receive essential information at the same time as others.[18]

72. Across Canada, accessibility gaps remain widespread. Broadcast captions often appear inaccurate or out of sync, interpreters are hard to see or cropped out, and alert formats vary by region and language. DeafBlind users also continue to lack reliable tactile or vibration-based notifications.

73. These barriers show that technical progress alone cannot ensure accessibility. True inclusion depends on enforceable standards across every alerting platform, with accessibility built in from the earliest stages of design.

74. From the Fort McMurray wildfire to the COVID-19 pandemic, Alert Ready has undoubtedly saved lives. It has also excluded many Deaf and Hard of Hearing Canadians from timely access to safety information. Achieving equal access requires governments to integrate Deaf expertise and lived experiences into the design, testing, and evaluation processes at every stage of development.

75. To meet the CRTC's accessibility commitments, public alerting systems must provide ASL and LSQ on all broadcast and mobile platforms. Authorities should treat accurate captioning and plain-language summaries as essential tools for public safety. Sustained progress will depend on Public Safety Canada and the CRTC coordinating with Deaf-led organizations.

76. Accessible emergency communication represents more than technical success; it reflects Canada's commitment to equality and safety.

[18] Federal Communications Commission. (n.d.). Wireless emergency alert templates in American Sign Language (ASL). Retrieved November 7, 2025,

VI. Accessible Emergency Communication: Canada, US, and Global Literature Review

A. Introduction

77. An effective emergency alert system depends on clear communication, yet many Deaf, DeafBlind, and Hard of Hearing people still encounter barriers that prevent them from understanding warnings that hearing audiences grasp easily. When people cannot see, hear, or comprehend messages, these barriers place entire communities at risk. The Convention on the Rights of Persons with Disabilities (CRPD) recognizes access to information as a fundamental human right.[19] True accessibility requires emergency communication to reach everyone simultaneously and in forms they can understand.

78. Regional and national studies show that limited linguistic and visual access prevents many Deaf, DeafBlind, and Hard of Hearing people from receiving timely alerts.[20],[21],[22] Emergency systems remain centred on sound or English text rather than bilingual and visual formats. Captioning remains inconsistent, officials omit ASL and LSQ interpretation, and many ignore Deaf communication needs. Many people rely on family or social media because official alerts are unintelligible or inaccessible. Confusing tones, mismatched text and audio, and disappearing messages erode public trust.

79. Technology contributes to these barriers, but systemic exclusion ultimately drives them. Many agencies design strategies without consulting Deaf professionals or accessibility specialists. Systems may satisfy checklists yet fail in practice. Without national policy and accountability, countries such as Canada and the United States continue to repeat the same accessibility mistakes.[23],[24] This review examines how these areas approach accessible emergency communication and identifies lessons to guide equitable policy in Canada.

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[19] United Nations (2006). *Convention on the Rights of Persons with Disabilities (CRPD).*
[20] Government of Canada. (2019). *Accessible Canada Act (S.C. 2019, c. 10).* Department of Justice.
[21] Canadian Hearing Society. (2018). *Barrier-free emergency communication access and alerting system research report.*
[22] Neil Squire Society. (2024). *Study on Canadian emergency alert accessibility.*
[23] World Federation of the Deaf, & World Association of Sign Language Interpreters. (2021). *Guidelines on access to information in national sign languages during emergency broadcasts*
[24] United Nations Office for Disaster Risk Reduction. (2023). *Global survey report on persons with disabilities and disasters.* UNDRR.

B. Canada

80. Broadcasters and emergency authorities in Canada continue to deliver inconsistent accessibility in emergency alerting. Officials create barriers for Deaf, DeafBlind, and Hard of Hearing people when they exclude interpretation, plain language, or clear visual structure from alerts.[25] Across several provinces, agencies still rely on sound, causing uncertainty about the nature, severity, or location of events.[26] The Canadian Hearing Society's Barrier Free Emergency Communication report warns that these gaps endanger Deaf citizens and urges leaders to implement a coordinated national framework rather than isolated provincial efforts.[27]

81. The Neil Squire Society's 2024 national survey found that officials and designers made many alerts too brief, excessively loud, and poorly synchronized with the text. Designers typically attempt to improve clarity by increasing sound volume, but they ignore the needs of people who rely on visual information. Survey participants requested that officials include clear symbols, meaningful images, and plain language text that remains visible long enough to read.[28] These findings reveal that designers and officials consistently overlook how people actually receive and process alerts.

82. Although challenges continue, leaders and officials are making meaningful progress. Emergency management programs across Canada actively recruit and involve more Deaf and disabled professionals in planning, testing, and evaluation. These professionals drive collaboration that shifts the focus from minimal compliance to shared responsibility and inclusive design.

83. Educator and researcher Joanne Weber has developed Deaf Aesthetics as a practical guide for inclusion. This approach centers on visual and tactile communication, Deaf culture, and the ethics of inclusion. Policymakers and designers can follow these principles to create and deliver public emergency alerts that clearly convey meaning at a glance.[29]

84. Governments continue to rely on limited measures such as captions; louder audio; or text overlays. These steps may help; however, they do not replace

[25] Canadian Hearing Society. (2018). *Barrier-free emergency communication access and alerting system research report.*
[26] Canadian Hearing Society. (2018). *Barrier-free emergency communication access and alerting system research report such as.,*
[27] Canadian Hearing Society (2018). *Barrier-Free Emergency Communication Access and Alerting System Research Report.*
[28] Neil Squire Society (2024). *Study on Canadian Emergency Alert Accessibility*.
[29] Weber, J. (2025). *Applied Deaf Aesthetics Toward Transforming Deaf Higher Education.*

sign language, plain language, strong contrast, or consistent interpreter visibility. When officials and designers apply Deaf Aesthetics, communication becomes visually strong, culturally grounded, and emotionally steady. These qualities build public trust and strengthen safety during crises.[30]

C. United States

85. In the United States, the Americans with Disabilities Act (ADA) and the Twenty-First Century Communications and Video Accessibility Act (CVAA) establish a foundation for accessible communication. Still, agencies inconsistently enforce and implement these laws. Officials and system designers continue to create most emergency alerts in written English, often overlooking American Sign Language (ASL), which has its own grammar, rhythm, and visual structure. When officials issue text-only alerts, they fail to convey movement, facial expressions, and spatial cues that are essential to ASL communication and immediate understanding.

86. For people who use ASL as their first language, text-only alerts can feel flat or unclear, primarily when officials must provide calm, visually direct communication to maintain safety. Research shows that Deaf communities respond best to alerts that include sign language interpretation, synchronized captions, and visuals that clearly reflect tone and intent.[31],[32],[33]

87. When officials and alert system designers create alerts with language and culture in mind, they not only transmit information but also build understanding, trust, and confidence to act. [34]

88. Public health research reveals that many state emergency agencies have failed to build lasting partnerships with Deaf organizations and certified interpreters.[35],[36] Too often, these agencies only address accessibility after a

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[30] Weber, J. (2025). *Applied Deaf Aesthetics Toward Transforming Deaf Higher Education.* University of Regina.
[31] Bennett, D., LaForce, S., Touzet, C., & Chiodo, K. (2018). *American Sign Language and Emergency Alerts.*
[32] Engelman, A., Ivey, S. L., Tseng, W., Dahrouge, D., Brune, J., & Neuhauser, L. (2013). *Responding to the Deaf in Disasters. BMC Health Services Research, 13(84).*
[33] National Deaf Center on Postsecondary Outcomes. (2025). *Emergency and crisis response resources.* The University of Texas at Austin
[34] World Federation of the Deaf & World Association of Sign Language Interpreters (2021). *Guidelines on Access to Information in National Sign Languages During Emergency Broadcasts.*
[35] Engelman, A., Ivey, S. L., Tseng, W., Dahrouge, D., Brune, J., & Neuhauser, L. (2013). *Responding to the Deaf in Disasters.* BMC Health Services Research, 13(84).
[36] National Deaf Center on Postsecondary Outcomes. (2025). *Emergency and crisis response resources.* The University of Texas at Austin

crisis begins, instead of integrating it into planning from the start.[37] This reactive pattern erodes public trust because repeated failures make many Deaf people feel ignored and excluded.

89. To close these gaps, advocacy organizations and government partners now develop systems that integrate accessibility from the outset. The National Association of the Deaf urges governments to provide inclusive communication, ensure interpreters remain visible in all televised briefings, monitor caption quality continuously, and appoint Deaf representatives at every stage of preparedness and response.[38]

90. Research on earthquake early-warning systems shows that many Deaf, DeafBlind, and Hard of Hearing people still receive alerts too late or not at all, often because officials and system designers limit messages to sound or written English.[39] These findings highlight the importance of delivering information in ways that match how people naturally perceive and process meaning.[40]

91. For Deaf communities, effective communication presents information through sign language, clear visuals, and plain-language text that audiences can understand quickly. When officials and designers structure information around how people actually experience the world, accessibility becomes part of the system rather than an afterthought. When officials and designers embed this principle in alert design, they create communication that is inclusive, timely, and focused on protecting everyone's safety and well-being.[41, 42]

92. The U.S. experience shows that laws alone cannot guarantee equitable access to emergency communication. Laws such as the CVAA set clear commitments to inclusion, yet their impact relies on how agencies practice and enforce those principles. Actual preparedness requires government agencies to provide continuous training, sustain funding, and coordinate with technology

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[37] National Deaf Center on Postsecondary Outcomes. (2025). *Emergency and crisis response resources.* The University of Texas at Austin

[38] National Association of the Deaf (2020). *Position Statement on Accessible Emergency Management for Deaf and Hard of Hearing People.*

[39] Cooper, A. C., Cooke, M. L., Takayama, K., Sumy, D. F., & McBride, S. (2024). *From alert to action: Earthquake early warning and Deaf communities. Natural Hazards, 120,* 13573–13594.

[40] Cooper, A. C., Cooke, M. L., Takayama, K., Sumy, D. F., & McBride, S. (2024). *From alert to action: Earthquake early warning and Deaf communities. Natural Hazards, 120,* 13573–13594.

[41] United States Federal Communications Commission (FCC), *Twenty-First Century Communications and Video Accessibility Act (CVAA),* Public Law 111-260, 2010.

[42] National Deaf Center on Postsecondary Outcomes. (2025). *Emergency and crisis response resources.* The University of Texas at Austin

providers.[43] When officials and technology providers coordinate their systems, they ensure that accessibility signals effective governance and strengthens public trust.

93. As the Federal Communications Commission notes, equal access to emergency information defines public safety rather than serving as a convenience.[44]

94. Actual readiness depends on how officials and organizations integrate accessibility into every aspect of crisis management, including visual alert systems, trained responders, interpreter availability, and mental health support, as the National Deaf Center's CLEAR framework recommends.[45]

D. International Context

95. Governments worldwide now recognize that inclusive emergency communication is essential to public safety. The World Federation of the Deaf (WFD) and the World Association of Sign Language Interpreters (WASLI) have issued international guidelines urging governments and media agencies to keep interpreters visible during broadcasts, ensure that captions do not block signing, and deliver messages simultaneously in spoken and signed languages.[46],[47] These measures help countries build systems that provide timely, accessible information for everyone. Equal access to public information is not an act of goodwill but a government responsibility that upholds human rights.[48],[49]

96. In 2023, the United Nations Office for Disaster Risk Reduction (UNDRR) reported that only one-third of people with disabilities worldwide receive

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[43] National Deaf Center on Postsecondary Outcomes. (2025). *Emergency and crisis response resources.* The University of Texas at Austin

[44] United States Federal Communications Commission (FCC), *Twenty-First Century Communications and Video Accessibility Act (CVAA)*, Public Law 111-260, 2010.

[45] National Deaf Center on Postsecondary Outcomes. (2025). *Emergency and crisis response resources.* The University of Texas at Austin

[46] World Federation of the Deaf, & World Association of Sign Language Interpreters. (2021). *Guidelines on access to information in national sign languages during emergency broadcasts.*

[47] World Federation of the Deaf, & World Association of Sign Language Interpreters. (2015). *Communication during natural disasters and other mass emergencies for Deaf people who use signed language.* WFD/WASLI Joint Guidelines.

[48] World Federation of the Deaf, & World Association of Sign Language Interpreters. (2021). *Guidelines on access to information in national sign languages during emergency broadcasts.*

[49] World Federation of the Deaf, & World Association of Sign Language Interpreters. (2015). *Communication during natural disasters and other mass emergencies for Deaf people who use signed language.* WFD/WASLI Joint Guidelines.

emergency information in accessible formats.[50] Because of this gap, many must rely on family members, neighbours, or bystanders to warn them of approaching danger. The report concluded that communities build resilience only when everyone receives equal and timely access to life-saving information.[51] This finding echoes the Convention on the Rights of Persons with Disabilities (CRPD), which affirms that accessibility is not a convenience but a condition for safety, dignity, and survival.[52]

97. At the community level, Deaf-led initiatives demonstrate how accessible emergency communication works in practice. One example is Off The Grid Missions, a global humanitarian organization that delivers real-time safety updates and visual alerts in local sign languages across disaster-affected regions.[53] Project leaders, guided by the principle "communication is not a bonus, it is life-saving," show the urgent need to present information in formats people can immediately understand. By training local Deaf responders and partnering with relief agencies, Off The Grid Missions reaches communities that official systems often overlook.[54] Its success illustrates how grassroots expertise can inform broader emergency policies and strengthen long-term resilience.

98. International research increasingly links accessibility with dignity and cultural recognition. Studies on Deaf aesthetics[55] show that design, representation, and visibility influence trust and emotional connection in communication.[56] [57] In emergency contexts, officials and designers must prioritize features such as signing space, visual contrast, and respectful tone as non-negotiable elements of safety, not mere decoration. These features carry cultural and emotional meaning that determines whether information feels trustworthy and inclusive. Visually clear and culturally grounded messages reduce confusion, prevent panic, and affirm that every person's understanding and safety matter equally.

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[50] United Nations Office for Disaster Risk Reduction. (2023). *Global survey report on persons with disabilities and disasters.* UNDRR.
[51] United Nations Office for Disaster Risk Reduction. (2023). *Global survey report on persons with disabilities and disasters.* UNDRR.
[52] United Nations. (2006). *Convention on the Rights of Persons with Disabilities.* Adopted by General Assembly Resolution 61/106.
[53] Off The Grid Missions (2024). Review of Website and Video.
[54] Off The Grid Missions (2024). Review of Website and Video.
[55] Weber, J. (2025). Applied Deaf Aesthetics Toward Transforming Deaf Higher Education. University of Regina
[56] World Federation of the Deaf & World Association of Sign Language Interpreters (2021). *Guidelines on Access to Information in National Sign Languages During Emergency Broadcasts.*
[57] Bosch-Boaliarda, M., Soler-Vilageliu, O., & Orero, P. (2020). *Sign language interpreting on TV: A reception study of visual screen exploration in Deaf signing users.* Link

99. Across countries and cultures, the lesson is clear: accessibility is fundamental to public safety. Progress happens when governments, relief organizations, and Deaf communities collaborate to design systems that reach everyone from the start of an emergency. Real inclusion means planning with, not for, the people most affected. When officials and communities make accessibility a shared responsibility rather than an afterthought, nations build communication systems that protect both safety and dignity. When leaders and planners build accessibility into every stage of emergency planning, they ensure that everyone receives information as soon as it matters most.

E. Synthesis and Identified Gaps

100. Research from Canada, the United States, and other regions shows that emergency communication systems still fall short of full accessibility. Studies identify ongoing barriers that prevent Deaf, DeafBlind, and Hard of Hearing people from receiving timely, accurate, and culturally meaningful alerts. Many systems continue to rely on spoken and written language, assuming that translation or captioning alone ensures inclusion.[58] This view overlooks that communication is not only linguistic but also visual, spatial, and emotional. When alerts exclude sign language, tactile elements, or plain-language formats, they fail to reach those who depend on these modes for safety and understanding.

101. International guidelines from the World Federation of the Deaf and the World Association of Sign Language Interpreters reveal ongoing inconsistency in accessibility across regions. [59] Interpreter visibility varies by broadcaster, captions are often inaccurate or out of sync, and alerts delivered across different media platforms are rarely synchronized. These issues are not minor details but signs of an uneven commitment to accessibility standards. In many cases, the technology exists, yet policy, enforcement, and coordination lag behind. The result is a system that performs well in theory but fails in practice when speed, clarity, and accuracy matter most.

102. Governance remains an area where accessibility is fragile. Deaf and disability organizations are often consulted only after policies are drafted, leaving them

[58] Bennett, D., LaForce, S., Touzet, C., & Chiodo, K. (2018). American Sign Language and Emergency Alerts.
[59] World Federation of the Deaf & World Association of Sign Language Interpreters (2021). *Guidelines on Access to Information in National Sign Languages During Emergency Broadcasts.*

to react rather than participate in shaping communication strategies.[60],[61] Without structured roles for community representation, decision-making continues to reflect *hearing-dominant frameworks*. This pattern creates a cycle of exclusion in which accessibility is treated as a corrective measure instead of a guiding design principle.

103. Taken together, these gaps show that accessibility is still viewed mainly as a technical fix rather than a core element of public safety. When systems are designed without meaningful community participation, exclusion becomes embedded in both policy and everyday practice.

104. One example of a Deaf-led initiative is *Off The Grid Missions*, a global humanitarian organization that delivers real-time safety updates and visual alerts in local sign languages to Deaf, DeafBlind, and Hard of Hearing communities in disaster-affected regions.[62] These initiatives show that when Deaf communities lead the design and delivery of emergency information, alerts reach people faster, more clearly, and with stronger cultural relevance. The main challenges are not technological but structural and cultural. True inclusion depends on recognizing linguistic and sensory diversity as part of everyday society and ensuring that equitable communication remains central to safety and public trust.

F. Policy and Practice Implications

105. Governments must improve emergency communication not only through new technology but also through structural reform and a genuine commitment to Deaf culture and inclusion. All levels of government must integrate accessibility into every stage of emergency management, including planning, implementation, and evaluation. To achieve this, governments should create permanent committees that give Deaf and disability community representatives decision-making power.[63],[64] These committees must review communication prototypes, funding priorities, and evaluation frameworks to make accessibility a standard of public safety rather than a gesture.

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[60] McEachen, J., Cowan, S., & Parker, C. (2025). Inclusive Emergency Management: Communication and Accessibility Needs for the Deaf, Hard of Hearing, and DeafBlind Population. HazNet Magazine.
[61] National Association of the Deaf (2020). Position Statement on Accessible Emergency Management for Deaf and Hard of Hearing People.
[62] Off The Grid Missions (2024). Review of Website and Video.
[63] World Federation of the Deaf & World Association of Sign Language Interpreters (2021). *Guidelines on Access to Information in National Sign Languages During Emergency Broadcasts.*
[64] National Association of the Deaf (2020). *Position Statement on Accessible Emergency Management for Deaf and Hard of Hearing People.*

106. Strong governance must lead to practical implementation. Training programs must focus on visual communication, plain language, and cultural awareness.[65], [66] Interpreters in emergency settings must meet certification standards that guarantee accuracy and readiness.[67] Emergency personnel and broadcasters must work effectively with interpreters and present information that stays visually clear and emotionally steady during crises.[68] Canada must establish national standards for interpreter placement, signing space, and caption readability to ensure consistent, accurate, and accessible emergency communication.[69]

107. Long-term success requires sustained investment. Dedicated accessibility budgets prevent last-minute improvisation and demonstrate that inclusion is a deliberate part of public safety.[70] Stable funding supports ongoing innovation in emergency alert design, including haptic alert systems, multilingual video messages, and visual formats shaped by Deaf aesthetics to strengthen understanding.[71] These initiatives go beyond technical upgrades and strengthen national resilience by making communication easier to understand, more inclusive, and more trustworthy for everyone, including Deaf and Hard of Hearing people, seniors, newcomers, and individuals with limited literacy.[72],[73] Treating accessibility as infrastructure, not accommodation, builds a solid foundation for public safety and social trust.

G. Global Principles and Relevance to Canada

108. International frameworks provide Canada with a clear pathway to advance emergency accessibility. The Convention on the Rights of Persons with Disabilities and the Sendai Framework for Disaster Risk Reduction both require governments to treat accessibility as a shared public responsibility,

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[65] Weber, J. (2025). *Applied Deaf Aesthetics Toward Transforming Deaf Higher Education.* University of Regina.
[66] Engelman, A., Ivey, S. L., Tseng, W., Dahrouge, D., Brune, J., & Neuhauser, L. (2013). *Responding to the Deaf in Disasters.* BMC Health Services Research, 13(84).
[67] World Federation of the Deaf & World Association of Sign Language Interpreters (2021). *Guidelines on Access to Information in National Sign Languages During Emergency Broadcasts.*
[68] McEachen, J., Cowan, S., & Parker, C. (2025). I*nclusive Emergency Management: Communication and Accessibility Needs for the Deaf, Hard of Hearing, and DeafBlind Population.* HazNet Magazine.
[69] World Federation of the Deaf & World Association of Sign Language Interpreters (2021). *Guidelines On Access To Information In National Sign Languages During Emergency Broadcasts.*
[70] National Association of the Deaf (2020). *Position Statement on Accessible Emergency Management for Deaf and Hard of Hearing People.*
[71] Off The Grid Missions (2024). Review of Website and Video.
[72] Canadian Hearing Society (2018). *Barrier-Free Emergency Communication Access and Alerting System Research Report.*
[73] Neil Squire Society (2024). *Study on Canadian Emergency Alert Accessibility.*

never a matter of voluntary generosity. By following these global agreements, policymakers strengthen safety, inclusion, and equality for everyone. Leaders who act on these commitments build a culture of preparedness that proactively protects all Canadians, rather than relying on reactive measures.[74],[75]

109. In Canada, this means turning these commitments into action. National and provincial alert systems must provide bilingual and visual access through American Sign Language and Langue des signes québécoise, using clear, consistent visual standards.[76] Interpreters should remain visible, captions must be accurate and easy to read, and visual cues should align with spoken information. Governments must consult Deaf communities regularly when planning and testing alerts to correct access barriers before crises occur. Accessibility planning must reflect the diversity within Deaf communities, including Indigenous Deaf people and those living in rural or remote areas where limited connectivity and cultural differences require specific approaches.

110. Open evaluation and strong accountability demonstrate Canada's commitment to public trust and transparency. Governments advance progress by publishing clear reports and actively seeking feedback from communities, especially those facing barriers. Governments and public safety agencies establish measurable targets such as annual accessibility audits and public scorecards, turning commitments into concrete outcomes and setting a national standard for transparency. By championing these global best practices, Canada strengthens its leadership in building accessible emergency systems that empower and protect all communities.

111. Embedding accessibility in both law and daily practice allows equality and safety to advance together. This shift replaces reactive accommodation with proactive inclusion and affirms that accessibility is a commitment to everyone's well-being, not a favour to a few. Governments, researchers, broadcasters, and Deaf-led organizations must work together to build a genuinely inclusive alert system. Sustained partnership will update and strengthen accessibility as new risks, technologies, and community needs emerge.

[74] United Nations. (2006). *Convention on the Rights of Persons with Disabilities (CRPD).*
[75] United Nations Office for Disaster Risk Reduction. (2015). *Sendai framework for disaster risk reduction 2015–2030.* United Nations.
[76] Canadian Hearing Society. (2018). Barrier-free emergency Communication Access and Alerting system research report.

H. Conclusion

112. Researchers and advocates across Canada, the United States, and internationally send a clear message: accessibility in emergency communication demands equity, safety, and trust, not mere convenience. Technological innovation alone cannot resolve the persistent exclusion faced by Deaf, DeafBlind, and Hard of Hearing communities. Governments, broadcasters, and emergency agencies must reshape how they define communication itself to advance true inclusion. When designers prioritize hearing audiences and treat Deaf and disabled people as afterthoughts, they reproduce inequality in every system they create. Governments, broadcasters, and emergency agencies must intentionally build inclusion into public safety structures from the start by prioritizing governance, funding, training, and design.

113. Across the country—from coast to coast to coast and across every region—communities consistently encounter the same patterns. Alerts that rely only on written or spoken language and exclude visual or tactile formats deny Deaf, DeafBlind, and Hard of Hearing people access to life-saving information. Policymakers and emergency managers who focus on compliance instead of collaboration create inconsistency and confusion. Even so, the research shows clear signs of change. Deaf-led organizations provide leadership, international frameworks set shared standards, and professional partnerships build the expertise required for accessible systems. When emergency communication reflects Deaf culture, visual language, and inclusive design, information reaches more people, is understood faster, and builds stronger public trust.

114. For Canada, the lessons are clear. Canada must unite federal, provincial, and municipal systems under shared accessibility standards as a national priority. The Accessible Canada Act[77] provides a strong foundation, but policymakers must enforce the law and include Deaf participation at every stage so policies achieve real impact. Leaders must embed accessibility in governance by sharing power, conducting transparent evaluations, and investing consistently. Governments must establish accessibility as essential infrastructure for national preparedness and uphold the dignity of everyone they protect.

[77] Government of Canada. Accessible Canada Act (S.C. 2019, c. 10). Ottawa: Department of Justice, 2019.

115. International leaders, through the CRPD,[78] and the Sendai Framework for Disaster Risk Reduction,[79] affirm that nations build resilience only by embracing inclusive design. These frameworks establish participation, accountability, and equity as the foundations of disaster communication. By aligning its policies with these standards, Canada can integrate human rights into public safety and move beyond box-checking toward systems that value every life and provide accessible, trustworthy, and timely communication.

116. We can only move forward by working together. Governments, researchers, broadcasters, and Deaf-led organizations must test new models, evaluate outcomes, and refine communication strategies as technology evolves. Society must treat accessibility not as a specialized service, but as a measure of how it governs, prepares for, and responds to crises. Transparent, inclusive, and culturally grounded emergency systems strengthen immediate safety and build long-term public trust. The goal is not perfection, but participation and a shared commitment to ensure that no one is left behind when the next alert arrives.

117. This section shifts from global context to individual experience and introduces the interviewers whose expertise shaped the conversations. Their insights reflect the lived realities of Deaf, DeafBlind, and Hard of Hearing Canadians, grounding the findings in community leadership.

VII. Profile

A. Profile of Interviewer: Gary Malkowski, M.A., L.H.D.

118. Gary Malkowski conducted the interviews for this study. He is an experienced qualitative researcher and accessibility consultant with an extensive history of collaborating with the Deaf Wireless Canada Consultative Committee (DWCC) on national projects that advance accessibility and communication.

119. Gary is a respected Deaf advocate, educator, and accessibility strategist. He served as Member of Provincial Parliament (MPP) for York East from 1990 to 1995, becoming the first Deaf parliamentarian in Canada. As a Policy and Accessibility Consultant with DWCC, Gary brings decades of leadership, human rights, advocacy against audism, accessible education, and government engagement. His expertise and commitment to inclusion shaped

[78] United Nations. (2006). Convention on the Rights of Persons with Disabilities. Adopted by General Assembly Resolution 61/106.transitions
[79] United Nations Office for Disaster Risk Reduction. (2015). *Sendai framework for disaster risk reduction 2015–2030.* United Nations.

the framework for these interviews, grounding the findings in both lived experience and policy insight.

120. With more than a decade of experience in disability research, policy analysis, and community engagement, Gary holds academic training in psychology, social work, counselling, and social research. His work has focused on advancing equitable access to information and communication for persons with disabilities, including Deaf individuals. In recognition of his leadership, Gallaudet University awarded him an Honorary Doctor of Humane Letters in 2011.

121. This project marked Gary's second time leading interviews for DWCC, building on his prior work in the organization's CRTC research submissions. His deep understanding of Deaf community research ethics, combined with his skill in communicating through interpreters and accessible technologies, ensured that the interview process was respectful, inclusive, and precise.

122. The team conducted all interviews using each participant's preferred mode of communication, including American Sign Language (ASL), Langue des signes québécoise (LSQ), or text. The team engaged qualified interpreters when needed to support accurate dialogue. Qualified interpreters were engaged when required to support accurate dialogue. The team followed standardized informed consent procedures in every case and emphasized participant choice regarding anonymity, public identification, and transcript sharing.

B. Role and Responsibilities

123. Gary's responsibilities extended across all stages of the research process, ensuring both integrity and accessibility. He conducted one-on-one and group interviews with participants from across Canada, coordinated with interpreters and transcribers, and verified all transcripts for accuracy. Working closely with the DWCC analysis team, including Lisa Anderson and Jeffrey Beatty, he helped identify key themes, regional differences, and systemic accessibility gaps. His contributions were central to synthesizing findings, shaping recommendations, and preparing the final report for the CRTC.

124. **Lisa Anderson**, DWCC Co-Founder and Past Chairperson, served as a senior consultant and the second-largest contributor to this report. This was her second time co-leading an interview report for DWCC. Drawing on extensive experience in advocacy and research, Lisa developed the project's structure and substance. She authored major sections of the report, including

About DWCC and its Mandate, Context of the Proceeding, Background, and thematic analyses on topics such as *The Deaf Experience: Last to Know, Reliance on Community and Informal Networks, and Emotional and Safety Impacts.* Lisa also helped shape the preliminary recommendations, final reflections, and executive summary, ensuring clarity, accessibility, and community grounding.

125. Jeffrey Beatty led DWCC's contributions to this project, drawing on more than a decade of national advocacy, regulatory expertise, and lived experience within the Deaf community. As Chairperson of the Deaf Wireless Canada Consultative Committee (DWCC), he brings extensive knowledge of telecom accessibility, emergency communication, public alerting systems, and CRTC policy development. His background includes specialized work in video calling accessibility, RTT-911, GPS-based services, and accessible digital ecosystems, making him a central voice in advancing equitable communication rights for Deaf, DeafBlind, and Hard of Hearing Canadians. For this project, Jeffrey oversaw the documentation of disasters and emergencies in Canada and directed the development of a data resource designed to strengthen evidence-based advocacy. He compiled *Appendix D: Ten-Year Disaster Arc in Canada (Key Events and Lessons)*, reviewed 21 key sources, and prepared the literature review. His work provides essential national context on public alerting, accessibility barriers, and the experiences of Deaf, DeafBlind, and Hard of Hearing people during emergencies.

126. The team advanced the research on a foundation of community knowledge, subject-matter expertise, and diverse lived experience. Drawing on historical analysis, literature review, and insights from prior accessibility initiatives, the team developed initial working hypotheses to guide interviews. These hypotheses helped frame the investigation of systemic barriers in emergency alerting and evaluate how current practices measure up to the real needs of Deaf, DeafBlind, and Hard of Hearing Canadians.

VIII. Preliminary Hypotheses

127. Before the interviews began, the research team developed a set of working hypotheses grounded in accessibility reports, community conversations, and years of experience with Canada's emergency communication systems. The team's first hypothesis reflected concern that many Deaf, DeafBlind, and Hard of Hearing (DDBHH) Canadians would still be excluded from the National Public Alerting System (NPAS) because it continues to rely on sound and text

to deliver urgent information.

128. Building on this, the team expected that participants would describe limited access to alerts in sign language, inconsistent captioning, and few visual or tactile options. Earlier national and international studies had already shown that most emergency systems still serve people who hear, read, and process information in written or spoken language. The result is a system that works well for many Canadians but still leaves others at risk when every second matters.

129. A second hypothesis explored how interpreter visibility affects trust in information during live emergency broadcasts. Based on previous observations of federal and provincial press conferences, the team anticipated that participants would mention recurring issues such as missing or poorly placed interpreters, small or obstructed interpreter windows, and captions that overlap or lag. The team expected these barriers to erode confidence in official sources and to force many DDBHH people to rely on friends, family, or social media for critical updates rather than receiving them directly.

130. The third hypothesis focused on solutions. The research team anticipated that emergency agencies could quickly integrate pre-recorded ASL and LSQ video messages into alerts. These clips could explain what is happening and guide actions, such as sheltering, evacuating, or moving to safety. The team expected participants to highlight the value of visual icons, pictograms, and emoji-style symbols that instantly communicate urgency and threat type, especially for DeafBlind individuals or people with limited literacy. The team believed that these approaches would make alerts easier to understand, reduce confusion and fear, and provide everyone with equal access to life-saving information.

131. All of these hypotheses align with the goals of the CRTC's Telecom and Broadcasting CRTC 2025-180[80] consultation, which calls for better accessibility, stronger linguistic inclusion, and fair oversight of how alerts are delivered across Canada. The research team grounded its findings in interviews to amplify lived experiences and identify community-driven solutions, such as sign-language videos and visual design, to make Canada's alerting system truly accessible.

[80] Canadian Radio-television and Telecommunications Commission of interpreters Commission. (2025, June 5). Telecommunications and Broadcasting Notice of Consultation CRTC 2025-180.

IX. Methodological Framework Link

132. The research team designed the study around the hypotheses to ensure that accessibility remained central throughout. The team guided each stage of the interview process and data analysis by the same priorities identified for Canada's public alerting system.

133. The researchers organized interview questions into themes that reflected core accessibility factors, including comprehension of alerts, interpreter visibility, language access, device usability, and reliance on informal networks. The researchers grouped the questions this way to see whether participants' real experiences reflected the barriers and solutions predicted earlier. The research team organized and analyzed the responses by theme and category, focusing on communication methods, device types, response timing, and emotional impact. The team then compared the findings with the national priorities identified in the CRTC 2025-180 consultation.

134. Integrating these guiding hypotheses throughout the research process allowed DWCC to combine quantitative data with personal stories, creating a comprehensive understanding of how Canada's National Public Alerting System (NPAS) functions in practice.

135. The following section outlines the research methodology, including the design of the interview guide, participant recruitment strategies, and procedures for collecting, coding, and analyzing qualitative data. Describing each stage clearly demonstrates how the team gathered and interpreted the voices and experiences of Deaf, DeafBlind, and Hard of Hearing Canadians with care and rigor. This approach ensures that the findings remain credible, meaningful, and firmly grounded in real-world experience.

X. Methodology

A. Development of Questions

136. Recognizing the complex and varied experiences of Deaf, DeafBlind, and Hard of Hearing Canadians, the research team put accessibility and participant experiences at the heart of their approach. DWCC countered traditional audiocentric approaches by developing a methodology that balanced structured data collection with open-ended, story-driven interviews, ensuring that researchers meaningfully represented and analyzed every participant's voice. This section outlines the key steps and decisions behind the interview

guide.

137. Researchers included demographic, device-use, and general accessibility questions in a brief pre-interview Google Form that participants completed before or at the start of each session. This reduced participant fatigue, improved data consistency, and allowed interviews to focus on richer stories. The information also helped build participant profiles and added valuable context to the findings.

138. The second draft of the interview guide, seen in Appendix C, marked a significant shift. Replacing a traditional survey format, it emphasized storytelling and empathy through three sections: real-life experiences, alert accessibility, and final reflections. Open-ended questions invited participants to recount specific emergencies, allowing exploration of barriers, actions, emotions, and support networks. The guide incorporated culturally inclusive and trauma-informed examples, including Indigenous safety concerns and gender-based emergencies, to respect participants' diverse experiences.

139. The two-phase methodology combined structured pre-interview forms with narrative-based interviews, enabling DWCC to collect both quantitative data and qualitative insights. This comprehensive approach deepened understanding of how people access alerts, the barriers they encounter, the emotional and safety effects of those experiences, and the community's recommendations for improving Canada's emergency-alert system.

B. Recruitment Process

140. The research team prioritized building a diverse and representative sample to understand how Deaf, DeafBlind, and Hard of Hearing Canadians experience emergency alerts. To achieve this, the research team used three primary recruitment methods: direct outreach, community connections, and open participation.

141. The first step involved reaching out to individuals whose experiences during emergencies were already known or publicly shared. Among them were John Warren, who documented the Sumas Flood Plains disaster in the Fraser Valley, and Lisa Anderson, former co-chair of CAD-ASC's ASL and LSQ rally, who played an essential role in the Ottawa tornado response and national mobilization efforts. Their first-hand stories provided valuable insight into emergency communication and community leadership.

142. The second path came through DWCC's Public Alerting Survey Community Connectors. These local leaders were deeply involved in Deaf, DeafBlind, and Hard of Hearing networks and recommended people whose perspectives might otherwise go unseen. Their involvement helped ensure that the study reflected not only prominent voices but also the everyday experiences of those who are often less visible in public discussions.

143. The third path invited volunteers through DWCC's national survey, distributed in six versions: three in English and ASL, and three in French and LSQ, with accessible formats for DeafBlind participants. Each survey included an invitation to participate in interviews. The team selected participants from this group to reflect the diversity of Canada's DDBHH communities, including Indigenous and immigrant perspectives, across language, culture, region, and identity.

144. Together, these three approaches created a strong foundation for inclusive representation. By balancing well-known experiences, community recommendations, and volunteer participation, the study captured both the breadth and depth of DDBHH realities.

145. Researchers devoted equal care to selecting participants and to recording and analyzing their voices. The team aimed to treat every story, whether widely known or newly shared, with accuracy, respect, and authenticity, reflecting the full range of lived experiences across Canada's DDBHH communities.

C. Perceived Bias

146. To ensure fairness and accuracy, the research team took deliberate steps to minimize bias and preserve the authenticity of participants' responses. The research team intentionally designed the interview questions to be neutral, open-ended, and non-leading, allowing participants to share their perspectives in their own words.

147. Interviewers used consistent structured prompts and follow-up questions to promote fairness and avoid personal assumptions or interpretations. Appendix B has the participant pre-interview questions, while Appendix C contains the interview questions.

148. In some cases, a report contributor also participated as an interviewee. To maintain neutrality, the research team analyzed their contributions collectively with those of other participants and presented the findings as a shared perspective rather than emphasizing any single person's account. This

approach ensured that the research reflected the collective experiences of Deaf, DeafBlind, and Hard of Hearing participants rather than focusing on individual stories.

149. Team members reviewed the interview guide, question phrasing, and analytical methods multiple times to safeguard against bias. Together, these checks ensured data integrity and provided an accurate, respectful, and careful representation of participants' lived experiences throughout the report.

D. Anonymity & Consent

150. From the outset, DWCC ensured that participants had control over how the research team represented their contributions in the report. Before each interview, the interviewer sent Research Interview Consent Forms, allowing participants to choose whether to be identified or remain anonymous. This form is in Appendix A. As a result, for some, the team removed all personal details from transcripts and reports for those who preferred anonymity.

151. The team clearly informed participants who agreed to be identified about how their input would appear in the report and how it would contribute to the report's findings. This approach respected each person's privacy and autonomy. It ensured that participants could decide how they wished to be represented while maintaining ethical integrity and transparency. Each participant kept complete control over their personal information and the level of visibility they were comfortable with in the study.

E. Ethical Context

152. From the beginning, the team presented and explained participation in this study transparently. The team clearly explained the report's purpose, scope, and goals before participants took part, outlining how their insights would help guide accessibility recommendations.

153. This open communication helped participants feel confident that their stories would contribute to meaningful improvements in Canada's emergency alerting system. It also ensured fully informed consent by ensuring everyone understood the potential impact of their contributions. Participants recognized that their experiences would help shape public understanding and regulatory change, thereby reinforcing trust throughout the process.

154. By understanding how their input would be shared and utilized, participants contributed depth, credibility, and authenticity to DWCC's submission to the

Commission. Their perspectives strengthened the overall findings, grounding this report in lived experience and ensuring that accessibility policy remains connected to the real people it is meant to serve.

F. Issues or Challenges with the Interview Process

155. Conducting interviews with participants who use different sign languages presented unique coordination and scheduling challenges. The limited availability of skilled ASL and LSQ interpreters also required careful planning and flexibility. In addition to these logistical barriers, the team worked to minimize interviewer bias, avoid leading questions, and manage the time needed for thoughtful, accessible discussions.

156. Technical and accessibility barriers also affected participation. Unstable Wi-Fi connections and limited access to reliable video platforms interrupted some interviews. Participants with mobility or visual impairments may require additional time or visual adjustments to communicate effectively. Additional communication barriers affected other participants, especially Deaf immigrants who use different sign languages and those who have experienced language deprivation. Recognizing these challenges helped the team remain responsive to participants' varied needs and ensure equitable participation.

157. These realities led the team to design an interview process that was inclusive, flexible, and responsive. The team adjusted scheduling, communication methods, and question phrasing to accommodate diverse needs. This approach helped minimize barriers and ensured that all voices, regardless of language, ability, or background, could share their experiences meaningfully.

158. Some additional procedural challenges also emerged during the study, including incomplete responses, participant fatigue, and difficulties clarifying complex questions, even with interpreter support. These lessons highlight the ongoing need for thoughtful planning, flexible communication strategies, and strong accessibility support in similar research. Strengthening these areas will improve the quality, accuracy, and inclusivity of future studies.

XI. Application of Methodology to the Proceeding

159. To capture both measurable trends and lived realities, this report uses a mixed-methods approach that combines quantitative data with personal experiences of accessibility during public emergencies. Demographic infographics illustrate who participated and highlight the diversity and depth of

the study's evidence base.

160. The first component uses qualitative data gathered through in-depth interviews with 23 Deaf, DeafBlind, and Hard of Hearing participants across Canada. These conversations form the core of the study, revealing personal stories and identifying accessibility barriers encountered during real emergencies.

161. The second component complements these stories by integrating quantitative data from pre-interview surveys. Appendix B contains the five participant profile questions. These surveys helped the research team identify patterns in demographics, communication preferences, technology use, and awareness of public alerting systems. The resulting data provides essential context for the qualitative findings, linking individual experiences to broader national trends.

162. The third component draws from a literature review of seven national and international sources, including academic studies, regulatory reports, and best-practice guidelines. This review situates Canada's progress within a global context, examining how emergency communication systems function, the accessibility standards in place, and the strategies that have proven effective elsewhere. By combining qualitative narratives, quantitative patterns, and comparative evidence, the report builds a comprehensive foundation for understanding accessibility in Canada's National Public Alerting System (NPAS).

163. Taken together, these three components present a balanced and credible picture of how Canada's alerting systems include or exclude Deaf, DeafBlind, and Hard of Hearing people. This integrated design ensures that personal experiences are understood not in isolation but as part of a larger system shaped by policy, technology, and human impact.

164. From the outset, the team aligned the methodology with the goals outlined in the 2025-180 proceeding[81]. This consultation seeks practical ways to strengthen accessibility, linguistic inclusion, and the reliable delivery of public alerts across Canada. Through qualitative interviews, the research team gathered clear, direct evidence on how current alert systems reach Deaf communities. Participants nationwide shared stories from those who have never received accessible alerts and others who have only experienced partial

[81] CRTC, *Telecom and Broadcasting Notice of Consultation CRTC 2025-180: Improving the Public Alerting System*, 15 July 2025.

access through captioning, interpreters, or community networks.

165. Across interviews, participants described many of the same accessibility gaps that motivated the Commission to begin this consultation. Participants noted fragmented alert systems, regional inconsistencies, limited visibility of ASL and LSQ, and low public awareness of the National Public Alerting System among Deaf and DeafBlind communities. Including these lived experiences ensures that the findings remain grounded in reality. This context gives policymakers a foundation for addressing long-standing gaps in public safety communication.

166. Taken together, the findings underscore the urgent need for reform that prioritizes accessibility, inclusion, and linguistic equality at the core of Canada's public alerting framework. This direction reflects legal and policy obligations in the Canadian Charter of Rights and Freedoms[82] the Supreme Court of Canada's decision in *Eldridge v. British Columbia (Attorney General)*,[83] which recognized the right to sign language interpretation in public services; the Canadian Human Rights Act [84], the Accessible Canada Act,[85] and the 2023 Policy Direction to the CRTC that emphasizes equity, diversity, and accessibility in regulatory policy.[86]

167. Building on these findings, the research centers the perspectives of Deaf, DeafBlind, and Hard of Hearing Canadians, treating their lived experiences as essential evidence for accessibility reform. It moves beyond anecdotal accounts to systematically inform national policy and practice. The stories gathered through interviews, supported by quantitative data and findings from a literature review, reveal persistent barriers across regions and communication channels. Participants also proposed practical solutions such as stronger Deaf-led consultation, national ASL and LSQ standards for public alerts, and the use of innovative online technologies that enable real-time communication.

168. To ensure transparency and guide future action, the report provides the interview guide and question framework in Appendix B. These materials outline the key themes explored and show how the study directly supports the Commission's objectives to strengthen accessibility, linguistic inclusion, and the reliability of Canada's public alerting system.

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[82] Charter of Rights and Freedoms, s.15
[83] *Eldridge v. British Columbia (Attorney General)*,, [1997] 3 S.C.R. 624
[84] Canadian Human Rights Act, RSC 1985, c H-6
[85] Accessible Canada Act, SC 2019, c 1 0
[86] Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy, SOR/2023-234complete.

A. Profile of Interviewees

169. Across Canada, 23 individuals participated in this national qualitative study led by the Deaf Wireless Canada Consultative Committee (DWCC). The team selected participants to reflect a range of communication preferences, regional contexts, and community settings. This diversity helps reveal how geography, language, and community size influence access to Canada's public alerting system.

170. At the start of each interview, researchers asked participants to complete a brief Google Form with demographic questions. The research team used this information to develop participant profiles for this report. Appendix B provides the complete list of questions for reference. Appendix B provides the complete list of questions for reference.

B. Province or Territory of Residence

171. Geographically, participants represented nine provinces, with the largest group from Ontario (**18.2%**). Similarly, balanced participation came from British Columbia, Alberta, Saskatchewan, Quebec, and Newfoundland and Labrador (each at **13.6%**), while smaller numbers were reported from Nova Scotia, New Brunswick, and Manitoba (each at **4.5%**). This broad geographic spread provides a national snapshot that reflects Western, Central, and Atlantic perspectives, enabling meaningful comparisons of how access to public alerting systems differs by region.

C. Urban / Suburban / Rural Community Size

172. Regarding community size, most participants lived in cities with more than 50,000 people (**86.4%**), while **9.1%** lived in smaller towns or villages, and **4.5%** lived in rural or remote areas. This distribution reflects where many Deaf Canadians live, in larger cities with better access to services, interpreters, and community networks. However, the smaller number of rural participants highlights a significant gap. Their limited representation underscores the importance of including voices from remote communities when addressing unequal access to emergency communication.

D. Primary Language

173. In terms of language use, participants showed a strong preference for signed languages. Most used ASL (**77.3%**), while **13.6%** used LSQ. One used both

ASL and PISL (**4.3%)**. Some participants reported using both ASL and LSQ (9.1%), while a few reported English as their first language. This linguistic diversity captures the intersection of Anglophone, Francophone, and Indigenous sign language experiences, emphasizing the bilingual and culturally rich nature of Canada's Deaf communities.

E. Hearing Status

174. Regarding hearing status, the majority of participants identified as Deaf, with 21 out of 23 (**86.4%**) using ASL or LSQ as their primary communication method. One participant **(4.5%)** identified as DeafBlind. Because only one participant identified solely as Deaf oral or hard of hearing, this report clearly reflects the experiences of sign language users. The DeafBlind perspective adds valuable depth to understanding accessibility challenges.

F. Gender Breakdown

175. From a gender perspective, women formed the majority of participants, with **59.1%** identifying as female and **40.9%** as male. This pattern reflects a common trend in Deaf community leadership and accessibility advocacy, where women play a strong role in consultation and engagement. Both genders contributed valuable insights, but the higher number of women underscores their leadership in shaping accessibility priorities.

G. Summary of Participant Demographics

176. Taken together, the demographic profile reveals a diverse and engaged group of participants, primarily Deaf ASL users residing in urban centers across nearly every region of Canada. The study captured perspectives from major cities and smaller communities, offering balanced linguistic inclusion through ASL, LSQ, and PISL. Contributions from regional and rural participants added valuable insights that highlight persistent gaps in access to emergency alerts. These findings demonstrate DWCC's national reach and its commitment to an inclusive and intersectional approach that reflects the broad experiences of Deaf, DeafBlind, and bilingual sign language users across Canada.

H. Participant Device Use

177. Regarding technology, most participants used Apple devices: 61 percent owned iPhones, and one participant used an iPad. Android devices accounted for 35 percent of participants, while one individual relied on a Wi–Fi–only iPad.

Participants cited iPhones as especially popular for their familiar accessibility settings and reliable alert delivery across carriers.

178. The type of device significantly influenced alert reliability. Android users often report issues with vibration, sound, or visual notifications not working consistently. Apple users noted that alerts rarely included sign language or other visual features. One participant who relied solely on a Wi-Fi device missed alerts while offline, underscoring the direct impact of connectivity on accessibility. These findings indicate that while most Deaf Canadians depend on smartphones for emergency alerts, accessibility barriers persist across both major operating systems.

I. Range of Alert Event Types

179. Across Canada, people shared vivid accounts of how emergencies unfolded in their lives over the past decade. Through 22 in-depth interviews, these stories revealed moments when access to clear, timely, and understandable information meant the difference between safety and danger.

180. Public Safety Canada generally groups emergencies in Canada into four broad types.

a. Natural disasters such as wildfires, floods, hurricanes, ice storms, tornadoes, and earthquakes.

b. Biological or environmental threats, including extreme heat, poor air quality, and pandemics.

c. Civil emergencies such as terrorist attacks, active shooter incidents, or nuclear threats.

d. Amber Alerts for child abduction emergencies.

181. Participants most often recalled natural disasters. People spoke about devastating wildfires in British Columbia, Alberta, and Saskatchewan; flooding that swept through Ontario and Atlantic Canada; and powerful storms, including hurricanes, ice storms, and tornado warnings, in Newfoundland, Quebec, and Ontario.

182. When environmental and health crises emerged, many people reflected on how they had shaped their daily lives. Weeks of thick wildfire smoke, record-breaking heatwaves, and the isolation of the COVID-19 pandemic exposed deep gaps in accessible public safety communication. Too often,

alerts lacked signing, captions, or clear visuals that would allow Deaf and DeafBlind individuals to respond quickly.

183. Stories of civil and localized emergencies also surfaced, including police lockdowns, Amber Alerts, and widespread power or network outages. In these moments, people frequently waited for updates or turned to hearing family members and neighbours for help in interpreting what was happening.

184. Taken together, these experiences point to a single conclusion. Systems still exclude Deaf and DeafBlind Canadians from vital emergency information. Regardless of the crisis, the outcome remains consistent. People continue to face unequal access to timely, understandable, and lifesaving alerts. The accounts shared in this study reaffirm the need for a coordinated, bilingual, and sign language–accessible national alerting system that reaches everyone, every time.

J. Alert Event Types

Categories of Emergency Alerts by Threat Type

185. Federal, provincial, and territorial authorities developed Canada's National Public Alerting System, known as Alert Ready, to ensure consistent and timely emergency messaging across the country. It organizes alerts by threat type, so people receive easy-to-understand and reliable information via phones, radios, and televisions.

186. Although not every message lists categories, authorities generally use categories such as natural disasters, biological or environmental hazards, civil emergencies, fires, hazardous materials, and security threats. Authorities developed the framework in collaboration with provincial and territorial input to promote effective coordination during crises and ensure that critical safety information reaches all relevant parties.

187. Within this framework, authorities organize alerts by threat type to guide their public communication. Natural disaster alerts cover floods, earthquakes, hurricanes, and other severe weather that can endanger lives or property. Biological and environmental alerts warn residents about air quality issues, contamination, or outbreaks that pose a threat to their health. Civil emergency alerts address urgent safety situations such as Amber Alerts for missing children or wide-reaching health advisories. While this structure supports timely responses, accessibility remains uneven for Deaf and DeafBlind

Canadians when alerts rely solely on text or sound, without visual or signed communication.

1. Natural Threats/Disasters

188. Authorities issue alerts when severe weather or environmental hazards pose a threat to lives, property, or local infrastructure, enabling communities to act quickly.

189. These alerts cover three main types of natural events:

a. Severe weather events such as tornadoes, hurricanes, blizzards, thunderstorms, and periods of extreme heat or cold.

b. Geological hazards, including earthquakes, landslides, tsunamis, and floods.

c. Environmental and fire-related events such as wildfires, smoke advisories, or air-quality warnings.

190. These alerts guide people to take immediate protective actions, including sheltering in place, evacuating, or avoiding hazardous areas.

2. Biological or Health Threats

191. Public health and biological emergencies require rapid, coordinated communication. These alerts notify people about situations that affect health, contaminate essential resources, or damage the environment.

192. Common biological and health alerts include:

a. Public health emergencies such as pandemics like COVID-19 or outbreaks of influenza and measles.

b. Resource contamination alerts, including boil-water advisories, food contamination warnings, or toxic chemical exposure.

c. Environmental condition warnings, such as air quality advisories due to wildfire smoke, smog, or other hazardous materials.

193. These alerts provide clear instructions to help individuals protect their health and minimize exposure to hazardous conditions.

3. Civil Emergencies

194. When human-origin incidents or security threats arise, civil emergency alerts provide immediate warnings and instructions to protect public safety.

195. These alerts typically address:

a. Public-safety threats such as active shooter situations, dangerous persons in the area, or general civil danger alerts.

b. Terrorism or security incidents, including bomb threats, explosions, or other forms of civil unrest.

c. Infrastructure and utility failures such as power outages, industrial explosions, dam or levee breaches, or gas leaks.

196. These alerts help communities respond quickly, stay informed, and maintain safety during serious non-weather emergencies.

4. Amber Alerts

197. If a child has been abducted or is believed to be in danger, authorities activate an Amber Alert to mobilize the public's help. Authorities distribute these specialized emergency notifications through broadcast, wireless, and online channels to reach as many people as possible.

198. Each Amber Alert typically contains:

a) A description of the missing child, including age, appearance, and identifying features.

b) Information about the suspected abductor and any vehicles involved.

c) Targeted geographic areas where the child is most likely to be found.

199. Amber Alerts follow strict national protocols to ensure a rapid, coordinated response. Clear, visible text is essential for accessibility, ensuring that Deaf and DeafBlind Canadians receive information at the same time as others.

5. Additional Alert Categories

200. Canada's emergency alert system also includes several additional categories to ensure that all types of situations are covered, from infrastructure failures to special notifications that do not fit other classifications.

A. Technological and Infrastructure Threats

201. When mechanical systems or critical infrastructure fail, these alerts warn the public of hazards that could pose a safety threat or disrupt essential services.

202. They generally cover three main types of situations:

a. Major infrastructure failures such as widespread power outages, dam or levee breaches, and the collapse of bridges or roads.

b. Industrial incidents, including chemical spills, toxic releases, explosions, fires, and radiological or nuclear events.

c. Transportation emergencies such as train derailments, aircraft or marine accidents, and large-scale traffic collisions.

203. These alerts focus on emergencies involving mechanical systems or infrastructure rather than natural or deliberate causes.

B. Other Emergency Information Alerts

204. Some emergencies do not fit neatly into the standard categories but still require urgent public communication.

205. These include:

a. Evacuation or shelter-in-place orders that authorities announce to protect immediate public safety.

b. Alerts about missing vulnerable persons, such as Silver Alerts for older adults or individuals with cognitive disabilities.

c. Public information or test alerts that notify people about system-wide safety updates or alerting tests

206. These alerts ensure that people receive clear, timely instructions during complex or unusual events, supporting public awareness across all communities.

XII. Contextual Framework

207. Recognizing how emergencies are categorized helps explain how people receive information when it matters most. This structure reflects how Alert Ready classifies alerts for the public and how Public Safety Canada prepares

for different types of hazards. By including both the four main alert categories and additional types, this report aligns with the National Public Alerting System. It ensures that the analysis covers all types of emergencies affecting Deaf, DeafBlind, and Hard of Hearing Canadians.

208. Governments coordinate behind every emergency alert to keep people safe. Canada's national system depends on collaboration among federal, provincial, and territorial partners to send alerts quickly and consistently across the country. Authorities disseminate these alerts through television, radio, mobile networks, social media, and the internet. They aim to provide life-saving information to everyone, including Deaf, DeafBlind, and Hard of Hearing communities, so all can respond quickly during emergencies.

209. For this research, the alert categories evolved beyond a mere technical structure. The categories shaped how the team understood real experiences, provided a framework for explaining how the national system functions, and guided the analysis of interviews. The research team grouped participant stories by the type of emergency they experienced, including natural disasters, biological or environmental threats, civil emergencies, Amber Alerts, and infrastructure-related incidents. This approach enabled consistent comparisons across regions and revealed how different emergencies affected people's access to alerts.

210. The following section moves from systems to stories. It shifts the focus from how Canada's alerting framework is designed to how Deaf, DeafBlind, and Hard of Hearing Canadians actually experience these alerts in real life.

XIII. Introduction of the Interviewees

211. To understand how Canada's National Public Alerting System actually reaches people during emergencies, the Deaf Wireless Canada Consultative Committee (DWCC) heard directly from twenty-three Deaf, DeafBlind, and Hard of Hearing individuals across nine provinces. Their stories bring depth and humanity to the findings, revealing how accessible or inaccessible public alerts can influence safety, trust, and decision-making in moments of crisis. Each participant's profile highlights their region, communication methods, and personal experiences with emergency alerts, offering a vivid look at accessibility barriers in everyday life across Canada.

212. The research team prioritized protecting participants' privacy as much as amplifying their voices. To ensure comfort and safety, four of the twenty-three

interviewees chose to remain anonymous, while nineteen agreed to be publicly identified. The report lists anonymous profiles by province or region, such as “Anonymous from British Columbia” or “Anonymous from Newfoundland.” This approach made space for participants to share personal or distressing experiences, including trauma, emergency evacuations, and systemic failures, without fear of losing confidentiality. All participants provided informed consent after learning that their interviews would be part of DWCC’s submission to the CRTC and chose whether to be identified by name or remain anonymous in the final report.

A. British Columbia

213. During the Sumas Prairie floods in rural British Columbia, John Warren, an ASL user, recalled that authorities communicated evacuation orders only through sound or long text messages that were difficult to follow. Living in a small town, he had no direct access to official information and instead relied on Deaf community networks and visual cues to stay safe. His story shows how communication gaps in rural areas can put lives at risk when alerts are not accessible.

214. In a city in British Columbia, A.J. Brown, another ASL user, relied on an iPad connected only through Wi-Fi. When a severe storm hit and a tree crashed into their home, the power outage left them completely disconnected from the world. Without signed or visual alerts, A.J. was isolated and uninformed. Deaf, DeafBlind, and Hard of Hearing Canadians highlight the pressing need for visual alert systems, accessible emergency apps, and first responders trained in sign language.

215. An anonymous participant from an urban area in British Columbia who uses ASL and English described experiencing wildfires and extreme heat. The alerts on her iPhone appeared only as text, without sign language interpretation or visual cues. She relied on social media and updates from the Deaf community to stay informed. Her experience shows how inconsistent accessibility across devices and platforms can leave people vulnerable, even in major cities.

216. Further east, Deaf Albertans described facing the same accessibility gaps during wildfires, poor air quality, and city lockdowns, showing how both geography and technology can shape who receives critical safety information.

B. Alberta

217. In an urban area of Alberta, Crystal Jones, an ASL user, shared her frustration with text-based emergency alerts and air quality warnings during wildfires. Captioning delays and missing sign-language interpretation in televised updates made it challenging to understand the urgency of the situation. Her experience highlights the need for visual-first alert systems that prioritize accessibility for Deaf communities.

218. Robin Demko, who identifies as Deaf Oral and lives in an Alberta city, described receiving wildfire smoke alerts and lockdown notices filled with dense text that failed to convey urgency. The lack of clear visuals made it harder to know how to respond. Robin's story demonstrates the importance of concise, image-supported alerts that can be quickly understood during crises.

219. In Edmonton, Alberta, Nancy Lynn Dillon, a DeafBlind ASL user, discussed her struggles to read emergency notifications on her iPhone and iPad during tornado warnings and windstorms. Small print and brief display times made messages nearly impossible to read. She emphasized the need for high-contrast visuals, larger text, persistent alerts, and an emergency app co-designed with Deaf communities that includes ASL or LSQ videos and tactile features for DeafBlind users.

220. In Saskatchewan, both rural and urban participants described the isolation caused by inaccessible alerts during wildfires and tornadoes. Their stories revealed how communities often had to depend on each other rather than official warning systems.

C. Saskatchewan

221. In northern Saskatchewan, Rae-Mairi Richardson, who uses ASL and Prince Edward Island Sign Language (PISL), explained how wildfire alerts never reached her small rural community. Poor internet access and the lack of ASL updates forced her to rely on Facebook posts and word of mouth to stay informed. Her experience shows how inaccessible real-time information puts rural residents at heightened risk.

222. In a Saskatchewan city, Shayla-Rae Tanner, an Indigenous ASL user, recalled receiving phone-based tornado alerts that lacked sign language or clear visuals. To understand the risk, she had to rely on friends and family members to explain what was happening to her. Her story highlights the importance of

integrating sign language and visual indicators into emergency alerts, enabling people to act without delay.

223. Mustafa Alabssi, a Deaf Syrian immigrant living in a Saskatchewan city and using ASL, shared a newcomer's perspective. Experiencing Canadian emergencies for the first time was confusing due to language barriers and the lack of multilingual sign language options in official alerts. His experience highlights the importance of culturally inclusive preparedness materials that cater to diverse linguistic needs.

224. In Manitoba, participants echoed these same concerns, emphasizing that even with improved technology, inconsistent captioning and limited sign-language access still put Deaf residents at risk during severe weather events.

D. Manitoba

225. In a Manitoba city, Sheila Montney, an ASL user, described enduring blizzards and power outages that left Deaf Manitobans struggling to stay informed. Emergency broadcasts lacked captioning or sign language interpretation, and text alerts were delivered inconsistently. Sheila's account emphasizes the ongoing need for clear visual communication and sign language access in every emergency message to ensure safety for all.

E. Ontario

226. In an Ontario city, Abigail Danquah, a Black Deaf ASL user, reflected on the difficulty of receiving written alerts that were either delayed or inaccessible during power outages and Amber Alerts. She emphasized that gaps in accessibility often hit racialized and marginalized Deaf individuals the hardest, urging emergency planners to approach public safety through an intersectional lens that considers both race and disability.

227. Alvin Witcher, another ASL user from an Ontario city, described his frustration with inconsistent alerts across platforms and provinces. Mobile, television, and radio systems rarely matched, and messages were often incomplete or unclear. Alvin called for standardized visual features, plain language messaging, and reliable ASL translation to make alerting fair and understandable for everyone.

228. In Ottawa, Ontario, Darryl Hackett, an ASL user, explained that even in the nation's capital, he often receives late or text-only alerts. English-print messages dominate local and national systems, leaving many Deaf residents

unsure how to respond. Darryl's experience reinforces the need to put ASL and visual mobile alerts at the center of Canada's public alerting framework.

229. An anonymous participant from Ontario, an ASL user living in a city, described a stressful regional emergency where iPhone notifications arrived as text-only messages with no ASL or clear explanation. The sudden alert noise caused confusion and anxiety. She urged officials to implement ASL-interpreted alerts, consistent captioning, and plain-language summaries on both television and mobile devices.

230. Lisa Anderson, a national Deaf advocate and researcher originally from Ottawa and now living in Vancouver, reflected on her experiences with both grassroots and policy-level accessibility. She frequently encounters delayed alerts, limited integration of sign language, and a lack of national bilingual standards. Lisa believes that addressing these issues would benefit Deaf Canadians across the country by creating one consistent, inclusive alerting model.

231. Across the border in Quebec, participants focused on the need for consistent access to LSQ. Even in a province where French-language communication is strong, LSQ users still struggle to find themselves fully represented in emergency alerts.

F. Québec

232. In Montreal, Quebec, Alice Dulude, an LSQ user, interpreter, and bilingual communicator fluent in ASL, French, and English, described how LSQ interpretation sometimes appears during televised government updates but is rarely available in real-time mobile alerts. When official communication fails, she turns to social media and community sharing to fill the gap. Alice advocates including LSQ interpretation across all broadcast and mobile alerts so Deaf Quebecers can act quickly and confidently.

233. Also from Montreal, Yves Dubé, who communicates in LSQ, ASL, French, and English, spoke about struggling with extreme heat and air quality alerts that contained no LSQ video content. He emphasized that French-only alerts do not meet the needs of LSQ users, calling for the integration of both ASL and LSQ in national public alerting systems.

234. Moving into New Brunswick, participants described how accessibility sharply declines outside Quebec, showing how provincial inconsistencies continue to create unequal safety outcomes.

G. New Brunswick

235. Jean-Yves Vachon, who moved from Montreal, Quebec, to Edmundston, New Brunswick, noticed an immediate drop in LSQ access after his relocation. New Brunswick relies heavily on written and audio alerts, with no LSQ translation available. Jean-Yves's experience demonstrates how provincial differences leave sign language users unprotected, reinforcing the need for national standards.

236. In another New Brunswick city, Wilma Colette Morin, an LSQ user, shared that she rarely receives accessible alerts. Information mainly comes in written French or English, forcing her to rely on family or social media for updates. Her story highlights the ongoing exclusion of LSQ representation in emergency communications.

237. On the Atlantic coast, Nova Scotia's participants experienced a different challenge: the growing impact of severe weather and the inconsistency of visual alerts during hurricanes and storms.

H. Nova Scotia

238. Marty Van Den Heuvel, an ASL user from Nova Scotia, described facing repeated hurricanes and storm warnings. He noticed inconsistencies between provinces and service providers, as emergency text systems were unreliable and often lacked visual or sign-based clarity. His story highlights how cross-provincial differences can undermine trust in Canada's public alerting system.

239. Further east, in Newfoundland and Labrador, participants described the isolation that comes with losing communication during major storms and blackouts when alerts are only provided through sound or text.

I. Newfoundland and Labrador

240. In a small town in Newfoundland and Labrador, an anonymous ASL user described enduring a significant power outage and winter storm without access to alerts because local authorities delivered them only via audio or text. She turned to her husband and social media for updates, but felt isolated and frustrated by the lack of direct information in sign language.

241. In a city in Atlantic Canada, Jonathan MacDonald, an ASL user, recalled that storm and hurricane alerts were often delayed and lacked visual accessibility.

To stay informed, he depended on local community networks. His story demonstrates how timely, visual communication remains essential for safety during extreme weather.

242. Another anonymous participant from a Newfoundland village who uses ASL described surviving a severe storm in which both TV and mobile alerts lacked accessible content. He relied on hearing neighbours and online updates, calling for stronger community preparedness, offline alerts, and direct ASL or visual-based communication during emergencies.

J. National Reflection

243. Together, these deeply personal accounts create a nationwide picture of what it is like for Deaf, DeafBlind, and Hard of Hearing Canadians to navigate emergencies, from Saskatchewan's wildfires to Atlantic Canada's hurricanes. Each experience reflects a distinct regional, linguistic, and cultural context, yet one truth connects them all. Governments and broadcasters still fail to guarantee timely, accessible, and reliable alerts. This recurring pattern reveals persistent systemic gaps in Canada's emergency communication system that demand urgent attention.

244. The following section, "The Deaf Experience: Last to Know," delves deeper into these realities, highlighting how accessibility gaps affect trust, safety, and inclusion within Canada's national alerting framework.

XIV. The Deaf Experience

A. Last to Know

245. From the very first interview, one message kept resurfacing. Deaf, DeafBlind, and Hard of Hearing participants described feeling "the last to know." The phrase captures the isolation and anxiety that arise when vital emergency information never arrives in time or in a form they can understand. Behind their shared frustration lies a deeper problem: even with a national alerting system in place, access remains uneven and uncertain. People spoke about missed alerts, confusing text messages, and an ongoing worry that the system would not protect them when it mattered most. In many cases, they had to rely on hearing family members, social media, or sheer luck for critical updates. Information intended for everyone still often reaches only some by chance.

246. For Abigail Danquah in Ontario, this exclusion carries an even heavier weight. As a Black Deaf woman, she explained that being left out of accessible alerts

reflects not just a communication issue, but a much larger question of equity: who is protected and who is left vulnerable when crises unfold. Her perspective reminds us that emergency access is also about social justice, because safety should not depend on factors such as race, gender, or hearing status.

247. Looking ahead, the following sections build on these lived realities. They explore five key areas where accessibility breaks down: public awareness of alerts, the lack of accessible formats, inconsistent or failed delivery methods, reliance on informal community networks, and the emotional and safety impacts these gaps create. Taken together, these experiences highlight the human cost of inaccessible communication and highlight the urgent need to strengthen Canada's National Public Alerting System, ensuring that **no one is left behind.**

B. Public Alert Familiarity

248. Interviews revealed significant differences in the familiarity of Deaf, DeafBlind, and Hard of Hearing Canadians with public alerts. Awareness, comprehension, and trust in the National Public Alerting System varied dramatically. Some recognized the distinctive alert tone on their phones or TV, yet many were unsure what it meant or how to respond. Others admitted they often dismissed alerts, assuming they were tests or unrelated events, because there was no accompanying visual or signed explanation to guide them.

249. When an alert appeared, many Deaf and DeafBlind participants had to depend on others to make sense of it. They learned about emergencies only after family members, friends, or social media explained what had happened. Several said they had never seen an alert in ASL or LSQ and assumed sign language access simply did not exist in Canada. Even when participants received text messages, the writing was often too complex or disappeared too quickly to process, leaving many uncertain about what steps to take.

250. Canada's alert infrastructure combines many channels, including wireless messages, television and radio broadcasts, and visual cues such as flashing lights. Some accessibility tools exist, including Text with 9-1-1 (T9-1-1) and visual alarm systems in public spaces; however, participants reported that these options rarely link directly to real-time emergency alerts. The gap between available technology and practical access remains wide.

251. Geography and language profoundly shaped awareness. Participants in major cities, such as Vancouver, Montreal, and Ottawa, received alerts more

promptly and recognized tones and on-screen messages more frequently. Alerting systems often reached rural and northern residents late or not at all. Francophone and LSQ users expressed particular frustration that most messages appeared only in English, with minimal or no translation into LSQ or French.

252. Taken together, these interviews show that public alert familiarity among Deaf and DeafBlind Canadians remains inconsistent and incomplete. Lack of sign language access, complex text, and uneven regional service leave many unsure about how alerts work or what steps to take. Until alerts are fully accessible in sign language and plain language, trust in the system will remain out of reach, and many will continue relying on hearing relatives or social networks instead of official alerts.

C. Lack of Accessible Public Alerts

253. Across every interview, one message was clear: Deaf Canadians have yet to receive emergency alerts in their own languages. No one had seen a public alert presented in ASL or LSQ, whether on television or on mobile devices. Participants described the absence of interpreters, hearing or Deaf, as a clear signal that accessibility is still treated as optional rather than essential in public safety communication.

254. Many also noted that agencies rarely use other visual supports. They said there was a lack of infographics, clear icons, or even simple visual cues to quickly explain the type of emergency and its urgency. Broadcasters often omitted accurate captioning, and they displayed small or cluttered on-screen text. Without these features, confusion replaces clarity, resulting in wasted time.

255. One of the most significant barriers is Canada’s continued reliance on sound-based alerting systems. These methods exclude people who need visual or tactile information to act quickly. The result is delayed understanding, slower responses, and unnecessary risk. Visual alerts, such as ASL and LSQ videos, high-contrast captions, or flashing light notifications, remain rare, even though they are essential for equal safety.

256. Emergency responders also lack training to communicate effectively with Deaf, DeafBlind, and Hard of Hearing individuals. Apps and hotlines frequently overlook accessibility from the start. Participants said alerts must be delivered through multiple accessible formats, including vibrations, flashing lights, sign language videos, and real-time social media updates, so that information

reaches everyone at the exact moment.

257. Every alert should use clear, plain language and include interpreters, both hearing and Deaf, to ensure accurate and trustworthy communication. Community members also shared how they prepare for emergencies by creating personal plans, using visual alert tools, and carrying cards that explain their communication preferences. These small steps help bridge the gaps until larger systemic changes take place.

258. The absence of accessible alerts is not the only problem. Canada's national emergency alert system remains inconsistent and fragmented, with delivery varying across regions, languages, and platforms. Differences in how agencies create, translate, and transmit messages point to more profound structural inequities that continue to limit equal access to life-saving information.

D. Inconsistent and Fragmented Systems

259. Canada's public alerting system remains inconsistent and fragmented for Deaf, DeafBlind, and Hard of Hearing Canadians. Without alerts that combine visual, vibrating, written, and signed information, many individuals remain uncertain and unsafe during emergencies. Because most alerts still rely on sound, people often miss vital instructions when agencies fail to include captions, visual signals, or sign language interpretation.

260. Interviews revealed several reasons for the wide variation in accessibility across the country. One significant barrier is the absence of a universal standard for visual and digital accessibility. Tactile and visual alert systems appear inconsistently, if at all, which leaves substantial gaps in how information reaches people.

261. Another issue is the inconsistency in how alerts appear across devices and regions. Flashing lights, vibrations, and text notifications vary from place to place, making it impossible to predict when or how an alert will arrive. Sign language access is also missing from most emergency broadcasts. Even when broadcasters include captions, they often delay them or display them inaccurately. The shortage of qualified ASL and LSQ interpreters during emergencies means that critical information sometimes arrives too late to be helpful.

262. Accessibility also depends on a person's location. Some provinces and territories are far better prepared than others, and no federal mechanism guarantees equal access nationwide. Decision-makers rarely include the

voices of Deaf, DeafBlind, and Hard of Hearing people in planning or design, so the systems that result do not reflect the communication realities people face during emergencies.

263. Together, these deep-rooted inconsistencies reduce trust in Canada's National Public Alerting System and weaken its ability to protect Deaf, DeafBlind, and Hard of Hearing Canadians. To address this, Canada requires a unified, accessible framework for emergency alerts that is co-designed by Deaf-led and disability organizations, ensuring equal communication across all regions.

264. In the absence of consistent and accessible alerts, many Deaf, DeafBlind, and Hard of Hearing Canadians have developed their own informal communication systems. When formal systems fall short, the community steps in with creative and reliable workarounds, ensuring critical information spreads quickly through personal networks. These informal networks highlight the community's resilience, but they are not a measure of success. They show how accessibility gaps continue to shift the burden of safety and communication onto individuals and social connections rather than onto the institutions responsible for protecting everyone.

E. Reliance on Community & Informal Networks

265. In moments when official channels fall silent, Deaf, DeafBlind, and Hard of Hearing Canadians become each other's lifeline. During emergencies, community connections often move faster than government systems, spreading vital information through social media, text messages, and word of mouth. Interviews revealed that these informal networks have become both trusted and essential tools for ensuring safety. They reveal the community's resilience and creativity while also exposing how Canada's public alert system continues to fall short.

266. Participants described this community relay not as a habit but as a matter of survival. Family, friends, and local Deaf organizations stepped in as first responders, sharing updates when official alerts never arrived. People often used Facebook groups, group chats, and video calls to provide the first and sometimes only confirmation that danger was near.

267. As Yves Dubé explained, "Deaf people often have to rely on hearing friends or others to clue us in." Many others echoed his words. During both a mass shooting and a hurricane, Marty Van Den Heuvel recalled that his first alerts came not from government systems but from Facebook and text messages

sent by his mother and friends, messages that arrived well before any official notice. In Manitoba, Sheila Montney took on the role of communicator herself, recording ASL video updates and sharing them on Facebook. One of her posts helped two Deaf drivers avoid a tornado. In Ottawa, Darryl Hackett described how, during the Derecho storm, he turned to friends and social media for confirmation when government messaging was confusing or delayed.

268. Across regions, people now sustain this informal relay system through texts, Facebook chains, and personal conversations, making it an unofficial substitute for the National Public Alerting System. Participants called it essential yet fragile. These networks save lives but depend on timing, trust, and chance. Delays or incomplete information can leave some people unaware until it is too late.

269. Without real-time alerts in ASL, LSQ, or clear visual formats, many Deaf, DeafBlind, and Hard of Hearing Canadians must piece together safety information after the fact. While these community-based solutions demonstrate remarkable collective strength, they exist out of necessity rather than choice. They fill the gaps created by inaccessible official systems and show how much responsibility for communication institutions has shifted onto the community.

270. Beyond their practical value, these informal networks reveal a deeper emotional cost. Participants described feeling anxious, unsafe, and excluded when depending on others for time-sensitive information. The repeated experience of being the last to know not only erodes trust in public safety systems but also reinforces feelings of vulnerability and fear.

271. Addressing these emotional and safety impacts is as critical as fixing the technical gaps. True accessibility means ensuring that safety communication reaches everyone clearly, directly, and in their language when it matters most.

272. The stories in these interviews remind us that even the strongest communities cannot carry the full weight of an inaccessible system. When people must depend on friends or social media to stay safe, the worry never truly fades. Every missed alert or unclear message brings anxiety, uncertainty, and a sense of being left behind. Over time, that fear becomes part of daily life. It shapes how people think about safety, trust, and their place in emergencies. Understanding these emotional and safety consequences is the next step toward building an alert system that not only informs but also reassures and protects everyone.

F. Emotional & Safety Impacts

273. Each missed or delayed alert incurs a cost that extends beyond mere inconvenience. For Deaf, DeafBlind, and Hard of Hearing Canadians, the absence of accessible emergency communication creates fear, confusion, and emotional strain that linger long after the crisis ends. The interviews reveal how communication failures are not just technical gaps but lived experiences that shape safety, trust, and mental well-being.

G. Fear, Anxiety, and Confusion

274. Many people have spoken about the panic that sets in when danger is near, but crucial information is missing. They described moments when others around them were already reacting while they were still trying to understand what was happening. One participant from Saskatchewan said, “By the time we knew, the fire was already close,” while another in Newfoundland remembered, “I found out hours later from neighbours when it was already too late to prepare.” These stories illustrate how quickly confusion and fear can escalate into danger when real-time alerts fail to reach everyone.

H. Isolation and Helplessness

275. For those unable to access information independently, the experience carried significant emotional weight. Depending on family, neighbours, or social media, participants often left participants feeling powerless and excluded from the very systems designed to protect them. DeafBlind individuals described an even more profound fear when visual or tactile alerts were unavailable, saying that relying entirely on others heightened feelings of isolation and vulnerability.

I. Loss of Trust and Emotional Fatigue

276. After years of being left out, trust in Canada’s alerting systems has eroded. Many participants said they no longer expect alerts to reach them directly and instead rely on Facebook, text messages, or word of mouth. One participant summed up this exhaustion: “I am tired of always being the last to know.” Another added, “I have to verify everything myself.”

277. For some, the emotional fatigue goes beyond missing information. People who regularly take on the responsibility of interpreting or relaying alerts for others described constant stress and guilt, knowing that mistakes or delays could put friends and family at risk.

J. Implications for Public Safety and Mental Well-Being

278. These experiences demonstrate that accessibility is not only a technical issue but also a matter of public safety, mental health, and dignity. When people cannot trust that emergency systems will reach them directly, their sense of security and well-being is compromised, and the risk of harm increases. For Deaf, DeafBlind, and Hard of Hearing Canadians, this means living with both heightened physical danger and the chronic stress of always being left behind.

279. The voices in this study reveal something bigger than individual hardship. They show a nationwide pattern of exclusion that crosses provinces, languages, and types of emergencies. Together, these accounts form a call to action. They demand a public alerting system that restores confidence, reflects linguistic and cultural inclusion, and ensures that no one faces the next emergency in silence or uncertainty.

280. The emotional toll described by participants cannot be separated from the systems that create it. Behind every moment of fear or exclusion lies a pattern of policies, technologies, and design choices that continue to overlook Deaf, DeafBlind, and Hard of Hearing Canadians. These are not isolated failures but signs of a system built without full community participation. The following section examines these systemic barriers and shared realities, showing how technology, policy, and human experience intersect and where change must begin to make safety truly inclusive.

XV. Common Findings from Interviews (Across Participants)

281. Across every province and territory, the interviews revealed striking similarities in people's experiences. Deaf, DeafBlind, and Hard of Hearing Canadians described the same emotional, linguistic, and accessibility barriers appearing again and again, no matter where they lived.

282. These shared patterns show that the problem is not about where someone lives or what device they use. It reflects a national issue that stems from how Canada designs and delivers its National Public Alerting System.

283. Gary Malkowski's qualitative analysis of the interviews reinforces this conclusion. The challenges that participants described are not one-time failures but part of long-standing structural barriers that shape every stage of emergency communication.

284. These barriers affect people across every region of the country and call for action at all levels of government, in the media, and in industry. The interviews make one point clear: decision-makers must build accessibility into every decision, platform, and policy that shapes how public alerts are sent and received.

1. Common Themes

a. Accessibility & Inclusion

285. Across interviews, Deaf, DeafBlind, and Hard of Hearing Canadians described inclusion as more than a policy goal. It is about being able to see, understand, and respond to an emergency in real time. Participants spoke about how public alerts must reach people in their first languages, ASL and LSQ, and through strong visual tools such as clear colour codes, pictograms, infographics, or flashing lights that everyone can recognize quickly.

286. Interview participants emphasized that full accessibility requires agencies to display captioned and visual alerts across all platforms, ensuring equal access to information for everyone. These priorities align with the principles of the Accessible Canada Act,[87] which calls on institutions to anticipate and remove barriers before they cause harm.

287. To achieve this, participants urged governments and service providers to involve Deaf, DeafBlind, and Hard of Hearing people in every stage of development, testing, and improvement of alert systems. Governments and service providers must begin collaboration with those who depend on these systems most.

b. Systemic Fragmentation and Accessibility Gaps

288. Across Canada, how emergency alerts reach people depends primarily on their location, the device they use, and the delivery method. This uneven system leaves many Deaf, DeafBlind, and Hard of Hearing individuals unsure if they will ever receive critical updates when danger strikes. Participants explained that alerts often rely too heavily on sound-based systems, such as sirens or spoken announcements, and rarely include visual or tactile options, including flashing lights, vibration patterns, or real-time captioning.

[87] Government of Canada. Accessible Canada Act (S.C. 2019, c. 10). Ottawa: Department of Justice, 2019.

289. Because there are no consistent national standards for visual accessibility, the result is a patchwork of systems that work well in some places and fail in others. People described moments when alerts never appeared or arrived too late to act. The absence of inclusive design means that information often reaches the public unequally, placing Deaf and DeafBlind individuals at higher risk in the very moments that demand swift communication.

290. Participants agreed that the solution requires more than fixing technology. The report calls for governments to establish a coordinated framework that incorporates accessibility from the outset. A national standard for visual, tactile, and linguistic alerts could unify this fragmented system into one that people can trust, regardless of their location.

c. Preparedness Inequality

291. For many Deaf and DeafBlind Canadians, being ready for an emergency often depends more on luck than access. Interviewees stated that they felt vulnerable because emergency systems rely on sound from sirens, loudspeakers, and radio warnings, which exclude Deaf, Deaf-Blind and Hard of Hearing people. When alerts lack ASL and LSQ interpretation, captioning, or clear visuals, people lose the ability to act quickly and independently.

292. This inequality reaches beyond individual households. When one group cannot access essential information, entire communities become less resilient. Participants urged governments to move beyond technical fixes and embed inclusion into every part of emergency management, from policy and training to real-time response. Actual preparedness, they said, means designing systems where everyone, regardless of hearing status or language, can respond with confidence and safety.

d. Technology Limitations

293. Even the best technology cannot bridge communication gaps if designers fail to build accessibility into their designs. Participants described captioning that arrived too late, interpreters cropped out of the screen, and alert messages that disappeared before readers could finish them. Across platforms, audio continues to take priority over visual design, leaving Deaf, DeafBlind, and Hard of Hearing people without critical updates when seconds matter most.

294. Technology also fails when developers inconsistently apply accessibility standards. Companies release new devices without built-in visual or tactile alerts, display interpreter windows that are too small, and provide captions that

are often inaccurate or poorly timed. Participants explained that these gaps are not just technical. They are systemic choices that determine who gets to feel safe during an emergency.

295. Although these problems occur across Canada, each person's experience reveals that access to services depends on factors such as language, geography, and culture. Improving technology alone cannot solve these issues. Policymakers and service providers must develop culturally responsive strategies and collaborate directly with Deaf-led and disability organizations to integrate accessibility into every innovation from the outset.

296. Together, these shared experiences uncover more than barriers. They expose the inequities in Canada's emergency alerting system. The following section examines how these challenges manifest in different and sometimes conflicting ways across the country, offering insight into where meaningful change can begin.

2. Different/Unique Perspectives

297. Across Canada, Deaf, DeafBlind, and Hard of Hearing people experience emergencies in ways that reflect who they are, where they live, and the languages they use. The following nine profiles provide a human perspective on those realities. Each person's account sheds light on how inequities in Canada's alerting system intersect with language, geography, and identity. Together, their stories reveal why reformers must ground emergency communication in real diversity to protect everyone.

298. The following personal accounts bring these findings to life. Each story illustrates how real people navigate emergencies in different parts of Canada, showing the human impact behind the data.

299. The first story highlights the unique experience of a newcomer to Canada who faces both linguistic and cultural barriers in understanding emergency communication.

300. Mustafa Alabssi, a Deaf immigrant from Syria, described the challenges newcomers face when navigating Canada's emergency alert system, which primarily serves English speakers. As a multilingual user of ASL and International Sign, Mustafa faced additional barriers because officials did not provide emergency information in his languages or adapt it to different cultural backgrounds. His experience shows why agencies must deliver emergency alerts in multiple sign languages, such as ASL, LSQ, and International Sign, so

Deaf refugees and immigrants can receive clear and equitable communication during emergencies. Mustafa's story reminds us that inclusive public alerting succeeds only when it embraces linguistic diversity and recognizes the unique needs of newcomers.

301. From linguistic barriers, the following story moves north to explore how geography and infrastructure affect access to emergency alerts in remote Indigenous communities.

302. Rae-Mairi Richardson lives in an Indigenous community in northern Saskatchewan and described the confusion and fear she felt during major wildfire emergencies. Without visual or signed alerts, Deaf residents in her region could not access critical safety information when they needed it most. Limited internet and unstable phone connections forced people in her community to rely on social media and word of mouth, making it difficult to know when threats were nearby. Her story highlights the urgent need for offline, visual, and regionally adaptive alert systems that can reach remote or wildfire-prone Indigenous areas, where standard infrastructure often fails during disasters.

303. The next perspective brings the focus to urban life and how overlapping identities can create additional layers of exclusion in emergency communication.

304. Abigail Danquah is a Black Deaf woman living in Toronto. She spoke about how the combination of race, gender, and disability leads to layered challenges when accessing emergency alerts. Abigail shared that inaccessible written alerts and broader systemic barriers often leave her feeling excluded and mistrustful of public safety messaging. Her experiences show that policymakers must consider intersectionality and reflect the racial, gender, and cultural diversity within the Deaf community. By recognizing and addressing these overlapping identities and barriers, policymakers can design emergency alerting systems that truly include and serve people from all backgrounds.

305. Moving westward, the following story examines how DeafBlind Canadians encounter barriers that extend far beyond language.

306. Nancy Lynn Dillon lives in Edmonton and is DeafBlind. She shared the daily challenges she faces with current emergency alert technologies, which rarely meet the needs of people who have both hearing and vision loss. Nancy Lynn described mobile alerts with small text that disappeared too quickly and noted that agencies failed to provide tactile and high-contrast visual options to help

her stay informed during emergencies. Her experience demonstrates why developers must design easy-to-use interfaces that incorporate tactile, visual, and auditory cues, as well as direct input from DeafBlind users. Nancy Lynn's story reminds us that accessible public alerting succeeds only when it includes vibration, braille compatibility, larger text, and visible interpreter video to protect people with dual sensory barriers.

307. The following story highlights how Indigenous Deaf perspectives deepen our understanding of accessibility and cultural inclusion.

308. Shayla-Rae Tanner is an Indigenous Deaf woman from Saskatchewan. She described how mainstream emergency alert systems often fail to serve Indigenous and rural communities. Shayla-Rae explained that authorities frequently deliver messages only in English or French, without adapting them for local languages or cultural contexts. Her story highlights the importance of reconciliation-driven approaches and meaningful Indigenous consultation in emergency communication planning.

309. The following profile highlights Francophone accessibility and linguistic equity as ongoing challenges in Quebec.

310. Alice Dulude is an LSQ user and interpreter living in Quebec. She described how access to LSQ remains inconsistent, even in a province that recognizes both English and French as official languages. Although government broadcasts in Quebec sometimes include interpreters, Alice pointed out that emergency alerts and televised updates rarely feature LSQ in real-time, making it harder for Deaf Quebecers to access essential information quickly. Her experience shows that policymakers must extend the Official Languages Act's language equality to sign languages as well. Ensuring both ASL and LSQ users can access life-saving emergency messages is critical for building an inclusive and equitable alerting system in Canada.

311. From an urban policy and federal oversight perspective, the following story shows how accessibility gaps persist even within the nation's capital.

312. Darryl Hackett lives in Ottawa, where he frequently faces challenges with emergency alerts, despite the city being home to Canada's federal institutions. He said that mobile and televised alerts often lack sign language, clear visuals, or proper synchronization, making them difficult to follow. His experiences reveal the gap between federal leadership and the implementation of alerting policies at the local level. Darryl's story highlights the urgent need for comprehensive, nationwide accessibility standards in all public alert systems, ensuring that everyone, regardless of location or circumstances, can receive and understand emergency messages when they matter most.

313. The following accounts from New Brunswick and Quebec illustrate the Francophone regional divide, where provincial borders create unequal access to the same language and alerting tools.

314. Wilma Colette Morin from New Brunswick and Jean-Yves Vachon from Quebec shared their experiences as LSQ users living on opposite sides of a provincial border. Jean-Yves Vachon described how LSQ interpretation is sometimes available in Quebec broadcasts, though it is not consistent or guaranteed for emergency alerts. In contrast, Wilma reported that in New Brunswick, authorities send emergency alerts only in written French or English, omitting LSQ interpretation. Together, their stories highlight how uneven linguistic accessibility is from one province to the next.

315. The final story provides a cross-border perspective through the Korean missile alert experience, showing what truly inclusive emergency communication can look like in practice.

316. An anonymous Deaf participant from British Columbia shared the experience of being in South Korea during a false ballistic missile alert. What stood out during that moment was how quickly and clearly officials communicated the emergency. The alert appeared instantly, accompanied by visual cues, text instructions, and updates in multiple languages, making it easy to understand what was happening and how to stay safe. This experience contrasted with Canada's limited alerting system, which often lacks visual clarity and accessible language. The participant's story shows how other countries integrate inclusive communication into their emergency alerts and demonstrates that Canada can learn from these models to ensure everyone, regardless of language or ability, can respond quickly in a crisis.

317. Collectively, these nine profiles highlight the spectrum of perspectives within the Deaf, DeafBlind, and Hard of Hearing community, including linguistic minorities, rural residents, Indigenous peoples, Deaf immigrants, and DeafBlind individuals. Their stories show both resilience and frustration, revealing how systemic gaps in accessibility, language inclusion, and policy coordination can leave some Canadians less protected during emergencies.

318. The diversity of these experiences makes clear that improving the National Public Alerting System (NPAS) requires more than technical upgrades. Reformers must embed cultural, linguistic, and intersectional accessibility at the heart of system design. Only by prioritizing Deaf-led consultation, national standards in both ASL and LSQ, and inclusive technology development can Canada ensure that no one is left "*the last to know*" during times of crisis.

3. Barriers & Challenges for DDBHH in Accessing Emergency Public Alerts

319. Deaf, DeafBlind, and Hard of Hearing Canadians continue to struggle to receive clear, timely information during emergencies. Most alert systems rely on sound-based communication, such as sirens, radio broadcasts, and spoken announcements, making them inaccessible to many. Without visual or tactile alternatives, essential safety messages fail to reach everyone, putting lives at risk when time is critical.

320. Access barriers persist across every communication platform. Captioning is often inaccurate or missing, sign language interpretation is rare, and visual alerts arrive late or disappear entirely. The lack of consistent national accessibility standards adds to the problem. Design flaws such as low-contrast text, small interpreter windows, and poorly timed captions make essential information difficult to follow and reduce trust in the systems meant to protect people.

321. Other challenges go beyond technical design. Overdependence on audio alerts, uneven captioning practices, and inaccessible technology continue to be common issues. Non-standard accessibility protocols, fragmented alert channels, and minimal tactile or vibration-based notifications for DeafBlind users compound these risks. The pattern is clear: Canada's emergency alerting framework still treats accessibility as optional rather than as a core element of public safety.

A. Audio-Only Alerts

322. Emergency alert systems that depend entirely on sound continue to leave Deaf, DeafBlind, and Hard of Hearing Canadians without the information they need to stay safe. Because these systems rarely provide visual, signed, or tactile ways to receive alerts, many people have no warning that danger is approaching until it is already unfolding. For those affected, this is not a technical inconvenience but a daily reminder that emergency communication still prioritizes sound over inclusion. Their experiences show that in moments of danger, silence can feel as frightening as the crisis itself.

323. Across provinces, people shared personal stories of what happens when alerts depend only on sound. These firsthand accounts reveal how often Deaf and DeafBlind Canadians must find their own ways to stay informed when official systems fail to meet their needs.

324. In British Columbia, John Warren, a Deaf resident, remembered the Sumas Prairie floods when officials issued evacuation orders only by sound. Deaf residents had no way of knowing what was happening until they saw people leaving or heard about it from others online. "*The sirens went off, but none of us knew what was happening*," he said. His story shows how communication gaps during rural emergencies can quickly put lives at risk.

325. Nancy Lynn Dillon, a DeafBlind woman in Alberta, described watching televised alerts that were completely sound-based. *"Everything was being said out loud on TV, but I could not see or feel anything that told me what was going on,"* she said. Because officials failed to include tactile or visual cues, she was unable to assess the danger until it was too late.

326. *"I had to ask people what was happening because the alarms meant nothing to me,"* said Rae-Mairi Richardson from a small northern Saskatchewan community. During a major wildfire, emergency sirens and radio broadcasts excluded Deaf residents entirely. Her story shows how Deaf residents in rural areas often depend on community networks rather than official alerts.

327. When a powerful storm swept through Nova Scotia, television and radio stations broadcast announcements only by voice, without captions or interpretation. Marty Van Den Heuvel, a Deaf community advocate, recalled, "*I only found out what was happening from my family or Facebook, and by then the situation had changed.*" His experience demonstrates how the absence of signed and visual information can turn confusion into risk.

328. Farther north, the wildfire emergency itself became the signal. In Saskatchewan, some Deaf residents realized the danger only when they saw flames in the distance or neighbours leaving their homes. Events like these highlight how sound-based systems often fail those who rely on visual communication.

329. Taken together, these stories paint a clear picture of exclusion. Sound-based systems leave Deaf, DeafBlind, and Hard of Hearing people without timely access to life-saving information. Authorities achieve absolute safety when they combine visual, tactile, and signed-language alert options, ensuring that everyone receives information simultaneously.

330. Canada's ongoing reliance on audio alerts highlights a significant accessibility gap in the National Public Alerting System, falling short of the Accessible Canada Act's promise of barrier-free communication. Participants agreed that

agencies must deliver every emergency alert in both sound-based and accessible visual or tactile formats.

331. Participants proposed several practical steps to make alerts accessible to everyone:

- **a.** Use flashing lights in conjunction with sirens to reach those who are deaf or have hearing loss.
- **b.** Add real-time ASL and LSQ video pop-ups on television and mobile devices.
- **c.** Enable vibration notifications on phones, smartwatches, and home alert systems.
- **d.** Install visual alarm systems in homes, workplaces, and public areas.

332. These improvements ensure that every person receives timely, understandable information in the format that works for them. A truly inclusive system gives Deaf, DeafBlind, Hard of Hearing, and hearing Canadians equal access to accurate, simultaneous, and actionable alerts. Implementing a national standard for accessible, multimodal communication would ensure that agencies reach everyone during a crisis.

333. Yet even with these changes, accessibility is far from complete. The following section examines another significant challenge: the visual and captioning barriers that continue to limit the sharing and understanding of information during crises.

B. Inconsistent or Missing Captioning

334. Across Canada, many Deaf, DeafBlind, and Hard of Hearing people still struggle to access emergency alerts with reliable captioning. Television, online broadcasts, and mobile devices often display captions that are inaccurate, delayed, inconsistent, or missing altogether. For those depending on them, this is not just frustrating; it can mean missing critical information when seconds matter. Poor caption quality remains one of the most persistent accessibility challenges in emergency communication, weakening trust in Canada's public alerting systems.

335. In Alberta, Crystal Jones, a Deaf advocate, recalled how caption delays and frequent dropouts during wildfire and air-quality emergencies made it challenging to know when to act. *"When the captions lag or disappear, you*

lose the moment to react. It's already too late," she said. Her account captures the urgency Deaf Canadians face when captions fail at the exact moment they need them most.

336. Sometimes, the problem is visibility rather than timing. Nancy Lynn Dillon, who is DeafBlind and lives in Alberta, shared that television stations often display captions that are too small and disappear too quickly to be useful. *"The words flash too quickly or disappear before I can read them. It's frustrating and dangerous,"* she explained. For her, even minor design flaws can make safety information completely inaccessible.

337. Further east in Ontario, Abigail Danquah described how agencies often presented mobile and televised alerts only in English and used complex wording that made them hard to understand. *"Not everyone reads English easily, and captions full of jargon make it harder to understand what's happening,"* she noted. Her experience reminds us that policymakers must link language and literacy accessibility with technology.

338. In Quebec, Alice Dulude explained that provincial broadcasters sometimes started updates with working captions but dropped them partway through. *"Sometimes captions work for the first few minutes, then vanish right when the important information starts,"* she said. This inconsistency left her guessing about key instructions during critical moments.

339. From the prairies to the Atlantic, the same frustrations surfaced. Sheila Montney, a Deaf resident of Manitoba, described watching televised emergency broadcasts during blizzards and power outages with no captions or interpreters. *"When the screen only shows the speaker's face and no captions, we are left in the dark, literally and figuratively,"* she said. Her words reflect a shared sense of exclusion that many participants across the country voiced.

340. These stories together reveal a national pattern of inconsistency. When agencies treat captioning as optional or secondary, they undermine safety for Deaf, DeafBlind, and Hard of Hearing viewers. Agencies must treat reliable captioning as essential infrastructure, not an afterthought.

341. To address this, participants called for clear, enforceable national standards that ensure equal access to accurate, timely information. Their recommendations included:

a. Mandatory, real-time, human-edited captions for all emergency alerts and briefings.

b. Bilingual captioning in English and French that aligns with both spoken and signed content.

c. Large, high-contrast, and persistent text across all broadcast and mobile platforms.

342. These standards would guarantee that Deaf, DeafBlind, and Hard of Hearing Canadians receive clear and consistent emergency information, regardless of where they live. The CRTC's national coordination on captioning would not only close a critical accessibility gap but also ensure that broadcasters and emergency agencies inform everyone without delay, enabling them to stay safe during a crisis.

343. Yet even with perfect captions, true accessibility requires more than text. The following section explores how the absence of ASL and LSQ interpretation during live broadcasts continues to block equal access to lifesaving information.

C. Lack of Sign Language Interpretation

344. Broadcasters often air live emergency coverage without ASL or LSQ interpretation and frequently exclude Deaf Interpreters. This gap continues to leave Deaf, DeafBlind, and Hard of Hearing communities without equal access to urgent, life-saving information. When wildfires or televised briefings occur, many people feel anxious and uninformed at a moment when clarity is most crucial.

345. During one provincial broadcast, Alice Dulude, a Deaf professional from Quebec, noticed the complete absence of sign language. *"There's no sign language… doesn't matter whether it's ASL, LSQ, or Indigenous,"* she said. Her observation echoed many others and showed how national screens still fail to provide Deaf access.

346. Visibility, several participants explained, can make the difference between panic and preparedness. In Alberta, Robin Demko, an advocate and community leader, emphasized the importance of Deaf interpreters standing beside broadcasters during emergencies. She pointed to interpreters such as Nigel Howard and Kevin Colp, whose presence during the COVID-19 pandemic offered Deaf Canadians equal access to vital updates. *"The Prime*

Minister and premiers should always appear with interpreters during emergency announcements," she said.

347. When wildfires swept through Northern Manitoba, the screen remained silent. Sheila Montney remembered that *"there was no signing at all."* She added that stations often delay or omit picture-in-picture interpreting and urged consistent, immediate sign language access during every televised emergency.

348. Even when stations include interpretation, viewers cannot always use it. Nancy Lynn Dillon, a DeafBlind woman from Alberta, described moments when TV graphics covered interpreters or channels omitted them altogether. Broadcasters and government officials should include interpreters in every emergency announcement, as there are insufficient interpreters available.

349. For Francophone Deaf viewers, the challenge multiplies. Wilma Colette Morin and Jean-Yves Vachon, both LSQ users from Quebec, explained that captions alone are not enough. *"For Deaf people, they need LSQ with images to really understand what's going on,"* they said. Their experiences show that systems exclude Deaf francophones twice over when agencies send alerts only in English or omit LSQ interpretation.

350. *"The inclusion of ASL, LSQ, and Indigenous sign language interpreters is the number one recommendation for making emergency information accessible,"* said Yves Dubé from Quebec. His statement captures the shared conviction that accessibility depends on visibility. Jonathan MacDonald in Newfoundland agreed, noting that *"interpreters must be front and center, first and foremost, for those who need them."*

351. The participants' shared experiences reveal a national pattern that governments and broadcasters can no longer ignore. When broadcasters omit, obscure, or delay interpreters during emergencies, Deaf, DeafBlind, and Hard of Hearing Canadians lose real-time access to life-saving information.

352. This persistent lack of ASL and LSQ interpretation across broadcast, digital, and wireless alert systems reflects a systemic communication failure that violates the principle of equal access.

353. Participants recommended that the CRTC require:

- **a.** Require ASL and LSQ interpretation for every televised and streamed emergency alert.
- **b.** Include Deaf Interpreters for complex or extended briefings.

c. Ensure on-screen interpreters remain visible, adequately sized, and well contrasted.

d. Embed ASL and LSQ video components in mobile alerts and government websites.

354. By embedding sign language access into every part of Canada's National Public Alerting System, the Commission can ensure that Deaf and DeafBlind Canadians receive information that is equal, timely, and life-saving. Doing so would fulfill the promise of the Accessible Canada Act and uphold the principles of the Canadian Charter of Rights and Freedoms, reflecting the voices of Deaf Canadians who have been calling for this change for decades.

355. Sign language interpretation is only one part of the accessibility picture. Even when broadcasters include interpreters, weak visuals, missing captions, or poor design can still undermine the message's urgency. The following section examines how visual clarity and caption accuracy influence comprehension, and how subtle design choices can make the difference between confusion and safety.

D. Delays in Alert Dissemination

356. When storms and floods strike, every minute counts. Yet many Deaf and DeafBlind Canadians described waiting long after the danger had begun before receiving any alerts. Broadcasters and carriers often delivered text and television updates too late, forcing people to rely on instinct, social media, or quick texts from friends. *"It makes it hard to trust a system that warns you after the fact,"* said Marty Van Den Heuvel, recalling moments when the warnings came too late to make a difference.

357. For others, timing was only part of the problem. Agencies often sent alerts filled with long, overly complex text, leaving users struggling to understand them as emergencies unfolded. Alice Dulude explained that by the time she could make sense of the alert, the situation had already worsened. For her, clarity mattered just as much as speed.

358. Smaller or rural regions faced longer delays because slower networks caused visual alerts to lag behind audio ones. As Rae-Mairi Richardson observed, information *"would arrive a lot quicker if it were in a visual display instead of text,"* showing that equal access requires prioritizing visual-first systems that reach everyone simultaneously.

359. Many participants said they often had to rely on observing others' reactions rather than receiving direct communication. Wilma Colette Morin and Jean-Yves Vachon shared that they *"often learn about emergencies only after seeing others react or through Facebook posts."* These moments of uncertainty left many Deaf, DeafBlind, and Hard of Hearing Canadians feeling perpetually one step behind, a dangerous position when every second can matter.

360. Taken together, these experiences reveal how the technology platforms themselves compound accessibility gaps and slow delivery. The following section explores how mobile apps, websites, and social media tools often fail to meet accessibility needs, leaving many Deaf, DeafBlind, and Hard of Hearing Canadians without reliable or usable alert systems when they need them most.

E. Inaccessible Technology Platforms

361. Technology often becomes a barrier rather than a bridge during emergencies. Developers have designed many tools to keep Canadians safe; however, mobile apps, websites, and social media alerts still lack essential accessibility features. Participants repeatedly explained that designers failed to build these systems with Deaf, DeafBlind, or Hard of Hearing users in mind. Most systems omit visual alerts, captioning, and sign language integration, and even when messages appear, they overwhelm users with fleeting or text-heavy content that limits comprehension.

362. Interviews reveal how these design gaps pose real risks. Some participants noted that new apps and online systems appear advanced but lack even simple visual indicators that Deaf users can rely on. Marty Van Den Heuvel described how alerts on his phone and laptop often appeared for only a few seconds before disappearing. He emphasized that alerts must remain visible and easily accessible, especially when every second counts.

363. For others, comprehension posed the most significant challenge. Nancy Lynn Dillon explained that the alerts on her phone contain "*all words*," with no icons or visuals to help users with different literacy levels. Without graphics or symbols, emergency messages quickly become confusing and overwhelming.

364. Technology also fails when connectivity breaks down. AJ Brown recalled that a storm cut her off when power and Wi-Fi failed, leaving her iPad useless. Because the system lacked offline alerts or accessible backups, she was unable to stay informed about what was happening. Her experience

demonstrates why developers must design alert systems that function offline or under low-bandwidth conditions, ensuring information reaches people when they need it most.

365. Innovation alone will not solve these problems. As Darryl Hackett explained, "*we need a Deaf emergency app*" that uses plain language, clear visuals, and icons rather than complex English text. He emphasized that designers must build accessibility into systems from the start, not tack it on later as an afterthought. Similarly, Yves Dubé called for seamless integration across apps, websites, and devices, with push notifications that include sign language or illustrated formats, ensuring information remains clear and consistent everywhere.

366. Confusion deepens when technology sends mixed messages. Jonathan MacDonald described how conflicting updates from multiple apps undermine or erode public trust and how many platforms go offline during power outages or service interruptions, leaving Deaf and DeafBlind users without reliable ways to receive updates.

367. These accounts reveal a national problem: inconsistent design keeps emergency communication tools unreliable and inaccessible, reinforcing inequities in how Canada shares safety information. To close these gaps, participants recommended that the CRTC require:

- **a.** Standardized accessible design with high-contrast visuals, large fonts, and persistent notifications.
- **b.** Built-in ASL and LSQ video options, along with clear visual icons.
- **c.** Offline-capable and low-bandwidth functions for rural and remote users.
- **d.** Integration with smart home and wearable devices that provide tactile and visual alerts.

368. If adopted, these changes would align Canada's emergency technologies with the goals of the Accessible Canada Act, ensuring that Deaf, DeafBlind, and Hard of Hearing Canadians can receive, trust, and act on life-saving information when it matters most.

369. The following section examines how inconsistent accessibility practices compound these barriers and limit people's ability to receive and act on alerts in real time.

F. Non-standardized Accessibility Protocols

370. Across Canada, emergency alerts vary from one province to the next, not only in timing but also in how they look and sound. Without a standardized national accessibility framework, Deaf, DeafBlind, and Hard of Hearing Canadians experience unpredictable and unequal access to critical information. The same alert may display different visuals, arrive at varying times, or exclude key features depending on location or device.

371. In Manitoba, Sheila Montney noticed that alerts often looked different across platforms. Some had grey backgrounds with black text, others reversed the colours, and the font size sometimes changed mid-message. She recommended that alerts follow a single national format, stating they should be "*set to black with yellow text along with images and visuals*," to ensure clarity for everyone, including DeafBlind users.

372. Yves Dubé, a Deaf community leader from Quebec, described how scattered communication can exacerbate confusion during emergencies. *"Mobile alerts, websites, and social media all say different things,"* he said. He made a simple but powerful suggestion: create a single national website and app that delivers ASL, LSQ, and Indigenous Sign Language videos alongside text, ensuring consistent nationwide access.

373. A hurricane warning in Nova Scotia revealed how sharply the systems differed. Marty Van Den Heuvel found his phone vibrated immediately for that event, but during a later flood, no notification came through. *"It depends on the provider,"* he explained. For Marty or anyone else, reliability and redundancy should never vary based on the type of disaster.

374. Television broadcasts introduced another layer of inconsistency. Nancy Lynn Dillon recalled a "*Fire Update*" broadcast where a banner covered the interpreter window. In other provinces, interpreters stayed visible. *"It all depends on how the broadcaster designs their screen,"* she said, pointing out that accessibility should not rely on luck.

375. *"Sometimes we never get the full alert,"* recalled Rae-Mairi Richardson, describing life in northern Saskatchewan. Her community frequently missed air-quality warnings and severe-weather notifications, leaving residents unsure whether to shelter or evacuate. For remote and rural areas, inconsistent delivery can mean real danger.

376. An early winter storm in Alberta further showed how unpredictable formats can slow response times. Local Deaf residents reported that alerts on mobile devices lacked vibration or clear visuals, while television broadcasts displayed them differently. This patchwork approach means that safety often depends on which device or service a person happens to use.

377. Together, these accounts paint a clear picture of an alert system that still depends on geography and luck rather than equality and design. Without national standards for colour contrast, interpreter visibility, vibration settings, and multilingual inclusion, Canada's emergency alerts remain fragmented. Participants called for coordinated CRTC oversight to ensure that accessibility, timing, and design are consistent across the country, so that everyone, regardless of province or platform, receives the same clear, reliable warning when it matters most.

378. The following section continues this discussion by exploring how poor visual design adds another layer of inaccessibility. Even when alerts reach people, cluttered layouts, hard-to-read text, and confusing colour schemes often make critical information hard to interpret at the moment.

G. Poor Visual Design of Alerts

379. Even when emergency alerts reach Deaf, DeafBlind, and Hard of Hearing Canadians, poor visual design often prevents them from understanding the message. Small interpreter windows, cluttered text, low colour contrast, and confusing layouts make critical safety information difficult to follow when time is limited. Participants described how design flaws in broadcasts and mobile alerts can turn life-saving messages into inaccessible or stressful experiences.

380. Nancy Lynn Dillon recalled that graphics and scrolling banners partially obscured the interpreter windows during one televised emergency update. Lisa Anderson, who lives in British Columbia and frequently travels to Ottawa, noted that televised government updates often cover interpreters with captions or logos. She emphasized that *"no matter how fast information is shared, if the visuals are wrong, it's inaccessible,"* calling for consistent framing that keeps interpreters visible across all broadcasts.

381. Yves Dubé observed that broadcasters often make LSQ interpreter windows too small, misplace them, or crop them out entirely. He recommended national guidelines that define the minimum size of interpreters and screen placement to ensure equal visibility. Alice Dulude, also from Quebec, noted that poor lighting and camera angles during televised briefings can sometimes cast

shadows over interpreters. She explained that simple adjustments to lighting and framing would significantly improve legibility and access.

382. Concerns also extended to the readability of text alerts. Sheila Montney from Manitoba shared that most alerts appear in "*tiny grey text on white*," which is difficult for older adults and people with low vision. She suggested using high-contrast colours, such as black text on yellow, and consistent symbols to quickly indicate the level of threat.

383. Visual clutter on mobile devices added to the problem. Marty Van Den Heuvel in Nova Scotia described receiving alerts as *"visually overwhelming,"* explaining that dense text, lack of spacing, and missing icons made it challenging to identify urgency during stressful moments. He said that better spacing, icons, and simple layouts would make alerts easier to understand and act on.

384. These accounts reveal that visual accessibility is as essential as linguistic access. Poor design can make even the most well-intentioned alerts unusable for Deaf, DeafBlind, and Hard of Hearing viewers. Issues such as small interpreter windows, low-contrast text, and cluttered displays reduce comprehension and heighten anxiety during emergencies.

385. Participants emphasized the need for national standards that prioritize clarity and consistency. They recommended:

- **a.** Large, unobstructed interpreter windows.
- **b.** High-contrast, static backgrounds.
- **c.** Clear and consistent caption placement.
- **d.** Universally recognized colour codes and pictograms.

386. Applying these standards would make emergency alerts easier to process, reduce cognitive strain, and ensure that visual design supports, rather than hinders, comprehension. Accessible emergency communication requires more than delivering information; it requires presenting that information clearly.

387. The following section explores another key challenge: how the growing reliance on multiple, uncoordinated alerting channels further fragments access and leaves many Deaf, DeafBlind, and Hard of Hearing Canadians uncertain about which messages to trust or follow.

H. Over-Reliance on Multiple Channels

388. A growing dependence on multiple, uncoordinated communication platforms such as television, radio, mobile apps, and social media has created one of the most persistent accessibility barriers in Canada's emergency communication system. Policymakers designed this approach to build redundancy, but it often produces the opposite effect. Deaf, DeafBlind, and Hard of Hearing Canadians frequently find themselves switching between platforms in search of complete and reliable information, resulting in confusion, stress, and lost time during crises.

389. During an active shooter incident, Marty Van Den Heuvel in Nova Scotia said he had to check every possible source, including television, police reports, online news, and community pages, to understand what was happening. With no direct emergency alert about the situation, he depended on Facebook updates and family text messages. The constant switching, he explained, was exhausting and left him anxious. *"It makes you feel like you're always one step behind,"* he said.

390. Economic barriers also play a role in access. Nancy Lynn Dillon in Alberta explained that some Deaf people without cable rely heavily on Facebook Live streams for updates, while others only receive alerts through television or mobile devices. She noted that "*people who can afford cable get alerts automatically, but those who can't often wait without updates.*" Her experience shows how income can determine who receives life-saving information first.

391. In Quebec, Alice Dulude described how during both the COVID-19 pandemic and a nearby oil spill, she had to alternate between television and mobile streams to access sign language interpretation. *"If the TV channel connected to an app with the same interpreter feed, it would be so much easier,"* she said. Her story shows how the need to juggle multiple platforms can add stress in moments that demand clarity and calm.

392. Jonathan MacDonald from Newfoundland and Labrador said he routinely checks several apps, such as VOCM and weather tools, to compare information. *"When everything matches, I feel confident,"* he explained, *"but when it doesn't, I don't know what to believe."* His experience highlights how inconsistent messaging across digital platforms can fuel confusion rather than provide reassurance.

393. When emergency information is inaccessible, Robin Demko steps in to help others understand what is happening. She depends on Facebook, government

websites, and rural contacts to fill the gaps left by missing or unclear alerts. Her efforts show how Deaf community members have established their own informal information networks in response to the failures of official emergency systems.

394. Across the country, people described this fragmented process as both exhausting and unsafe. Constantly toggling between devices and sources not only delays understanding but also deepens inequities in who receives information first. When every platform carries a different message or none at all, emergency communication becomes a puzzle at the very moment it should offer clarity.

395. These experiences expose a structural flaw in Canada's National Public Alerting System. What should create coordination instead produces fragmentation, leaving critical information scattered across platforms with uneven accessibility and reliability.

396. To fix this, participants called for a single, centralized alert system that provides identical, accessible information across all channels. They recommended that the CRTC:

- **a.** Require a synchronized multi-channel framework with identical alerts in ASL, LSQ, captions, and visual indicators, released simultaneously across all platforms.
- **b.** Support the development of a national emergency app that delivers bilingual ASL and LSQ alerts accessible on every device and network.
- **c.** Establish interagency coordination to remove conflicting or duplicate alerts.

397. Governments can eliminate confusion, strengthen public trust, and ensure that Deaf, DeafBlind, and Hard of Hearing Canadians receive accurate and timely information, regardless of how they connect or where they are, by creating a unified system.

398. The following section explores how these communication barriers extend beyond personal devices and into the physical environments where safety information should be most visible.

I. Limited Accessibility in Public Spaces

399. Across Canada, Deaf, DeafBlind, and Hard of Hearing Canadians continue to face significant safety risks in public spaces where emergency systems rely almost entirely on sound. Schools, workplaces, hospitals, transit systems, and community centers often depend on sirens, intercoms, or public announcements, leaving those who use visual or tactile communication unaware when an emergency begins. The result is confusion, fear, and reliance on others for direction rather than direct access to information.

400. British Columbia provides one of many examples. John Warren, a Deaf man, recalled being at a recreation facility when a fire alarm sounded. *"The siren went off, but there were no flashing lights. Everyone ran, and I had no idea what was going on until I saw people outside,"* he said. His story captures the confusion that occurs when public buildings rely only on sound without visual cues.

401. For some, the problem extends to inconsistency across environments. Nancy Lynn Dillon, a DeafBlind advocate from Alberta, said that *"alarms flash sometimes, but not always, and you cannot depend on vibration or text systems to work everywhere."* She explained that even when technology exists, it often fails to reliably warn people, leaving them uncertain whether they will receive an alert.

402. In Saskatchewan, Deaf newcomer Mustafa Alabssi described the lack of visual or bilingual sign language alerts on public transit and in government buildings. *"There are no visible instructions or bilingual sign language indicators,"* he said, adding that Deaf immigrants often face additional stress navigating emergencies in unfamiliar languages and systems. His experience highlights how accessibility gaps intersect with cultural and linguistic barriers.

403. During tornado drills and warnings, Deaf educator Shayla-Rae Tanner said that *"schools and offices make announcements over the PA system, but there's nothing for Deaf people. We just follow others."* Her story shows how dependence on others, even in educational spaces designed for safety, leaves Deaf individuals excluded from basic emergency communication.

404. Even in modern office spaces, accessibility often stops at minimum compliance. Crystal Jones, a Deaf advocate from Alberta, observed that *"they have flashing lights, but they don't tell you what kind of emergency it is. You still have no context or direction."* Her comment underscores that visual alerts must convey information, not just signal that something is wrong.

405. Taken together, these stories expose a significant gap in Canada's emergency preparedness framework. While federal and provincial systems focus on television and mobile alerts, in-person environments remain overwhelmingly auditory. This oversight leaves Deaf, DeafBlind, and Hard of Hearing Canadians without clear or timely instructions during evacuations, lockdowns, or environmental crises.

406. Participants emphasized that the solution lies in national coordination. They recommended that the CRTC work with federal departments, accessibility regulators, and municipal authorities to:

- **a.** Establish national accessibility standards for in-person public alert systems.
- **b.** Mandate visual and vibration-based alarms in all new and renovated public facilities.
- **c.** Require digital display systems in transit, schools, and workplaces to share real-time emergency messages.
- **d.** Integrate bilingual ASL and LSQ instructions into public signage and emergency preparedness materials.

407. Improving accessibility in public spaces is essential to ensuring that every Canadian can receive and act on emergency information immediately. Equal access to safety is not a privilege but a right that must be built into every place where people live, learn, and work.

408. These accessibility gaps become even more costly when the alerts themselves are misleading or inconsistent, creating uncertainty and frustration.

409. The following section examines how confusing or contradictory messages can lead people to question whether they can trust the system in real-life situations of danger.

J. Misleading or Confusing Alerts

410. Emergency alerts that are rushed, mistranslated, or poorly formatted can quickly turn from tools of safety into sources of fear and uncertainty. When messages appear broken, unclear, or incomplete, Deaf, DeafBlind, and Hard of Hearing Canadians struggle to understand what is happening and what actions to take. This breakdown in communication during critical moments adds emotional strain and can delay protective action.

411. Confusion often begins the moment an alert appears. Lisa, who travels regularly between Ontario and British Columbia for work, remembered receiving a text labelled "*civil danger warning*" with no explanation. *"The text just said 'Take shelter immediately.' No context, no link, no ASL. It's frightening when you don't even know what the danger is,"* she said.

412. Other moments of confusion happened when the message itself malfunctioned. Marty, a Deaf community advocate in Nova Scotia, described a hurricane alert that displayed only half the text before vanishing. *"You had to guess what the rest said. People were texting each other to figure it out,"* he explained.

413. During a wildfire evacuation in northern Saskatchewan, Rae-Mairi Richardson saw conflicting alerts that told people both to *"stay in place"* and to *"evacuate immediately."* Conflicting messages left Deaf residents unsure which alert was correct or whether help was on the way. The experience revealed how contradictory alerts can turn urgent safety instructions into chaos.

414. Even when alerts appear correctly, their wording can still exclude people who struggle to understand complex or technical language. Crystal Jones, noted that *"emergency alerts use too many abbreviations and technical terms,"* making them hard to follow even for fluent English readers. She emphasized that plain, direct language would help everyone react more quickly and confidently.

415. For others, technical failures compound the problem. Nancy Lynn Dillon, a DeafBlind woman also from Alberta, described captions on television that *"jump or freeze mid-alert,"* leaving her uncertain whether the danger had passed or was ongoing. These disruptions, she explained, turn moments of communication into moments of fear.

416. Confusing or misleading alerts do more than just frustrate viewers. They undermine public trust and put lives at risk. When messages are unclear or inconsistent, people hesitate, panic, or tune out future warnings. For Deaf, DeafBlind, and Hard of Hearing Canadians, the stakes are even higher because most alerts still lack ASL or LSQ translation and clear visual explanations. Without accessible design and language, critical information can be easily misunderstood or overlooked altogether.

417. Participants urged the CRTC and emergency partners to take the following steps to improve clarity and consistency in emergency communication:

a. Adopt plain-language and standardized visual templates for all alerts, including bilingual ASL and LSQ video components.

b. Implement a mandatory quality-control process to verify the accuracy of text, captions, and visuals before alerts are issued.

c. Require every alert to include a short, clear summary that identifies the type of emergency, the affected location, and the specific actions people should take

418. Improving clarity is not simply a technical upgrade; it is a matter of public safety and equality. Deaf, DeafBlind, and Hard of Hearing Canadians deserve the same confidence as everyone else that alerts will be accurate, timely, and understandable.

419. These issues of confusion and inconsistency lead directly to another significant gap: the lack of personalization options that would allow users to receive alerts in the format, language, and timing that meet their individual accessibility needs.

K. Lack of Personalization Options

420. Across Canada, many people emphasized that the National Public Alerting System still lacks the ability for users to personalize or control how alerts are displayed and delivered. The current design treats all users the same, offering little flexibility for Deaf, DeafBlind, and Hard of Hearing Canadians to adjust alerts according to their communication and accessibility needs. Without those options, people lose independence and confidence at the very moment they matter most.

421. In Alberta, Nancy Lynn Dillon, a DeafBlind advocate, explained that she often struggles to read alerts because of small text and poor colour contrast. *“You can’t make the letters bigger or change the colours. It’s just the same for everyone,”* she said. Her experience shows how visual design that cannot be customized leaves users unable to interpret urgent messages when seconds count.

422. She added that DeafBlind individuals and people with low vision should be able to adjust brightness, vibration strength, and text size to suit their needs. Yet most apps and devices still fail to include even these basic accessibility features.

423. Crystal Jones, said she would like *“to pick my own alert tone, vibration, or pop-up style,”* noting that the default settings often go unnoticed. Her comment highlights how user choice could make alerts more inclusive and responsive to different sensory preferences.

424. *“Let users choose their language and format,”* said Lisa Anderson, an accessibility advocate who divides her time between British Columbia and Ontario. She believes alerts should provide ASL, LSQ, captioned, or text options, much like accessibility preferences in other communication tools. Her point reflects modern design principles that center on flexibility and user control.

425. When wildfires struck Saskatchewan, residents described relying on whatever alerts their phones could display, but with no way to adjust settings for visibility or clarity. The event highlighted how inaccessible text formatting and fixed layouts can become barriers in moments that require quick comprehension.

426. Without options for personalization, many Deaf, DeafBlind, and Hard of Hearing people remain at a disadvantage. Systems that cannot be adjusted for preferred language, colour contrast, text size, vibration pattern, or alert duration exclude individuals who rely on accessible design to receive life-saving information independently.

427. Participants urged the CRTC and emergency partners to:

- **a.** Include user-controlled accessibility settings in all federally supported alert systems.
- **b.** Allow users to select their preferred sign language, ASL or LSQ, and communication mode.
- **c.** Offer adjustable display options such as text size, contrast, and colour themes, and
- **d.** Provide persistent, replayable notifications for individuals who require additional time to read or understand an alert.

428. Creating alerts that people can personalize enhances independence, comprehension, and safety. Every Canadian should be able to receive, understand, and respond to emergency information in real-time.

429. Participants also observed that accessibility policy and technology often evolve at different speeds. While some systems are slowly improving, others have lost key accessibility features over time.

430. These ongoing gaps between design and lived experience form the foundation of the next section, which focuses on the top recommendations participants shared for the CRTC to make Canada's public alerting system equitable and accessible for all.

4. Top Recommendations for CRTC from Participants

A. Integrate ASL and LSQ into All Public Alerts

431. Participants from across Canada called for the mandatory use of ASL and LSQ interpretation in all televised and online emergency broadcasts. They emphasized that both hearing and Deaf interpreters must appear in large, clearly visible windows with consistent placement on all channels. Participants described equal access to sign language interpretation as essential for ensuring that all Canadians receive timely, understandable, and trusted information.

B. Develop Visual-First and Multi-Modal Alert Systems

432. Deaf, DeafBlind, and Hard of Hearing participants urged the CRTC to require that alerts be delivered through multiple synchronized formats such as text, video, vibration, and visual notifications rather than relying mainly on sound or text alone. They emphasized that redundancy across platforms, including simultaneous mobile and television alerts, helps prevent information gaps during power failures or network outages.

C. Create Accessible Mobile Apps and Digital Platforms

433. Many participants called for a Deaf-designed, government-approved emergency alert app that includes ASL and LSQ videos, pictograms, high-contrast visuals, adjustable vibration, and customizable font and brightness options. They emphasized that such tools should be co-developed with Deaf-led organizations to ensure usability and cultural accuracy.

D. Standardize Accessibility Across Provinces and Broadcasters

434. Participants noted inconsistent accessibility standards across provinces, broadcasters, and alerting platforms. They recommended that the CRTC

establish and enforce national accessibility requirements for all alert broadcasters and telecommunications providers to promote visual consistency and equitable access nationwide.

E. Consult and Involve Deaf-Led Organizations in Policy Design

435. Participants, including advocates from Ontario, British Columbia, and Quebec, emphasized that policies must not be developed *"about us without us."* They urged the CRTC to formally consult Deaf-led and disability organizations at every stage of alert policy design, implementation, testing, and evaluation.

F. Enhance Captioning Accuracy and Synchronization

436. Participants highlighted persistent delays and inaccuracies in live captioning during emergency broadcasts. They recommended that the CRTC establish national benchmarks for real-time captioning quality and ensure that captions never obscure interpreter windows or visual information on screen.

G. Implement Deaf-Blind–Inclusive Alert Features

437. Participants, including DeafBlind Canadians, stressed the importance of accessible alert features such as customizable vibration patterns, large text, adjustable colour contrast, and Braille display integration. They noted that these options are essential for ensuring DeafBlind users can independently receive and respond to emergency messages.

H. Establish Continuous Training for Emergency Broadcasters and Responders

438. Participants recommended mandatory accessibility training for emergency broadcasters, first responders, and public officials to improve communication with Deaf, DeafBlind, and Hard of Hearing individuals during crises. Regular training, they added, would help build confidence, reduce misunderstandings, and strengthen public trust in the alerting system.

I. Increase Public Awareness and Education

439. Participants recommended a national public awareness campaign in ASL, LSQ, and plain language to educate both Deaf, DeafBlind, Hard of Hearing, and hearing Canadians on how to access and interpret emergency alerts. Increased awareness, they said, would make the system more effective and inclusive for everyone.

5. Additional Patterns: Deaf-Blind Barriers and Experiences

440. Deaf, DeafBlind, and Hard of Hearing participants urged the CRTC to deliver alerts through multiple synchronized formats, including text, video, vibration, and visual notifications, rather than relying mainly on sound or text alone. They emphasized that using redundant platforms, such as simultaneous mobile and television alerts, helps prevent information gaps during power failures or network outages.

441. Nancy Lynn Dillon, a DeafBlind advocate from Alberta, explained that individuals with dual sensory loss or low vision need options to adjust text size, brightness, and vibration intensity. These features are still missing from most devices and apps. She described ongoing frustration with alerts that were too small, dim, or disappeared too quickly from her iPhone and iPad screens. Because she couldn't customize her phone or iPad, she often struggled to access urgent information reliably during emergencies. Her experience demonstrates that without flexible design, current alert systems frequently fail to meet the needs of individuals with combined hearing and vision loss.

442. Dillon emphasized that current systems fail to consider the tactile and sensory diversity within the DeafBlind community. She recalled that "captions ran over the interpreter's hands," which made it impossible to follow televised emergency information. She advocated for DeafBlind-friendly emergency applications with adjustable font sizes, high-contrast visuals, and persistent vibration alerts. These features, she noted, are essential for making real-time information accessible and preventing emergencies from placing DeafBlind users at a severe disadvantage.

443. Across multiple interviews, participants noted that few devices or alert platforms provide meaningful haptic or touch-based options such as customizable vibration patterns or Braille display integration. For individuals with combined hearing and vision loss, the absence of tactile alerts can mean receiving no notification at all. This lack of universal design underscores the ongoing exclusion of DeafBlind Canadians from Canada's emergency preparedness framework.

444. To ensure equitable access, public alerting technologies must incorporate multi-sensory redundancy by combining tactile, visual, and auditory elements tested directly with DeafBlind users. Systems co-developed through DeafBlind consultation could include longer-lasting vibration alerts, synchronized

audio-visual-tactile combinations, and compatibility with refreshable Braille displays or wearable haptic devices.

445. Improving accessibility for DeafBlind Canadians requires recognizing that uniform approaches to accessibility do not work. Inclusive public alerting must address the broad spectrum of sensory needs within the Deaf, DeafBlind, and Hard of Hearing community, ensuring that every individual, regardless of sight or hearing, receives timely, clear, and actionable information during emergencies.

446. The challenges faced by DeafBlind Canadians highlight a broader truth: accessibility in Canada's emergency communication landscape remains unevenly implemented, inconsistently enforced, and too often treated as an afterthought.

6. Structural and Policy Barriers in Canada's Public Alerting System

447. The Broadcasting Act, the Accessible Canada Act, and CRTC regulations require organizations to ensure accessibility. Yet the National Public Alerting System (NPAS) continues to create significant barriers for Deaf, DeafBlind, and Hard of Hearing Canadians. These challenges are not only technical but structural, rooted in policy gaps and inconsistent accountability among federal, provincial, and territorial authorities.

448. The Accessible Canada Act recognizes the inclusion of ASL and LSQ, but governments have not yet enforced consistent integration into NPAS. Because accessibility depends on discretionary implementation rather than standardized regulation, the system remains unpredictable and, for many, unsafe.

449. Evidence from across Canada shows that these are not abstract policy shortcomings but lived realities that determine who receives warnings and who does not. When alerts are delayed, unclear, or absent, Deaf and DeafBlind individuals must rely on neighbours, social media, or chance to stay informed.

450. Although the law recognizes accessibility, government agencies and regulators often neglect to enforce and oversee it effectively, forcing affected communities to bear the burden. The Deaf, DeafBlind, and Hard of Hearing community reveals the persistent inequities in systems that government agencies and regulators never designed for them.

6a. Policy and Jurisdictional Inconsistencies across Canada

451. Across Canada, responsibility for accessible emergency communication remains fragmented. Public Safety Canada, Environment and Climate Change Canada, and the CRTC share roles, yet no single body ensures that alerts reach Deaf, DeafBlind, and Hard of Hearing people in accessible formats. As one interviewee observed, "*Everyone seems to own a piece of the puzzle, but no one is making sure it fits together.*"

452. This policy fragmentation has tangible consequences. Television alerts often lack interpretation, mobile alerts appear only as text, and sirens sound without visual or tactile cues. Several interviewees reported that they became aware of emergencies only after observing how their hearing neighbours reacted. Even when captions were available, they sometimes arrived late or contained errors that changed meaning. Together, these accounts show a system that serves hearing audiences while leaving others at risk.

453. Accessibility enforcement also differs by province. Some jurisdictions integrate visual alerts and inclusive design, while others fall behind. The result is that safety can depend on geography, technology, and broadcaster effort, conditions that should never determine who survives a crisis.

6b. Lack of enforcement of accessibility standards

454. Accessibility laws are only as effective as the commitment to uphold them. Although the Accessible Canada Act promises to remove barriers, few organizations have implemented meaningful policies to ensure that emergency alerts reach everyone. Authorities often make progress only after complaints or crises expose issues they should have anticipated all along.

455. As one advocate explained, "*We shouldn't have to keep proving why we deserve access. By the time the government listens, it's already too late.*" Their words reflect a broader frustration within the community that accessibility remains reactive, appearing only when systems fail rather than being built in from the start.

456. The lack of monitoring, public reporting, and consequences for ignoring accessibility requirements has created what many have described as a "*wait and see*" culture, in which Deaf, DeafBlind, and Hard of Hearing people must repeatedly push for improvements that should already exist.

457. Establishing regular audits, transparent reporting, and measurable performance standards would shift accessibility from promise to practice. More vigorous enforcement would make the Accessible Canada Act's goal of barrier-free communication a daily reality that people can depend on, not a vision revisited only after another failure draws attention to it.

6c. Jurisdictional Overlap and Accountability Gaps

458. Overlapping responsibilities between governments continue to create confusion and frustration. The CRTC oversees broadcasting and telecommunications accessibility, but the National Public Alerting System operates through a shared structure that includes Pelmorex Corp., provincial emergency offices, and Public Safety Canada. In practice, this divided framework means that some provinces integrate sign language and visual alerts while others still rely mainly on sound.

459. One Deaf participant explained, "*When nobody owns the problem, accessibility becomes optional.*" Many said they often do not know who to contact when an alert fails, whether it is the broadcaster, the province, or the federal government. The lack of transparency and accountability leaves people feeling invisible within the system and unsure where responsibility lies.

460. Clear national leadership is needed to address these gaps. The CRTC should take the lead in establishing consistent accessibility requirements for all alert distributors and in mandating annual public reporting on ASL, LSQ, and visual accessibility compliance. Consistent national standards developed in consultation with Deaf-led organizations would eliminate duplication and ensure that access to emergency information does not depend on where someone lives or which agency happens to be in charge.

461. As one advocate expressed, "*Safety should not be a lottery. It should be a right.*"

XVI. Emerging Tensions and Contradictions

A. The Comprehension Divide: Interpreter Access vs. Written Communication

462. Across Canada, emergency communication still leans heavily on written English and French. These formats are practical for record-keeping, but in moments of crisis, they fall short of what many Deaf, DeafBlind, and Hard of

Hearing people truly need: immediacy, clarity, and communication that speaks their language.

463. For countless Deaf, DeafBlind, and Hard of Hearing Canadians, written text is not their first language. It is a tool, not a natural way of understanding the world. During emergencies, this difference can be dangerous. Participants repeatedly described this as a comprehension divide, a gap between what people say and what others understand, and between what officials send and what the public actually receives.

B. Written Communication: Strengths and Limitations

464. **Static information.** Written alerts are one-way messages. They cannot answer questions or adapt to the reader's level of understanding. In fast-moving crises, this rigidity can mean hesitation when every second counts.

465. **Lack of interactive context.** Written words remove visual and emotional cues such as facial expression, body language, and rhythm, which give sign languages their meaning. Without these cues, readers can lose the sense of urgency or tone, and messages may feel distant or unclear.

466. **Risk of misinterpretation.** Technical language and bureaucratic phrasing often create confusion. When messages lack interpreters or sign language videos, many people must guess their meaning. For Deaf newcomers or those who use ASL or LSQ as a first language, this guesswork can be life-threatening.

467. **Delayed comprehension.** Processing written text takes longer for most native sign language users. In situations like wildfires or chemical spills, those extra moments can mean the difference between reaching safety and being left behind.

468. **Relying solely on written communication creates safety inequities.** A truly inclusive system must deliver the same information at the exact moment through sign language. That means live interpretation, embedded ASL and LSQ videos, or pre-recorded sign updates ready to share the instant an alert goes out.

C. Interpreter Access: Why It Matters

469. **Interpreters are not just translators.** They are lifelines in moments of fear and uncertainty. In emergencies, they make complex and rapidly changing information understandable, personal, and real.

470. **Immediate communication.** Interpreters create a two-way bridge that enables people to ask questions, confirm information, and take action quickly.

471. **Cultural accuracy.** Interpreters carry more than words. Interpreters convey tone, emotion, and intent, ensuring the message remains consistent across languages.

472. **Handling complexity.** Interpreters clarify and translate jargon and technical phrases that could otherwise confuse or delay action.

473. **Real-time clarification.** Interpreters can rephrase and confirm meaning on the spot, something no text alert can do.

474. As one Deaf participant said, "*An interpreter gives you calm in chaos.*" Written messages can document events, but interpreters make those moments survivable.

D. Persistent Gaps in Interpreter Inclusion

475. Despite their essential role, interpreters are still missing from most emergency systems. When crises arise, there are often no established mechanisms to address them immediately. Deaf and DeafBlind individuals are frequently left waiting or watching from the sidelines, while hearing audiences receive real-time updates.

476. Participants described this as more than a communication issue. It is a structural problem. Canada's systems were designed for sound and text, not for visual language. Fixing this requires more than accessibility add-ons. It calls for a shift in mindset, with linguistic inclusion built into safety planning from the start.

E. Key Challenges and Divides

a. Inadequate Warning Systems

477. Emergency alerts primarily rely on audible tones and spoken announcements, which are inherently inaccessible to individuals with DDBHH. Although

text-based or vibrating alerts exist, they are not universally implemented or reliable across devices. The lack of reliable text-based or vibrating alerts becomes particularly problematic during nighttime emergencies when visual or vibratory signals may go unnoticed.

b. Exclusion from Emergency Planning and Decision-Making

478. The DDBHH community is rarely consulted or actively involved in the development and testing of emergency preparedness plans. Consequently, emergency procedures often fail to address the linguistic and cultural needs of DDDBHH individuals, perpetuating inequitable access to life-saving information.

c. Lack of Sign Language Integration

479. Most national alert systems still exclude ASL and LSQ videos. Broadcasters sometimes crop interpreters out of television broadcasts or post their videos hours later. Deaf and DeafBlind viewers are left piecing together information through social media or word of mouth.

480. Agencies can implement a straightforward solution by building pre-recorded ASL and LSQ clips into every public alert. This approach would ensure immediate access in sign language, not as an afterthought but as an equal right, in line with the Accessible Canada Act[88] and the CRTC's 2023 Policy Direction[89] on Accessibility.

d. Limited Professional and Communication Support

481. To close this communication gap, pre-recorded ASL and LSQ videos should be developed and integrated into every emergency alerting method. These sign language versions can be embedded directly into mobile and web alerts or made easily accessible on official emergency webpages containing evacuation orders, shelter-in-place instructions, or ongoing threat updates.

482. Having these videos available from the start ensures that Deaf and DeafBlind Canadians receive critical information in their first language without waiting for follow-up interpretation or secondary translations. This proactive approach strengthens comprehension and provides equal access to the hearing public.

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[88] Government of Canada. Accessible Canada Act (S.C. 2019, c. 10). Ottawa: Department of Justice, 2019.
[89] Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy, SOR/2023-234straightforwardProperhaving to wait.

483. By embedding sign language videos across Canada's alerting infrastructure, governments can fulfill their obligations under the Accessible Canada Act[90] and the CRTC's Policy Direction[91] with sections on accessibility. More importantly, this approach builds accessibility into the system from the start, creating a standard that protects lives and demonstrates the country's commitment to equality in every moment of crisis.

E. Regional Inequities in Access

484. Federal and provincial governments established the National Public Alerting System to protect all Canadians equally; however, in practice, this promise varies depending on where people live. Geography, technology, and policy together determine who receives a warning in time and who remains in the dark.

485. Participants from British Columbia, Ontario, and Alberta reported receiving mobile alerts; however, accessibility barriers persisted in all three provinces. Messages were often hard to read, poorly formatted, and rarely included ASL or LSQ interpretation. In smaller or northern communities, the story changed entirely. People in rural areas of Saskatchewan, Newfoundland, and New Brunswick reported experiencing long delays, incomplete notifications, or no alerts at all.

486. Rae Mairi Richardson in northern Saskatchewan recalled wildfire warnings that "*arrived too late or not at all*" due to poor network coverage. In Newfoundland, several participants said that when hurricanes or blizzards hit, cellular connections disappeared completely, leaving Deaf residents without real-time updates and no idea what was happening outside.

487. For many, the difference between safety and danger came down to the quality of infrastructure. Urban centres benefit from stronger networks and denser coverage. Rural, remote, and northern communities often rely on weak signals that drop out during emergencies. As one participant put it, "*Where you live decides whether you survive.*"

488. But these gaps are not only technical. They are also linguistic and political. In Quebec, participants such as Alice Dulude, Yves Dubé, and Jean-Yves Vachon shared that alerts still appear only in written French. There is no LSQ

[90] Government of Canada. Accessible Canada Act (S.C. 2019, c. 10). Ottawa: Department of Justice, 2019.
[91] Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy, SOR/2023-234areas of Saskatchewan, Newfoundland, and New Brunswick reported experiencing.

interpretation, no sign language video, and no option for direct visual access. This forces Francophone Deaf residents to rely on social media or friends for translation, despite Canada's legal commitment to both bilingualism and accessibility.

489. In the Prairies, including Saskatchewan and Manitoba, participants such as Shayla Rae Tanner and Sheila Montney reported that alerts arrived late or inconsistently during tornadoes, blizzards, and wildfires. Limited internet and mobile coverage in many rural and Indigenous areas meant that people often learned about emergencies only through neighbours or Facebook posts.

490. In Atlantic Canada, participants, such as Marty Van Den Heuvel and others from Newfoundland and Labrador, stated that alerts often lacked visuals or clear explanations and sometimes arrived after the event had already begun. These experiences reveal that smaller provinces remain underserved, both in terms of technical infrastructure and policy enforcement.

491. Taken together, these accounts show that Canada's emergency communication system is uneven and unequal. Technology determines reach, but policy determines inclusion. Urban Deaf Canadians may struggle with inaccessible formats, while rural and northern residents often receive little to no support.

492. Regional inequities are not just gaps in technology. They are signs of a broader imbalance in public safety. Unless federal and provincial governments treat every region, language, and communication mode with the same urgency, the National Public Alerting System will continue to reflect geography more than equality.

493. Proper safety requires more than a functioning network. It requires leadership that recognizes ASL and LSQ as essential languages of survival and enforces universal visual alert standards nationwide. Only then will every person, no matter where they live, receive the same message at the exact moment, a message with the power to save lives.

F. Technology and Human Solutions: Integrating Access and Understanding

494. Across the interviews, a clear truth emerged. Technology and human communication are both essential for accessible emergency systems, yet Canada's National Public Alerting System still struggles to balance them.

Participants described an unequal system where technology determines who receives an alert, and human connection determines who truly understands it.

495. The inequality happens on two levels. Infrastructure and geography determine whether a message even reaches its destination, especially in rural, northern, or remote areas where networks are weak or nonexistent. At the same time, policymakers and broadcasters determine whether people can understand the message, particularly in provinces that have not integrated ASL and LSQ into their systems. Together, these create a pattern of exclusion that leaves many Deaf, DeafBlind, and Hard of Hearing Canadians unprotected during the very moments when protection matters most.

496. Technology and people bring different strengths. Technology provides speed and reach. Human communication provides meaning and trust. The most effective systems combine technological delivery with human connection, ensuring that each alert is both understood and usable.

G. Technology-Based Solutions

497. Modern alert technology can reach millions of people in seconds. Visual systems such as bright strobe lights immediately catch attention where sound cannot, and when installed in homes or workplaces, they can even wake people during overnight emergencies. Vibrating devices, such as Silent Call or VibraCall systems, provide tactile warnings for Deaf and DeafBlind users.

498. Mobile alerts sent through text, push notifications, or public alerting apps can deliver messages instantly, but only if the information is accessible. For many Deaf participants, accessibility means using plain language, clear visuals, and formats that are compatible with captioned apps, visual displays, or relay services.

499. Personalized alerting devices, such as vibrating alarms and multi-sensor systems, provide an additional layer of safety. They translate sounds like doorbells, baby cries, or smoke alarms into visual or tactile signals. These tools enable quick outreach, even when human support is not immediately available.

500. But as several participants pointed out, technology alone does not guarantee safety. A flashing light can warn that something is wrong, but it cannot explain what to do next. Automated messages cannot verify understanding, alleviate fear, or address questions. Without human guidance, alerts remain impersonal and incomplete.

H. Human-Based Solutions

501. Where technology reaches the body, people connect with the mind. Human communication transforms information into understanding. Interpreters, community workers, and first responders help make sense of complex information and ensure that Deaf, DeafBlind, and Hard of Hearing people know what actions to take.

502. Through Video Relay Services, interpreters can deliver information in ASL or LSQ in real time, bridging the gap between official broadcasts and the people they serve. Participants described how seeing an interpreter in a broadcast helped them stay calm and focused, even in frightening moments. "*When I see someone signing clearly, I know what to do,*" one person explained.

503. Human involvement also means connection. Community responders and accessibility coordinators can check that alerts were received and understood, especially for those who rely on tactile communication. Their presence brings reassurance that someone is watching out for them, not just sending a signal into the void.

504. Education is another vital piece. Accessible technology only works when people know how to use it. Many Deaf and DeafBlind participants explained that no one had ever shown them how to set up visual alerts or connect assistive devices to their phones. Ongoing training and awareness programs, led in partnership with Deaf-led organizations, build confidence and reduce fear when emergencies occur.

I. Integrating Technology and Human Support

505. An inclusive emergency system cannot rely solely on tools or people. It must bring both together. Technology should serve as the first signal, reaching as many people as possible with visual, tactile, and mobile alerts. Human communication should follow right away to provide explanation, context, and reassurance.

506. This integration turns alerting into understanding. Interpreters embedded in broadcasts, pre-recorded sign language videos in mobile alerts, and coordinated outreach by Deaf organizations all help ensure that everyone receives the same information at the same time.

507. A hybrid model of technology and human support aligns with the Accessible Canada Act, the CRTC's Policy Direction[92] which includes sections on Accessibility, and the United Nations Convention on the Rights of Persons with Disabilities. But beyond laws, this approach builds trust. People act faster and stay calmer when they receive information in their own language, from individuals who understand their communication style. Trust saves time, and in emergencies, that time can save lives.

J. Continuing Gaps for DeafBlind Accessibility

508. Even the most advanced hybrid systems often overlook individuals who primarily communicate through touch. DeafBlind participants explained that most alert mechanisms, including lights, texts, and sounds, still exclude them. Without tactile alerts, braille displays, or direct human support, vital information can disappear entirely.

509. For some, survival depends not on a device but on another person. A trained support worker or interpreter who uses tactile communication can be the only source of accurate, timely information. Designing systems that include these touch-based methods is not optional; it is essential to equality and safety.

XVII. Conclusion

510. Technology delivers the message, but people ensure it is understood. True accessibility is not only about innovation; it is about connection. Emergencies reveal whether a society values convenience or equity.

511. The stories shared by Deaf, DeafBlind, and Hard of Hearing Canadians make one point clear. Canada already has the tools to build a fair and inclusive emergency system; what is missing is the will to bring them together. When technology and human care work side by side, every person can receive an alert they can trust, understand, and act upon.

512. That is what safety should mean for everyone.

XVIII. Preliminary Summary Recommendations

513. Throughout the interviews, participants described moments when they were the last to know about an emergency, such as floods, fires, or evacuation

[92] Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy, SOR/2023-23, Government of Canada

orders that reached others first. These stories made one thing clear: accessibility in public alerting cannot wait for another crisis to reveal the gaps. The following eight recommendations reflect what Deaf, DeafBlind, and Hard of Hearing Canadians identified as the most urgent and achievable steps toward equal access.

514. Each recommendation is grounded in lived experience and supported by research and community expertise. Together, the recommendations form a practical roadmap toward an alerting system that reaches everyone, in every language, through every format, and at the same time.

1. **National DDBHH Emergency App**

   Develop a National Deaf, DeafBlind, and Hard of Hearing (DDBHH) Emergency App that provides bilingual (English/French) and bimodal (ASL & LSQ) alerts, real-time communication with emergency services, and accessible visual resources to support equitable safety for DDBHH Canadians.

2. **Sign Language Integration in NPAS and Media**

   Mandate ASL and LSQ interpretation video links within all emergency alerts and broadcasts issued through the National Public Alerting System (NPAS) and media outlets, ensuring visibility, synchronization, and accessibility.

3. **Simplification & Universality**

   Implement plain language, clear visuals, and consistent alert formats across Canada so that all individuals, regardless of language proficiency or communication preferences, can understand them.

4. **Infographic, Colour Coding, and Accessible Media**

   Adopt colour-coded alert levels, consistent icons, and pre-recorded ASL & LSQ videos or emoji-based visuals (🌪️🔥💧⚡🚨) to improve recognition and comprehension for DDBHH and DeafBlind users. This approach would also benefit newcomers and individuals learning English or French as a second language.

5. **Cross-Platform Consistency**

   Ensure that all alerting channels, including wireless, television, radio, streaming platforms, and public signage, adhere to consistent accessibility standards, are regularly tested for usability, and include clear visual and haptic notifications.

6. **Community Preparedness and Equity**

   Allocate funds for community-led training and outreach to build preparedness among DDBHH Canadians. The training and outreach include ASL & LSQ translation of emergency materials, public workshops, and partnerships with local organizations to strengthen grassroots resilience.

7. **CLEAR Framework: Best Practices for Assisting DDBHH Canadians**

   Adopt the CLEAR Framework (Communicate, Lighting, Emergency Alerts, Accessible Resources, Responsive Support) as a national best-practice model for inclusive emergency communication and response.

8. **National Standards for Sign Language Interpretation on Television During Emergencies**

   Require the CRTC, in fulfillment of its duty to accommodate, to initiate a proceeding to develop national standards for the visibility, placement, and quality of ASL & LSQ interpreters during televised emergency broadcasts. These standards shall guarantee uniform presentation and equitable access across all provinces and territories.

515. The eight recommendations will be expanded upon in the Full Recommendations at the end of this Report.

XIX. Conclusion

516. The Deaf Wireless Canada Consultative Committee (DWCC-CSSSC) conducted this investigation to highlight a critical truth: governments must protect equal access to emergency information as a fundamental right for all Canadians, not as a privilege. For Deaf, DeafBlind, and Hard of Hearing (DDBHH) people, emergency alerts are not simply messages; they are lifelines that can determine safety, preparedness, and survival. Yet the current National Public Alerting System (NPAS) continues to fall short of meeting its needs,

leaving many Canadians excluded from vital warnings and guidance during emergencies. The stories gathered through this study expose how structural, technological, and cultural barriers converge to perpetuate inequality, despite Canada's clear legal and moral commitments to accessibility and inclusion.

517. *T*he findings reveal that Canada's public alerting framework remains largely audiocentric and language-limited, relying heavily on sound, text, and English or French-based formats. These approaches neglect the bilingual, visual, and tactile communication needs of DDBHH Canadians.

518. The absence of alerts in ASL and LSQ, inconsistent captioning, and poor interpreter visibility undermine the goals of equitable access set out in the Accessible Canada Act[93], the 2023 Policy Direction to the CRTC[94], the Charter of Rights and Freedoms, and the United Nations Convention on the Rights of Persons with Disabilities. Systemic inaccessibility does more than inconvenience people; it isolates, endangers, and erodes trust in public safety systems that should protect everyone equally.

519. However, this report also points the way forward. DWCC's recommendations are practical, evidence-based, and grounded in human rights and community partnership. They call for the creation of a National DDBHH Emergency App, the establishment of ASL and LSQ standards for all emergency communications, and the consistent inclusion of Deaf and disability organizations in the design and evaluation of alerting systems. Such steps would not only improve accessibility but also strengthen national resilience, ensuring that Canada's emergency communication framework is fair, inclusive, and future-ready.

520. Ultimately, this study highlights the significance of treating accessibility as a cornerstone, not an afterthought, in public alerting. Implementing national standards for interpreter visibility and caption quality, ensuring plain language and visual design, and guaranteeing equal access across platforms would mark a historic turning point in Canada's approach to public safety.

521. The DWCC envisions a Canada where no one is the last to know when disaster strikes, a Canada where every citizen, regardless of hearing, language, or ability, receives life-saving information at the same time and in

[93] Government of Canada. Accessible Canada Act (S.C. 2019, c. 10). Ottawa: Department of Justice, 2019.
[94] Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy, SOR/2023-234.

the same way. Through effective leadership and genuine commitment, the Commission can turn that vision into reality.

XIX. Final Reflections

522. Although the broadcasting of emergency information through television news and public briefings falls outside the formal scope of this proceeding, many participants raised this issue on their own. Their comments came not from policy positions but from lived experiences of confusion, fear, and exclusion during national emergencies, such as the COVID-19 pandemic. These accounts reveal the human reality behind accessibility gaps: when sign language interpretation is missing, delayed, or poorly displayed, critical information fails to reach everyone.

523. Participants repeatedly described the inconsistency of televised interpretation across Canada. In some regions, interpreters were visible and continuous throughout the coverage. In some broadcasts, broadcasters cropped interpreters from view, delayed their feed by seconds, or excluded them altogether. These variations are not minor technical errors; they are barriers that determine who receives life-saving information and who is left behind. Canada's broadcasters and government networks currently lack uniform standards for interpreter visibility, placement, or quality, resulting in a patchwork system where access depends on geography, network choice, and chance.

524. To address this inequity, the Canadian Radio-television and Telecommunications Commission (CRTC) should lead a public process to develop nationally consistent, enforceable standards for the inclusion and presentation of ASL and LSQ interpretation in all emergency broadcasts, particularly during public health updates and national crises. This process should include sustained consultation with Deaf-led organizations to ensure that the resulting standards reflect the lived communication needs of Deaf individuals, rather than solely technical specifications.

525. A dedicated process at the CRTC should:

- **a.** Establish national consistency for interpreter frame size, position, and visibility across all broadcasters.

b. Define technical and broadcast specifications that allow interpreter feeds and interpreters to be fully visible and unobstructed by on-screen text, graphics, or captions on all media platforms.

c. Mandate broadcaster and government coordination to provide real-time interpretation during emergency briefings and alerts.

526. This recommendation is grounded in well-established international guidance. The World Federation of the Deaf (WFD) and the World Association of Sign Language Interpreters (WASLI) have issued global best-practice standards, including the 2021 *Guidelines on Access to Information in National Sign Languages During Emergency Broadcasts*[95] and the 2015 report *Communication During Natural Disasters and Other Mass Emergencies for Deaf People Who Use Signed Language*.[96]

527. These documents emphasize the critical need for consistent, qualified, visible, and accessible interpretation during official communications, stressing that sign language users must receive emergency information simultaneously and through the same platforms as the general public. Both guidelines are firmly rooted in the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD),[97] particularly Article 11[98] on risk and humanitarian emergencies.

528. Referencing these international instruments adds legitimacy and urgency to the call for action. Canada already recognizes accessibility as a human right under the Accessible Canada Act (ACA). By working with Deaf, DeafBlind, and Hard of Hearing communities, the CRTC establishes inclusive policies that meet global accessibility standards and rebuild confidence in Canada's emergency communication systems.

529. The CRTC, in collaboration with Public Safety Canada and Deaf-led organizations, could develop a national library of pre-recorded ASL and LSQ

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[95] World Federation of the Deaf (WFD), & World Association of Sign Language Interpreters (WASLI). (2021). *Guidelines on access to information in national sign languages during emergency broadcasts* (Version 6 Jan. 2021). World Federation of the Deaf.
[96] World Federation of the Deaf (WFD), & World Association of Sign Language Interpreters (WASLI). (2015). *Communication during natural disasters and other mass emergencies for deaf people who use signed language*. World Federation of the Deaf.
[97] United Nations. (2006). *Convention on the Rights of Persons with Disabilities (CRPD)*. https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf
[98] United Nations. (2006). *Convention on the Rights of Persons with Disabilities*, Article 11 – Situations of risk and humanitarian emergencies. https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-11-situations-of-risk-and-humanitarian-emergencies.html

videos covering all major emergencies, including natural disasters, extreme weather events, environmental hazards, and civil alerts. Each video would explain what the emergency means, what actions to take, and how to stay safe using plain language and clear visuals.

530. Each would describe the emergency, what to expect, and the appropriate safety actions to take, such as "*proceed to a cooling centre*" or "*evacuate to higher ground.*" All materials could be centrally hosted on a national bilingual public webpage, easily referenced during live alerts and shared by federal, provincial, and municipal agencies. This approach ensures that DDBHH Canadians in every jurisdiction have equal, timely, and language-appropriate access to critical safety information, irrespective of the alert platform.

531. Taken together, these remarks and recommendations offer a sustainable, forward-looking model to ensure equal, timely, and language-appropriate access to critical safety information for DDBHH Canadians. These frameworks call for proactive measures that embed accessibility into design—not as an afterthought, but as a national standard of safety and inclusion. These standards and measures would also strengthen compliance with the Accessible Canada Act (ACA)[99] and advance Canada's commitments under the UNCRPD[100], embedding accessibility as a national standard of safety, equity, and inclusion in emergency communication design.

XX. Key Recommendations

532. The DWCC team recommends the following national measures to ensure equitable emergency communication for Deaf, DeafBlind, and Hard of Hearing (DDBHH) Canadians.

1. National DDBHH Emergency App

533. Develop and implement a National Deaf, DeafBlind, and Hard of Hearing (DDBHH) Emergency App that provides:

- **a.** Bilingual (English/French) and bimodal (ASL & LSQ) alerts.
- **b.** Real-time, two-way communication with emergency services (e.g., text, video relay, or chat).

[99] Government of Canada. Accessible Canada Act (S.C. 2019, c. 10). Ottawa: Department of Justice, 2019.
[100] United Nations (2006). Convention on the Rights of Persons with Disabilities (CRPD).

c. Accessible visual and instructional resources to support equitable safety and preparedness.

2. Sign Language Integration in NPAS and Media

534. Mandate ASL and LSQ integration in all alerts disseminated through the National Public Alerting System (NPAS) and across all media outlets by: Embedding or linking to resources using short URLs of pre-recorded ASL & LSQ interpretation videos for a list of specific disasters in emergency alerts.

a. Public Safety Canada or the Canadian Telecommunications Association should host all ASL and LSQ videos on a centralized website and ensure the links are ready for use in public alerts. They should shorten each YouTube link with an approved URL shortener, such as bit.ly, before including it in the alerts.

b. Requiring interpreters and captioning to be visible, synchronized, and standardized during emergency broadcasts.

3. Simplification and Universality

535. Implement plain language, clear visuals, and standardized alert formats across all provinces and territories so that all Canadians, regardless of language, literacy, or ability, receive identical, easy-to-understand emergency messages. Examples of Plain Language and Accessible Design:

a. Making emergency alerts accessible requires using plain language, clear visuals, and standardized formats that are accessible to everyone, including Deaf individuals and immigrants.

b. Executing effective strategies includes comprehensive alert systems that integrate visual and tactile cues.

c. Providing Sign language information videos in ASL or LSQ.

d. Simplifying written materials is available in multiple languages.

536. Plain Language in Practice

Provide plain language information that is easy to understand on the first reading. Use familiar words, short sentences, and an active voice to ensure

clarity. This approach ensures that critical messages are clear and accessible to all audiences, including newcomers and individuals with reading, language, or cognitive disabilities.

a. **Public Health Information:** Government agencies publish COVID-19 guidelines in simple, direct language at an elementary reading level (approximately Grade 8), avoiding medical jargon and explaining necessary technical terms with consistent phrasing, such as "*this means.*"

b. **Emergency Instructions:** Emergency messages present evacuation procedures in numbered or bulleted steps that follow a logical order. Instead of writing, "*The public is advised not to enter the contaminated area,*" officials should write, "*Do not go into this area.*"

c. **Forms and Websites:** Online forms and website information use clear, descriptive headings and simple labels for each field. Agencies often avoid using PDFs and instead publish alerts in HTML, as assistive technologies and mobile devices can read HTML more easily.

4. Cross-Platform Consistency

537. Guarantee accessibility across all communication platforms, including wireless alerts, television, radio, streaming services, public signage, and digital media, by:

a. Standardizing alert design and accessibility requirements.

b. Conducting user testing with DDBHH individuals.

c. Integrating visual and haptic (vibration-based) notifications.

5. Infographics, Colour Coding, and Accessible Media

Clear Visual Examples

538. Clear visuals complement text, sign language, and audio, providing alternative ways to understand the message.

539. Adopt a **universal design language** for emergency alerts that includes:

a. **Colour-coded alert levels**, standardized icons, and **pre-recorded ASL & LSQ videos**.

b. **Emoji-based visuals** (e.g., 🌪️🔥💧⚡🚨) to improve recognition and comprehension.

c. **Pictograms and Icons:** Emergency maps use standardized icons (e.g., an 'X' on a person's back to signal an immediate evacuation) and clear symbols to indicate evacuation routes, fire exits, and safety equipment, which helps people who don't speak the local language or have low literacy.

d. **High-Contrast Design:** Communication materials, such as road signs and pamphlets, use high contrast (e.g., black text on a white background) and sans-serif fonts to enhance readability for people with vision disabilities.

e. **Image Descriptions:** All images, charts, and diagrams in digital communications include clear, concise alt-text descriptions so screen readers can convey visual information to users who are blind or partially sighted.

540. These measures enhance accessibility for DDBHH users and also support Canadians with limited English or French proficiency, such as recent immigrants.

6. Community Preparedness and Equity

541. Strengthen preparedness within DDBHH communities by investing in and supporting community-led training, outreach, and education initiatives.

a. Allocate funding to support community-led training, outreach, and education initiatives.

b. Funding ASL & LSQ translations of emergency materials.

c. Partner with Deaf organizations, service providers, and interpreters to deliver workshops and public awareness campaigns that strengthen community preparedness.

d. Implement accessible communication systems by installing emergency alarms that use flashing lights and vibration-based signals directly connected to the central system.

e. Train professional and residential staff on effective communication methods for DDBHH individuals, including written and sign-language instructions, apps, ASL & LSQ videos, infographics, and emoji-based visual materials.

f. Emergency agencies must deliver updates in accessible formats, such as real-time captions, ASL & LSQ, and Deaf interpretation, and make them available across multiple platforms, including TV and online.

g. Emergency agencies and community organizations should develop and provide training for Deaf, DeafBlind, and Hard of Hearing community members, as well as for emergency personnel, to build preparedness and cultural competence. Trainers must involve open communication with community members at every stage.

h. Planners must recruit qualified interpreters who receive emergency-specific training, and ensure they appear visibly during all broadcasts.

7. CLEAR Framework: National Best Practices for Assisting DDBHH Canadians

542. Adopt and promote the **CLEAR Framework** as a national best-practice model for inclusive emergency communication and response:

- **C – Communicate** clearly using multiple accessible channels.
- **L – Lighting** and visibility for interpreters, captions, and visuals.
- **E – Emergency Alerts** that are timely, accurate, and in ASL & LSQ.
- **A – Accessible Resources** that support understanding and response.
- **R – Responsive Support** through trained personnel and accessible technologies.

543. Emergency response best practices for the DDBHH community emphasize accessible communication through multiple redundant systems, like visual alerts, Emoji-based visuals**,** colour-coded alert levels**,** real-time captions, and ASL & LSQ and Deaf interpretation. Additionally, preparedness includes having a support network, an accessible emergency kit with medications and contact information, and pre-written communication notes for responders. Both the DDBHH community and emergency responders need accessible, ongoing

training to ensure preparedness.

544. Adapt the CLEAR Framework from the National Deaf Center on Postsecondary Outcomes.[101]

8. National Standards for Sign Language Interpretation on TV During Emergencies

545. Require the CRTC, in fulfillment of its duty to accommodate, to initiate and launch a public proceeding to develop **national standards** governing:

- **a.** The visibility, placement, and quality of ASL & LSQ and Deaf interpreters during televised emergency broadcasts.
- **b.** Consistency in interpretation quality, framing, and lighting across all broadcasters.

546. These standards shall ensure that Deaf and Hard of Hearing viewers receive emergency information simultaneously and equitably with the general public.

547. In summary, this report highlights key barriers and offers recommendations to improve the accessibility of emergency alerts for Deaf, DeafBlind, and Hard of Hearing Canadians. Continued collaboration, targeted policy changes, and inclusive design practices are essential to ensure that critical information reaches everyone equitably during emergencies. The following appendices provide further details, supporting materials, and research data.

Appendix A Research Interview Consent Form

[101] National Deaf Center on Postsecondary Outcomes (2025 *Emergency and Crisis Response Resources.* The University of Texas at Austin. Link

Research Interview Consent Form

Project Title: Personal Experience with Emergencies and Alerting in Canada

Researcher(s): Gary Malkowski and Lisa Anderson, Deaf Wireless Canada Consultative Committee (**DWCC**)

Contact Information: Gary – gary@deafwireless.ca

Purpose of the Research
You are invited to participate in an interview for research being conducted by the Deaf Wireless Canada Consultative Committee (DWCC). The purpose of this research is to gather experiences and perspectives on emergencies and public alerting in Canada.

What Participation Involves
- You will be asked questions about your experiences and perspectives with emergencies in Canada, specifically in one or more of the following categories:
  1. Natural disasters (e.g., floods, wildfires, storms, earthquakes)
  2. Non-natural disasters (human-caused) (e.g., hazardous material spills, accidents, acts of violence, or other human-caused emergencies)
  3. Power or technology outages (e.g., electrical blackouts, telecommunications failures, internet or cellular service disruptions)
- The experience must have occurred within the past 10 years.
- The interview will take approximately **60 minutes (1 hour).**

Acknowledgement
- The interview will take place over Zoom.
- The interview will be recorded for transcription purposes to help the report-writing team analyze the data.
- A total of 20 participants will be interviewed as part of this project.
- You will receive a $100.00 honorarium, which will be sent to you 30–60 days after the CRTC approves interim costs.

Please indicate your consent regarding recording:

☐ I agree to the interview being recorded for transcription and analysis.

☐ I do not agree to the interview being recorded.

Confidentiality and Use of Information
The information you share will be used for research and reporting purposes. You may choose how your contribution is identified in the research outputs (e.g., reports, presentations).

Please select one option:

☐ I do not mind my name being shared publicly in reports or presentations.

☐ I prefer to remain anonymous. Only the type of disaster and my province will be mentioned.

Voluntary Participation
Your participation is entirely voluntary. You may refuse to answer any question or withdraw at any time without consequence.

Consent

By signing below, you confirm that you have read and understood the information provided above, and that you consent to participate in this research interview.

Participant Name (print): _____

Signature: _____ Date: _____

Researcher Signature: _____ Date: _____

Appendix B Part A Participant Profile of Interview Questions – Focused on DDBHH Personal Experience with Emergency Alerts (CRTC 2025-180)

PART 1: Participant Profile (Brief Demographics)

Purpose: To provide context for their accessibility experience.

🔗 **LINK - ENGLISH: https://forms.gle/2VA9M3epeaPi6osPA**

🔗 **LIEN – FRANÇAIS : https://forms.gle/xFLgxZRyBkTpKvzw5**

1. **What gender do you identify with?**
    a. **Female**
    b. **Male**
    c. **Non-binary**

2. **How do you identify?**
    a. **Deaf (ASL or LSQ user)**
    b. **DeafBlind**
    c. **Hard of Hearing**
    d. **Oral Deaf**
    e. **Late-deafened**

3. **Which language(s) do you use most often to communicate?**
    a. **ASL**
    b. **LSQ**
    c. **English**
    d. **French**
    e. **Other:**

4. **Which province or territory do you live in? _____**

5. **Do you live in an urban, suburban, or rural area?**
    a. **City (50,000+ people)**
    b. **Town/Village (<50,000 people)**
    c. **Remote/Rural**

Appendix C Interview Questions focused on DDBHH Personal Experience with Emergency Alerts (CRTC 2025-180)

Developed by DWCC for in-depth insights

PART 1: Participant Profile (Brief Demographics)

Purpose: To provide context for their accessibility experience.

See questions on the previous page.

🔗 **LINK - ENGLISH: https://forms.gle/2VA9M3epeaPi6osPA**

🔗 **LIEN – FRANÇAIS : https://forms.gle/xFLgxZRyBkTpKvzw5**

PART 2: Devices and Access to Alerts

Purpose: To understand what devices they use and how they receive alerts.

1. **Which device(s) do you usually carry or use daily?**
    - iPhone
    - Android
    - Tablet
    - None
    - Other: _____

2. **Where have you seen or received emergency alerts before?**
   (Check all that apply or discuss)
    - Smartphone or tablet
    - TV
    - Visual Display in transportation centres (airport, ferry or train stations)
    - Public signage (e.g. highway, transit centre)
    - Instant Messenger and Chat
    - Social media
    - Email or text from the government
    - Emergency Alert app
    - I have never received an emergency alert

PART 3: Real-Life Experience with Disasters

Purpose: To gather specific stories from emergencies.

Thank you for your time in meeting with us to share your personal, real-life experience with an emergency and the accessibility of alerting systems for such situations. We will spend less than 1 hour discussing.

1. **What kind of emergency were you in?**
   (Check all that apply or ask for narrative)
   - AMBER Alert (child abduction)
   - Natural disaster (e.g. wildfire, flood, earthquake)
   - Severe weather (e.g. tornado, extreme heat/cold)
   - Civil emergency (e.g. active shooter, bombing)
   - Lockdown (due to shooting or unsafe situation, rape)
   - Parliamentary lockdown (within government buildings)
   - Civil disobedience (city lockdown for safety reasons)
   - Highway of Tears abduction (MMIWG+)
   - Border / Customs situations
   - 9-1-1 service outage
   - Other (please describe): _____

2. **Which specific emergency was it?** *(Prompt them to give the location of the situation) gather emergency specifics, ie. Fort McMurray fires, Fraser Valley Flooding, Ottawa Tornado, etc.* _____

3. **Did you receive an emergency alert during that event?**
   - Yes – I received it and it was accessible
   - Yes, but it was not accessible to me
   - No – I did not receive any alert

4. **Please describe what happened during your emergency.**
   (Prompt them to describe how accessible or inaccessible it was, and what barriers they experienced)
   - *Where were you when it started?*
   - *Were you indoors or outdoors?*
     Were you alone or with someone?
   - *Did you know something dangerous was happening right away? Or did you find out later?*

5. **How did you find out about the emergency?**
   - *Was it on your phone, TV, computer, or somewhere else?*
   - *What did the alert say or look like?*
     Did it grab your attention right away?
     Was it in your preferred language or sign language?

6. **Did you rely on community members, family, or others to get accurate info or stay safe?**
   - *Did someone interpret for you or explain things?*
   - *Did you rely on social media or group chats for communication?*
   - *Did the community help you out?*

7. **What actions did you take after the alert or when you learned about the emergency?**
    - *Did you try calling or texting 911 or a support person?*
    - *Did you go to a shelter or follow instructions?*
    - *Were you able to follow emergency directions independently?*

8. **How did the situation make you feel, especially in terms of safety and inclusion?**
    - *Did you feel excluded, confused, anxious, or unsafe?*
    - *Did you feel supported by others or left alone to figure things out?*

9. **Looking back, what do you wish had happened differently during the emergency to support your needs better?**

PART 4: Accessibility of Alerts
Purpose: To document barriers and preferences.

10. **What do you think were the most significant barriers to emergency alerts in that specific emergency?**
    (Examples: no sign language, audio only, too complex language, poor timing, vibration didn't work, etc.)

11. **How do you think emergency alerts can be improved for Deaf, DeafBlind, and Hard of Hearing people from your experience in that specific situation?**
    (Examples: ASL & LSQ videos, visual icons, simpler wording, etc.)

12. **Would receiving emergency alerts and test alerts in sign languages (ASL, LSQ, or Indigenous Sign Languages) have been helpful to you? Why or why not?**

PART 5: Final Reflection

13. **Is there anything else you would like to share with DWCC or the CRTC regarding your experience or concerns with emergency alerting in Canada?**

Appendix D: Ten Years of Disasters

Category	Type	Event	Place	Year	Notes
Biological Threat	Animal Health	Avian Influenza H5N2 outbreak in poultry	Fraser Valley, British Columbia	2015	Large culls and trade impacts in the BC poultry sector.
Biological Threat	Foodborne Illness	E. coli O157 outbreak linked to romaine lettuce	Nationwide	2018	National advisories and recalls affected multiple provinces.
Biological Threat	Infectious Disease (Human)	Measles resurgence with multi-province clusters	British Columbia, Alberta, Ontario, Quebec	2019	Importations led to community clusters and school exclusions.
Biological Threat	Animal Health	Avian Influenza Outbreak	British Columbia and Alberta	2021	H5N1 detections in poultry and wild birds led to large flock culls.
Biological Threat	Infectious Disease (Human)	Mpox Outbreak	Major Urban Centres Nationwide	2022	National vaccination and targeted public health campaign, coordinated through PHAC and provincial health agencies.
Biological Threat	Animal Health	Avian Influenza H5N1 Widescale Circulation in Wild Birds and Poultry	Multiple Provinces	2022	Ongoing detections through 2023–2024; significant economic and agricultural impacts.
Biological Threat	Animal Health	Avian Influenza H5N1 Continuation	Multiple Provinces	2023	Continued mass outbreaks in poultry, export disruptions and compensation programs.
Biological Threat	Animal Health	Avian Influenza H5N1 Resurgence	Multiple Provinces	2024	Ongoing outbreaks in poultry and wild birds; expanded surveillance and vaccination planning.
Civil Emergencies	Hazardous Chemicals	Pipeline Leak / Spill Release (Long Lake Upgrader)	Long Lake, Alberta	2015	The Nexen pipeline rupture released ~5M litres of emulsion, one of Alberta's most significant pipeline leaks.
Civil Emergencies	Hazardous Chemicals	Bunker Fuel Spill (English Bay)	Vancouver, British Columbia	2015	2,700 litres of fuel oil leaked from MV Marathassa, highlighting the need for

Category	Type	Event	Place	Year	Notes
					effective marine spill response.
Civil Emergencies	Residential Structure Fire – Single Family Dwelling (Indigenous Community)	Residential Fire	Pikangikum First Nation, Ontario	2016	Tragic house fire killed 9; sparked national debate on Indigenous housing and fire safety.
Civil Emergencies	Hazardous Chemicals	Pipeline Spill into the North Saskatchewan River	Near Maidstone, Saskatchewan	2016	The Husky Energy spill released ~225,000 litres of oil and impacted municipal water systems.
Civil Emergencies	Hazardous Chemicals	Fuel Spill at Richardson International Airport	Winnipeg, Manitoba	2016	A jet fuel leak contaminated the soil and groundwater, necessitating long-term remediation.
Civil Emergencies	Hazardous Chemicals	Diesel Spill from Tugboat Nathan E. Stewart	Seaforth Channel, British Columbia	2016	A tugboat grounding released ~100,000 litres of diesel, resulting in an extensive cleanup of the marine ecosystem.
Civil Emergencies	Residential Structure Fire – Single Family Dwelling (Northern Community)	House Fire (Sandy Bay Ojibway First Nation)	Manitoba	2017	A fatal fire killed four children, prompting calls for fire safety funding in northern communities.
Civil Emergencies	High-Rise Residential Fire – Multi-Unit Urban Building	Apartment Fire	Toronto, Ontario	2018	A six-alarm fire in a high-rise building displaced hundreds of residents, and authorities reviewed the fire code and sprinkler regulations.
Civil Emergencies	Hazardous Chemicals	Sulphuric Acid Spill on Highway 17	Sudbury, Ontario	2018	A transport truck crash spilled thousands of litres; a public shelter-in-place advisory.
Civil Emergencies	Institutional Fire – Long-Term Care Facility	Nursing Home Fire	Langley, British Columbia	2019	A primary care facility fire forced the evacuation of 150 seniors; no fatalities, but extensive property loss.

Category	Type	Event	Place	Year	Notes
Civil Emergencies	Heritage Residential Fire – Multi-Unit Structure	Row House Fire (Old Montreal)	Montreal, Quebec	2020	A historic heritage building fire killed 7; national attention on short-term rental safety enforcement.
Civil Emergencies	Hazardous Chemicals	Train Derailment and Crude Oil Spill	Guernsey, Saskatchewan	2020	The CP train derailment released 1.5M litres of crude oil, prompting new federal reviews of tank car safety.
Civil Emergencies	Hazardous Chemicals	Chemical Plant Explosion and Leak (East York Industrial Area)	Toronto, Ontario	2020	The explosion released toxic vapours, prompting a multi-agency HAZMAT response.
Civil Emergencies	Urban Encampment Fire – Unhoused Population Impact	Homeless Encampment Fire	Vancouver, British Columbia	2021	A large encampment fire destroyed shelters, raising concerns about urban emergency management and housing.
Civil Emergencies	Hazardous Chemicals	Marine Diesel Spill from Tugboat Ingenika	Gardner Canal, British Columbia	2021	Tugboat sank in a storm; fuel spill and crew fatalities; triggered Coast Guard safety review.
Civil Emergencies	Explosion and Fire – Residential Neighbourhood (Infrastructure-Linked)	Apartment Explosion and Fire	Calgary, Alberta	2022	Gas explosion leveled multiple homes; dozens injured; ATCO infrastructure review launched.
Civil Emergencies	Industrial Fire – Hazardous Storage Facility	Industrial Warehouse Fire	Mississauga, Ontario	2022	A chemical storage facility burned; toxic smoke prompted a local emergency declaration.
Civil Emergencies	Hazardous Chemicals	Pipeline Rupture	Fort St. John, British Columbia	2022	A gas pipeline rupture triggered an explosion and a fireball, prompting authorities to order an emergency evacuation.
Civil Emergencies	Heritage Building Fire – Mixed	Heritage Building Fire (Old Montreal)	Montreal, Quebec	2023	Reignited national scrutiny of building code enforcement and short-term rental safety.

Category	Type	Event	Place	Year	Notes
	Use / Tourist District				
Civil Emergencies	Hazardous Chemicals	Ammonia Leak at Ice Arena	St. John's, Newfoundland and Labrador	2023	A refrigeration system leak resulted in a mass evacuation and an emergency HAZMAT response.
Civil Emergencies	Hazardous Chemicals	Diesel Spill near Stewart–Cassiar Highway	Northern British Columbia	2023	A tanker truck accident spilled diesel into creeks due to oversight by the BC Environmental Emergency Program.
Civil Emergencies	Hazardous Chemicals	Chemical Explosion and Fire (Langley Industrial Park)	Langley, British Columbia	2023	Fire at chemical facility triggered shelter-in-place order; smoke plume visible for kilometres.
Civil Emergencies	Hazardous Chemicals	Train Derailment (Potash and Crude Oil Cars)	Rural Saskatchewan	2023	Multiple cars derailed and leaked hazardous material; TSB investigation opened.
Civil Emergencies	Commercial / Downtown Core Fire – Multi-Building Event	Downtown Fire	Whitehorse, Yukon	2024	Multi-building blaze in historic district; significant business losses and hazardous runoff.
Civil Emergencies	Arson Attack – Coordinated Multi-Site Urban Incident	Arson Attacks on Homeless Shelters	Toronto, Ontario	2024	Coordinated arson incidents targeted multiple shelters; there was a national debate on urban security and housing safety.
Civil Emergencies	Hazardous Chemicals	Pipeline Spill (Crude Oil Release)	Westlock County, Alberta	2024	Pembina pipeline rupture; extensive soil and groundwater contamination; Alberta Energy Regulator oversight.
Civil Emergencies – Human-caused Violence	Terrorism – Vehicle Ramming and Knife Attack	Terrorist: Vehicle Attack and Stabbings	Edmonton, Alberta	2017	Vehicle ramming and stabbing attack near Commonwealth Stadium; RCMP classified as terrorism-motivated.
Civil Emergencies –	Terrorism – Mass Shooting	Terrorist: Mosque Shootings	Quebec City, Quebec	2017	Mass shooting at Islamic Cultural Centre; 6 fatalities; first major domestic terrorism

Category	Type	Event	Place	Year	Notes
Human-caused Violence	(Religious Facility)				case under new federal framework.
Civil Emergencies – Human-caused Violence	Terrorism – Vehicular Mass Casualty Attack	Terrorist: Van Attack (Pedestrian Targeting)	Toronto, Ontario	2018	Van attack on Yonge Street; 10 fatalities; declared terrorism-motivated under ideological extremism provisions.
Civil Emergencies – Human-caused Violence	Terrorism – Kidnapping and Homicide (Urban Hostage Incident)	Terrorist: Kidnapping / Murder (Marriott Residence Incident)	Toronto, Ontario	2018	Coordinated kidnapping and homicide; part of evolving domestic terrorism investigations in urban centres.
Civil Emergencies – Human-caused Violence	Criminal Manhunt – Multiple Homicide Suspects	Manhunt: Homicide Suspects (Northern B.C. to Manitoba)	Across Northern British Columbia and Manitoba	2019	Multi-province manhunt for homicide suspects; RCMP coordinated nationwide search and emergency advisories.
Civil Emergencies – Human-caused Violence	Active Shooter – Mass Casualty Event	Mass Shooting (Portapique and Surrounding Areas)	Nova Scotia	2020	Canada’s deadliest mass shooting (22 fatalities) triggered a regional manhunt and Alert Ready controversy.
Civil Emergencies – Human-caused Violence	Officer Fatality – Extended Manhunt and Public Lockdown	Manhunt: RCMP Officer Killed (Onslow / Truro Region)	Nova Scotia	2020	Linked to Nova Scotia shooting; province-wide lockdown and police advisories during suspect pursuit.
Civil Emergencies – Human-caused Violence	Random Violence – Public Stabbing Incident	Random Stabbings (North Vancouver Library)	North Vancouver, British Columbia	2021	Multiple victims injured; national conversation on public safety and mental health.
Civil Emergencies –	Industrial Explosion – Suspected	Old Montreal Explosion and Fire	Montreal, Quebec	2021	An industrial explosion and fire led to evacuations and a

Category	Type	Event	Place	Year	Notes
Human-caused Violence	Intentional Cause				response involving hazardous materials.
Civil Emergencies – Human-caused Violence	Mass Stabbing – Multi-Community Manhunt	Manhunt: Saskatchewan Stabbings	James Smith Cree Nation & Weldon, Saskatchewan	2022	11 deaths; one of Canada's largest manhunts; Alert Ready system activated across provinces.
Civil Emergencies – Human-caused Violence	Urban Violence – Police Shootings and Vehicle Theft Pursuit	Manhunt: Stolen Vehicle and Police Shootings	Winnipeg, Manitoba	2023	City-wide police operation and Amber Alert overlap; urban lockdown procedures evaluated.
Civil Emergencies – Human-caused Violence	Targeted Shooting – Multi-Victim Residential Incident	Targeted Shooting at Edmonton Apartment Complex	Edmonton, Alberta	2023	A multi-victim incident led to a provincial review of urban emergency response.
Civil Emergencies – Human-caused Violence	Arson Attack – Coordinated Urban Fire Events	Arson Attacks on Homeless Shelters	Toronto, Ontario	2024	Multiple coordinated fires are under investigation, and a provincial review of shelter safety protocols is underway.
Environmental Threat	Water Contamination	Drinking Water Fuel Contamination	Iqaluit, Nunavut	2021	Officials issued a prolonged do-not-drink order after they detected fuel in the water system.
Environmental Threat	Chemical Spill	Diesel Spill	Stephenville, Newfoundland and Labrador	2022	Major diesel spill at fish plant; emergency shoreline containment and ECCC oversight are in place.
Environmental Threat	Water Contamination	Drinking Water Contamination (Boil-Water Advisories)	Northern Ontario and Manitoba	2024	A series of prolonged boil-water advisories in remote Indigenous communities has drawn national attention to water infrastructure.

Category	Type	Event	Place	Year	Notes
Natural Disasters	Meteorological	Winter Storm	Maritime Provinces	2015	Primary blizzard conditions disrupted transportation and caused coastal flooding across Nova Scotia and New Brunswick.
Natural Disasters	Meteorological	Storm – Unspecified / Other	Lower Mainland, British Columbia	2015	High winds and rainfall led to localized flooding and power outages in Metro Vancouver.
Natural Disasters	Meteorological	Tornado	Southern Ontario	2015	EF1–EF2 tornadoes caused property damage near Teviotdale and Grand Bend.
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	Alberta and Saskatchewan	2015	Hailstorms and straight-line winds damaged crops and structures across the Prairies.
Natural Disasters	Meteorological	Flood	Chestermere, Alberta	2015	Flash flooding after intense rainfall; municipal emergency declared.
Natural Disasters	Meteorological	Wildfire	Northern Saskatchewan	2015	Massive forest fires prompted the largest evacuation in Saskatchewan's history (~13,000 people).
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	Southern Ontario	2015	High winds and flooding affected communities in the Greater Toronto Area and the Niagara region.
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	Prairie Provinces	2015	A broad system produced hail, flooding, and lightning damage across multiple provinces.
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	Southern Alberta	2015	A severe hailstorm struck the Calgary region, causing extensive insured losses.
Natural Disasters	Meteorological	Wildfire	British Columbia	2015	Intense wildfire season burned over 280,000 hectares; air quality alerts across western Canada.
Natural Disasters	Meteorological	Flood	Perth-Andover, New Brunswick	2015	Ice-jam flooding caused evacuations and infrastructure damage.
Natural Disasters	Meteorological	Flood	Fort Albany and Kashechewan First Nation	2015	Spring breakup flooding forced repeated evacuations

Category	Type	Event	Place	Year	Notes
					of northern Ontario First Nations.
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	Southern Manitoba	2015	Heavy rainfall and lightning caused localized flooding and property loss.
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	Fredericton, New Brunswick	2015	A severe thunderstorm with high winds downed trees and disrupted power across the city.
Natural Disasters	Meteorological	Wildfire	Alberta	2016	Early-season wildfires across northern regions before the major Fort McMurray event.
Natural Disasters	Meteorological	Tornado	Long Plain First Nation, Manitoba	2016	A tornado damaged homes and community infrastructure, and the federal government granted disaster assistance.
Natural Disasters	Meteorological	Flood	Fort McMurray, Alberta	2016	Urban flash flooding after heavy rainfall complicated post-wildfire recovery efforts.
Natural Disasters	Meteorological	Wildfire	West Kelowna, British Columbia	2016	A 37-hectare wildfire prompted the evacuation of hundreds of homes.
Natural Disasters	Meteorological	Flood	Windsor and Tecumseh, Ontario	2016	Record rainfall caused flooding in hundreds of basements, prompting the activation of provincial disaster assistance.
Natural Disasters	Meteorological	Storm	South Coast and Lower Mainland, British Columbia	2016	A strong fall storm caused power outages affecting 200,000 residents, a pattern repeated later that year.
Natural Disasters	Meteorological	Flood	Red Earth First Nation, Saskatchewan	2016	Flooding isolated community; provincial emergency assistance mobilized.
Natural Disasters	Meteorological	Winter Storm	Nova Scotia and Prince Edward Island	2016	Blizzard conditions closed schools, roads, and ferry routes across the Maritimes.
Natural Disasters	Meteorological	Storm	Christmas Island, Nova Scotia	2016	A severe windstorm downed power lines and damaged homes across the Cape Breton region.

Category	Type	Event	Place	Year	Notes
Natural Disasters	Meteorological	Storms	Prairie Provinces	2016	A series of strong thunderstorms produced hail, funnel clouds, and localized flooding.
Natural Disasters	Meteorological	Flood	Nova Scotia, Prince Edward Island, and Newfoundland	2016	Heavy rain and coastal flooding have led to multiple communities declaring local states of emergency.
Natural Disasters	Meteorological	Storms	Alberta and Saskatchewan	2016	Crop and property losses due to severe hail and winds.
Natural Disasters	Meteorological	Storms	Alberta, Saskatchewan, Manitoba, and Ontario	2016	A multi-day convective storm outbreak resulted in flash flooding and power outages.
Natural Disasters	Meteorological	Winter Storm	Eastern Canada (ON–NL)	2016	A broad late-season snowstorm disrupted transportation across Eastern Canada.
Natural Disasters	Meteorological	Winter Storm	Southern Ontario	2016	Freezing rain and high winds caused extended power outages.
Natural Disasters	Meteorological	Storms	Southern Ontario	2016	Summer storms caused flooding and lightning damage, and meteorologists issued tornado warnings.
Natural Disasters	Meteorological	Storms	Nova Scotia	2016	Heavy rainfall and wind gusts caused road washouts and coastal flooding.
Natural Disasters	Meteorological	Wildfire	Paul First Nation, Alberta	2016	A grassfire threatened community buildings, prompting a local evacuation.
Natural Disasters	Meteorological	Wildfire (Fort McMurray)	Fort McMurray, Alberta	2016	One of Canada’s costliest disasters; 88,000 evacuated; significant urban destruction.
Natural Disasters	Meteorological	Flood	Northeastern British Columbia	2016	River flooding damaged roads and property in remote northern areas.
Natural Disasters	Meteorological	Wildfire	Easterville and Chemawawin, Manitoba	2016	A wildfire forced a complete community evacuation, resulting in the loss of homes and infrastructure.

Category	Type	Event	Place	Year	Notes
Natural Disasters	Meteorological	Flood	Kenora, Ontario	2016	Flash floods damaged roads and homes, and the provincial government deployed aid to assist residents.
Natural Disasters	Meteorological	Wildfire	Burns Bog, British Columbia	2016	The peat bog fire near Delta burned 78 hectares; major air quality issues for Metro Vancouver.
Natural Disasters	Meteorological	Flood	Kashechewan First Nation, Ontario	2016	Annual spring flooding caused the community to evacuate to Kapuskasing.
Natural Disasters	Geological	Landslide	Horton, Ontario	2016	A landslide destroyed a home, prompting a local emergency declaration.
Natural Disasters	Meteorological	Flood	Quebec	2017	Historic spring floods affected over 4,000 homes, prompting widespread evacuations along the Ottawa and St. Lawrence Rivers.
Natural Disasters	Meteorological	Flood	Mud Lake, Newfoundland and Labrador	2017	An ice jam on the Churchill River caused flooding in the community, necessitating a complete evacuation by air and boat.
Natural Disasters	Meteorological	Storm – Unspecified / Other	Eastern Ontario, Western Quebec	2017	Severe rainfall and wind events contributed to extensive regional flooding.
Natural Disasters	Meteorological	Wildfire	Island Lake Area, Manitoba	2017	Wildfires forced partial evacuations; air quality warnings are in effect across Northern Manitoba.
Natural Disasters	Meteorological	Flood	Windsor, Ontario	2017	Record-breaking rainfall flooded over 6,000 basements, marking the second major flood in two years.
Natural Disasters	Meteorological	Wildfire	British Columbia	2017	One of the province's largest wildfire seasons; over 1.2 million hectares burned; 65,000 displaced.
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	Saskatoon, Saskatchewan	2017	Thunderstorms with intense rainfall flooded streets and

Category	Type	Event	Place	Year	Notes
					caused localized infrastructure damage.
Natural Disasters	Meteorological	Flood	Eastern Canada	2017	Widespread flooding from Ontario to the Atlantic provinces; a major military assistance operation is underway.
Natural Disasters	Meteorological	Winter Storm	Churchill, Manitoba	2017	Blizzard cut off rail access, resulting in the prolonged isolation of the northern community.
Natural Disasters	Meteorological	Flood	Kashechewan First Nation, Ontario	2017	The annual spring ice breakup flood prompted recurring evacuations of the community.
Natural Disasters	Meteorological	Storm – Unspecified / Other	Sainte-Thérèse, Quebec	2017	A severe windstorm damaged homes and knocked down power lines.
Natural Disasters	Meteorological	Winter Storm	Newfoundland	2017	Heavy snow and high winds closed schools and roads, resulting in record seasonal accumulations.
Natural Disasters	Meteorological	Storm – Unspecified / Other	Southwestern Ontario	2017	Wind and heavy rain caused property damage and power outages across multiple municipalities.
Natural Disasters	Meteorological	Winter Storm	New Brunswick	2017	A series of major snowstorms buried the province under record accumulations.
Natural Disasters	Meteorological	Flood	British Columbia	2017	Widespread flooding in the Okanagan and Interior BC; homes and highways damaged.
Natural Disasters	Meteorological	Heat Wave	Quebec (mainly)	2018	Extreme heat caused 90+ deaths, mainly in Montreal, one of Canada’s deadliest heat events.
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	British Columbia	2018	Severe summer storms caused flash flooding and power outages across the Interior.

Category	Type	Event	Place	Year	Notes
Natural Disasters	Meteorological	Tornado	National Capital Region (Ottawa–Gatineau)	2018	EF3 tornado destroyed homes and businesses; significant infrastructure damage.
Natural Disasters	Meteorological	Flood	Toronto, Ontario	2018	Flash floods from record rainfall submerged underpasses and basements downtown.
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	Southern Alberta	2018	Large hail and wind gusts caused damage to crops and properties; severe weather watches were issued.
Natural Disasters	Meteorological	Wildfire	Ontario	2018	Record wildfire season across Northern Ontario; Parry Sound, with 33 fires, and other major fires prompted evacuations.
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	Southern Manitoba	2018	Tornadoes and hailstorms struck rural communities, causing widespread agricultural losses.
Natural Disasters	Meteorological	Wildfire	Little Grand Rapids, Manitoba	2018	Evacuation by air after a wildfire threatened the isolated First Nation community.
Natural Disasters	Meteorological	Wildfire	British Columbia	2018	Second consecutive record-breaking fire season; 1.35 million hectares burned, with smoke reaching eastern Canada.
Natural Disasters	Meteorological	Flood	Regional District of Kootenay Boundary, British Columbia	2018	Major spring flooding affected Grand Forks, damaging or destroying hundreds of homes.
Natural Disasters	Meteorological	Flood	New Brunswick	2018	Severe spring flooding along the Saint John River caused widespread evacuations.
Natural Disasters	Meteorological	Flood	Kashechewan First Nation, Ontario	2018	Annual spring flooding caused evacuation for the 16th consecutive year.

Category	Type	Event	Place	Year	Notes
Natural Disasters	Meteorological	Winter Storm	Southern Ontario	2018	A mid-April ice storm disrupted power for hundreds of thousands and damaged infrastructure.
Natural Disasters	Meteorological	Flood	Grand River, Ontario	2018	Ice jams caused sudden flooding near Cambridge and Brantford, resulting in significant evacuations.
Natural Disasters	Meteorological	Storm – Unspecified / Other	Southern Ontario	2018	Windstorm with gusts over 120 km/h; 200,000 power outages and property damage.
Natural Disasters	Meteorological	Flood	Quebec, Ontario, New Brunswick	2019	Major spring flooding from Ottawa to Saint John; 12,000 homes affected, resulting in widespread evacuations.
Natural Disasters	Meteorological	Wildfire	Northern Alberta	2019	Multiple fires, including the Chuckegg Creek Fire, forced mass evacuations near High Level.
Natural Disasters	Meteorological	Storm – Unspecified / Other	Eastern Canada	2019	Widespread wind and heavy rain; significant power outages in Atlantic provinces.
Natural Disasters	Meteorological	Winter Storm	Southern Manitoba	2019	An early-season blizzard stranded travellers and downed power lines, resulting in significant agricultural losses.
Natural Disasters	Meteorological	Hurricane / Tropical Storm (Hurricane Dorian)	Atlantic Canada	2019	Hurricane Dorian made landfall in Nova Scotia as a post-tropical cyclone, causing extensive damage.
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	Spruce Grove, Alberta	2019	Severe thunderstorms and hailstorms caused localized damage and flash flooding.
Natural Disasters	Meteorological	Wildfire	Pikangikum First Nation, Ontario	2019	A wildfire forced the emergency evacuation of over 3,000 residents by air.
Natural Disasters	Meteorological	Flood	Eastern Canada	2019	Additional late-summer flooding events compounded spring damage in Quebec and NB.

Category	Type	Event	Place	Year	Notes
Natural Disasters	Meteorological	Flood	Kashechewan, Ontario	2019	Annual spring flooding and ice breakup necessitate a complete community evacuation.
Natural Disasters	Meteorological	Winter Storm	Eastern Canada	2019	Severe snowstorms have paralyzed the Atlantic provinces, and meteorologists expect repeat events through February and March.
Natural Disasters	Meteorological	Wildfire	High Level, Alberta	2019	The Chuckegg Creek Fire burned over 350,000 hectares, and authorities evacuated 10,000 residents.
Natural Disasters	Meteorological	Wildfire	British Columbia	2020	A smaller fire season followed the 2017–2018 extremes; air quality issues persisted.
Natural Disasters	Meteorological	Winter Storm	Southern Ontario and Southern Quebec	2020	Heavy snowfall and freezing rain disrupted major cities and transport across the region.
Natural Disasters	Meteorological	Winter Storm	Avalon Peninsula and Bell Island, Newfoundland	2020	The "*Snowmageddon*" blizzard dropped over 75 cm of snow, and city officials declared a state of emergency in St. John's.
Natural Disasters	Meteorological	Storm – Unspecified / Other	Southern BC and Vancouver Island	2020	A winter windstorm caused power outages and ferry cancellations across coastal BC.
Natural Disasters	Meteorological	Flood	Fort Vermilion, Alberta	2020	Ice-jam flooding damaged homes and infrastructure, requiring a widespread evacuation.
Natural Disasters	Meteorological	Flood	Regional Municipality of Wood Buffalo (Fort McMurray)	2020	Major ice jam flooding downtown; over $200 million in damage.
Natural Disasters	Meteorological	Storms and Severe Thunderstorms	Calgary, Alberta	2020	June hailstorm caused $1.3B in insured damages, one of Canada's costliest natural disasters.

Category	Type	Event	Place	Year	Notes
Natural Disasters	Meteorological	Storm – Unspecified / Other	Ontario and Quebec	2020	A widespread windstorm caused power outages and downed transmission lines across provinces.
Natural Disasters	Meteorological	Flood	British Columbia	2021	The atmospheric river caused catastrophic flooding, resulting in the evacuation of over 15,000 people and the collapse of major infrastructure.
Natural Disasters	Meteorological	Heat Wave	British Columbia, Alberta	2021	A record-breaking "*heat dome*" caused 619 heat-related deaths in BC, affecting the central health system.
Natural Disasters	Meteorological	Wildfire	Lytton, British Columbia	2021	Town destroyed after record heat; over 1,000 displaced; national focus on climate resilience.
Natural Disasters	Meteorological	Storm (Hurricane Fiona)	Atlantic Canada	2022	The post-tropical storm caused extensive coastal damage, power loss, and evacuations in NS, NL, and PEI.
Natural Disasters	Meteorological	Wildfire (National Season)	Multiple Provinces	2023	One of Canada's largest wildfire seasons; 18M hectares burned; record air quality alerts nationwide.
Natural Disasters	Meteorological	Flood	Nova Scotia	2023	Historic July flash floods killed four and destroyed infrastructure; officials declared a state of emergency
Natural Disasters	Meteorological	Hurricane / Tropical Storm (Post-Tropical Storm Lee)	Atlantic Canada	2023	Widespread coastal flooding and power loss; debris and infrastructure damage across NS and NB.
Natural Disasters	Meteorological	Tornado	Ottawa Valley, Ontario	2023	A tornado outbreak caused extensive structural damage, with an EF2 rating confirmed.
Natural Disasters	Meteorological	Wildfire	Jasper, Alberta	2024	A major wildfire destroyed one-third of the town, prompting evacuations from

Category	Type	Event	Place	Year	Notes
					the national park and extensive property loss.
Natural Disasters	Meteorological	Flood	Quebec and Atlantic Canada	2024	Severe spring flooding affected multiple communities, damaging infrastructure and prompting evacuations.
Natural Disasters	Meteorological	Storm – Unspecified / Other (Severe Thunderstorms and Tornadoes)	Ontario	2024	Widespread convective storms produced damaging winds and tornado touchdowns in southern Ontario.
Public Safety	Child Abduction Alert	AMBER Alert	ON (1), AB (3), BC (1), SK (1)	2015	
Public Safety	Child Abduction Alert	AMBER Alert	ON (6), AB (1), BC (2), MB (1), SK (1)	2016	
Public Safety	Child Abduction Alert	AMBER Alert	QC (2), ON (3), AB (1), SK (1)	2017	
Public Safety	Child Abduction Alert	AMBER Alert	QC (2), ON (1), AB (1), SK (1)	2018	
Public Safety	Child Abduction Alert	AMBER Alert	ON (8), AB (3)	2019	
Public Safety	Child Abduction Alert	AMBER Alert	QC (2), ON (4), SK (1)	2020	
Public Safety	Child Abduction Alert	AMBER Alert	QC (6), ON (3), MB (1), NB (1)	2021	
Public Safety	Child Abduction Alert	AMBER Alert	BC (2), AB (2), SK (2), ON (5), QC (2), NB (1), NS (1)	2022	
Public Safety	Child Abduction Alert	AMBER Alert	BC (2), AB (1), SK (1), ON (2), QC (3), PE (1)	2023	

Category	Type	Event	Place	Year	Notes
Public Safety	Child Abduction Alert	AMBER Alert	BC (1), SK (1), ON (1), QC (5)	2024	
Transportation Accident	Aircraft Incident – Commercial Flight	Air Canada Flight 624 Crash Landing	Halifax, Nova Scotia	2015	Airbus A320 crash-landed short of the runway during a snowstorm; 25 injuries, no fatalities.
Transportation Accident	Marine Casualty – Passenger Vessel	Tofino Whale Watching Boat Sinking	Tofino, British Columbia	2015	Leviathan II capsized; 27 rescued, six fatalities; Transport Canada safety review initiated.
Transportation Accident	Rail Derailment – Crude Oil Transport	CN Rail Derailment	Gogama and Mattagami First Nation, Ontario	2015	Crude oil train derailment and fire; primary environmental response on the Makami River.
Transportation Accident	Road Collision – Bus and Semi-Truck	Humboldt Broncos Bus Crash	Armley, Saskatchewan	2018	Junior hockey team bus collided with a semi-truck; 16 deaths, 13 injured; national outpouring of grief and policy reform on trucking safety.
Transportation Accident	Aircraft Incident – Military Demonstration Flight	Snowbirds Jet Crash (Capt. Jenn Casey)	Kamloops, British Columbia	2020	CF Snowbirds aircraft crash during cross-country morale tour; one fatality.
Transportation Accident	Road Collision – Tour Bus Rollover	Columbia Icefield Tour Bus Rollover	Jasper National Park, Alberta	2020	The Ice Explorer tour bus rolled down the moraine slope; 3 deaths, 24 injured; triggered RCMP and TSB investigations.
Transportation Accident	Aircraft Incident – Medevac Operation	Medevac Plane Crash	Gillam, Manitoba	2021	Medical evacuation aircraft crash-landed; three fatalities.
Transportation Accident	Marine Casualty – Ferry Operation	Ferry Grounding (Queen of Alberni)	Active Pass, British Columbia	2021	A BC Ferries vessel ran aground, and officials reported no injuries but acknowledged a significant service disruption.
Transportation Accident	Rail Derailment – Freight Train	CP Train Derailment	Field, British Columbia	2021	Freight derailment in mountainous terrain; safety review prompted renewed brake system regulations.

Category	Type	Event	Place	Year	Notes
	(Mountain Terrain)				
Transportation Accident	Aircraft Incident – General Aviation (Training)	Small Plane Crash	Medicine Hat, Alberta	2022	Fatal crash during training flight; TSB investigation cited weather and instrumentation factors.
Transportation Accident	Marine Casualty – Cargo Vessel Fire	Cargo Ship Fire (MV Zim Kingston)	Off Victoria, British Columbia	2022	A container ship fire released hazardous materials, prompting environmental agencies to begin long-term monitoring.
Transportation Accident	Aircraft Incident – Private Helicopter	Helicopter Crash	Ottawa River, Ontario	2023	A private helicopter crash killed six; Transport Canada and TSB are conducting a joint investigation.
Transportation Accident	Rail Derailment – Hazardous Goods	CN Derailment (Hazardous Goods)	Capreol, Ontario	2023	The derailment of cars carrying flammable liquids prompted evacuations and environmental cleanup.
Transportation Accident	Road Collision – Senior Transport Bus	Manitoba Bus Crash (Senior Home Group)	Carberry, Manitoba	2023	Bus carrying seniors collided with semi-truck; 17 fatalities; one of Manitoba's deadliest road crashes.
Transportation Accident	Aircraft Incident – Private Fixed-Wing	Small Aircraft Crash	Yukon	2024	Fatal crash in remote terrain; complex recovery operation due to weather conditions.
Transportation Accident	Rail Derailment – Chemical Fire	Train Derailment and Chemical Fire	Saskatchewan	2024	A freight train carrying hazardous materials derailed, prompting highway closures and evacuations.
Wildlife Health Threat	Disease Spread	Chronic Wasting Disease Expansion in Cervids	Alberta, Saskatchewan, Manitoba	2023	Range expansion prompted enhanced surveillance and hunter advisories.

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