

Toolkit for Equitable  
Emergency Management

# Appendix E

---

## Suggested Data Sets

2025

100010 10001000 01111100  
101011 00110100 11000000  
110111 11100100 11100101  
100010 01011111 01110111  
111010 10001111 10010000

11001100 11111010 10001111  
10010001 10011001 00011011  
01101110 01001011 00101001  
11010101 11101101 10010110  
10011011 11001101 00101100  
01001000 11111100 01111000  
00111111 11010110 01001010  
10101100 10110110 00010100  
00000010 11110000 01000001  
10101010 00001000 10100101  
00010010 10110110 11100110  
01101101 10100101 11000111

## Appendix E - Suggested Data Sets

The following is a list of data that you can consider collecting that will feed into your HRVA and provide a more fulsome picture of vulnerability, risk, and resilience. While collecting each data set may not be possible, start with **demographic** and **socio-economic** data to get an idea of the composition of your community and continue from there. All data should be disaggregated by key demographic factors such as gender, age, race, ethnicity, sexual orientation, and disability status.

### 1. Demographic Data

- ❖ **Sex and Gender:** Sex and gender disaggregated population data.
- ❖ **Age Breakdown by Gender:** Specific age ranges by gender (children, adolescents, adults, older adults).
- ❖ **LGBTQI2S+ Community:** Data on the size and needs of the LGBTQI2S+ community, considering potential discrimination or social isolation during disasters.
- ❖ **Languages Spoken:** Primary and secondary languages and languages spoken by various groups in the community (e.g., primary language may be English and secondary French, but you may have small groups who primarily speak Punjabi or Swahili, etc.).
- ❖ **Race and Ethnicity:** Breakdown of population by racialized groups in the community.

### 2. Socioeconomic Data

- ❖ **Income Levels:** Average income levels and poverty rates disaggregated by race, ethnicity, and gender, including the community's gender pay gap and income inequalities.
- ❖ **Employment Status:** Unemployed, employed (full-time, part-time), underemployed all disaggregated by gender.
- ❖ **Occupation Types:** Common industry and job roles for each gender including informal sector work. Focus on collecting data related to occupations and industries most concentrated in vulnerable locations or high-density areas (e.g., low-wage earners in floodplains).
- ❖ **Newcomers:** Data on newcomers/those who recently immigrated to Canada, including language spoken and familiarity with local emergency procedures.

### 3. Historical Context

- ❖ **Historical Discriminatory Policies and Events:** Information on past discriminatory policies or events that might shape current vulnerabilities

(e.g. the Indian Act in Canada, Residential Schools, colonization, segregation etc.).

#### 4. Household and Housing Data

- ❖ **Household Composition:** Number of single-parent households, particularly those headed by women.
- ❖ **Dependency Ratios:** Number of dependents (children, older adults, those with disabilities) in households, categorized by gender of head of household.
- ❖ **Isolation Rates:** Information on older adult populations living alone, potentially more vulnerable during emergencies.
- ❖ **Housing and Infrastructure:** Data on housing quality, overcrowding, access to essential utilities, and the overall condition of infrastructure like roads, bridges, and communication systems.
- ❖ **Housing Status:** Homeownership, renting, homelessness.
- ❖ **Population Mobility:** Number of people living at the same address one year ago versus 3-5 years ago.

#### 5. Access to Resources

- ❖ **Resource Allocation:** Access to food, water, sanitation, transportation, and housing by gender, race, and ethnicity.
- ❖ **Financial Resources:** Access to savings, credit, and financial aid by gender, race, and ethnicity.
- ❖ **Internet Access:** Availability and affordability of internet services.
- ❖ **Digital Literacy:** Skills and knowledge related to using digital technologies.

#### 6. Health Data

- ❖ **Health Needs:** Specific health issues and needs by gender, race, and ethnicity including chronic disease prevalence.
- ❖ **Mental Illness:** Prevalence of mental illness and access to mental health services by gender, race, and ethnicity.
- ❖ **Addictions and Drug Usage:** Drug utilization rates and prevalence of addictions.
- ❖ **Access to Healthcare:** Healthcare coverage for residents, proximity to healthcare facilities.
- ❖ **Reproductive Health:** Access to reproductive health services, maternal health data by race and ethnicity.

#### 7. Disability and Neurodivergence

- ❖ **Disability Rates:** Data on the prevalence of different disabilities within the community.

- ❖ **Accessibility Features:** Information on the accessibility of shelters, evacuation routes, transportation, emergency communication, and public buildings for people with disabilities and neurodiversity.

## 8. Social and Cultural Data

- ❖ **Cultural Data:** Information on cultural beliefs, traditions, practices, and Traditional Knowledge related to hazards. This can be valuable for developing culturally sensitive risk reduction strategies and understanding risk and resilience.
- ❖ **Gender Role and Expectations:** Information on how gender norms, roles, expectations, and relations shape differential hazard impacts. Consider how gender inequalities and disparities shape differential impacts and outcomes for different genders and how gender intersects with other social identities and factors to influence exposure, sensitivity, coping capacities, and adaptive strategies. For example, Women, especially single mothers, racialized women, and women over the age of 65, are more likely to live in poverty due to lower wages, part-time employment, and caregiving responsibilities. This economic disparity limits their ability to prepare for and recover from disasters. Women are also often overrepresented in sectors such as healthcare, education, and service industries, which can be more vulnerable to disruption during hazards. Conversely, men might be more affected in industries like construction and manufacturing.
- ❖ **Community Support Networks:** Gender differences in access to and reliance on social support networks; information on the strength of social networks, community cohesion, and the presence of volunteer organizations
- ❖ **Religious Beliefs:** Information on religious practices or cultural observances that might need to be considered in emergency planning, including influence of religion on social dynamics.
- ❖ **Social Capital:** Trust in community institutions, participation in community activities.

## 9. Education and Training Data

- ❖ **School Enrollment:** Gender and diversity in school attendance.
- ❖ **Educational Attainment:** Graduation rates, literacy levels by gender, race, and ethnicity.
- ❖ **Access to Education:** Availability and accessibility of vocational training and adult education.

## 10. Environmental Data

- ❖ **Exposure to Environmental Hazards:** Proximity to industrial areas, pollution levels disaggregated by gender, race, and ethnicity.

## 11. Disaster Preparedness and Climate Change

- ❖ **Disaster Preparedness:** Community plans for disasters and emergencies, access to emergency services.
- ❖ **Participation in Disaster Planning:** Gender breakdown of participation in community disaster preparedness programs.
- ❖ **Access to Early Warning Systems:** Gender differences in access to and understanding of early warning systems.
- ❖ **Evacuation Plans:** Specific evacuation needs and challenges by gender, cultures, those with disabilities etc.
- ❖ **Shelter Accessibility:** Gender-specific needs in emergency/evacuation centres/shelters, including privacy, security, and sanitary facilities.
- ❖ **Climate Change Impact:** Data on how climate change affects community members differently (e.g., the impact on livelihoods and health).

## 12. Political and Legal Data

- ❖ **Representation in Decision Making:** Representation of women, men, and gender-diverse individuals in local government by race and ethnicity.
- ❖ **Legal Protections:** Laws protecting against discrimination and gender-based violence (domestic violence, sexual violence, etc.).
- ❖ **Civic Participation:** Voter registration and turnout rates, participation in community decision-making.

## 13. Violence and Safety Data

- ❖ **Crime Rates:** Rates of violence, including domestic violence, sexual assault, other forms of gender-based violence, and hate crimes.
- ❖ **Perception of Safety:** Community members' feelings of safety in their neighborhoods before, during, and after disasters, disaggregated by gender, race, and ethnicity.
- ❖ **Law Enforcement Practices:** Data on policing practices and interactions with the community.

## 14. Physical Vulnerability Data

- ❖ **Land Use and Development:** Information on land use patterns, building types, and critical infrastructure locations. This helps assess how these factors might influence the impact of a hazard.

- ❖ **Environmental Conditions:** Data on environmental factors like soil type, vegetation cover, and proximity to natural resources. These can influence the severity of a hazard and the ease of recovery.
- ❖ **Critical Facilities:** Location and vulnerability of essential buildings like hospitals, schools, and emergency shelters.

### 15. Hazard Specific Data

- ❖ **Historical Hazard Events:** This includes information on past occurrences of hazards in the area, such as frequency, intensity, duration, and location.
- ❖ **Hazard Mapping:** Maps depicting areas at risk from different hazards, like floodplains, wildfire zones, or earthquake fault lines.
- ❖ **Scientific Projections:** Data on climate change projections and how they might influence future hazard risks (e.g., increased risk of flooding due to rising sea levels).