Provincial Injury Prevention

Pathway to Injury Prevention

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Alberta Health Services (AHS) Provincial Injury Prevention (PIP) team adapted sections of the Colorado Violence and Injury Prevention - Mental Health Promotion Branch 2016 Strategic Plan for the Pathway to Injury Prevention. The Colorado Violence and Injury Prevention - Mental Health Promotion Branch 2016 Strategic Plan, as outlined by the Mental Health Promotion Branch, Prevention Services Division of the Colorado Department of Public Health, and Environment (CDPHE), is in the public domain and therefore is available to be borrowed and adapted with this acknowledgement and referencing. The Pathway to Injury Prevention is also influenced by Provincial Population and Public Health Strategic Clinical Network ™ (PPPH SCN) Transformational Roadmap 2020.

AHS PIP acknowledges and thanks both CDPHE and AHS PPPH SCN for their inspirational work.

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Executive Summary

Pathway Purpose and Development:

The Pathway to Injury Prevention (Pathway) was developed to provide direction and guidance to Alberta Health Services (AHS) Provincial Injury Prevention (PIP) team, AHS Zones, other provincial AHS teams, and Alberta-wide partners with a vested interest in injury prevention. The Pathway is upstream and equity-centered and uses a population health approach. The Pathway framework addresses risk and protective factors across all levels of the socio-ecological model. It highlights the importance of addressing structural systems that create barriers and challenges to preventing and reducing injury across the population.

The Pathway was developed using a multi-tiered approach which included:

1) Review of and alignment with the Provincial Population and Public Health Strategic Clinical Network Transformational Roadmap 2020.
2) Adaptation of sections of the Colorado Violence and Injury Prevention – Mental Health Promotion Branch 2016 Strategic Plan, with their permission.
3) Review and integration of health equity literature and perspectives.
4) Review by and integration of feedback from the PIP team and other teams/committees with injury prevention mandates including: AHS Zone teams, other provincial AHS teams, the Unintentional Injury Prevention, Domestic Violence Prevention and Suicide Prevention Direction Setting Committees, and the Injury Prevention Coordinating Committee.

The Burden of Injury in Alberta: Priority Areas of Focus

Alberta's most common and costly mechanisms of injury include falls, transportation-related injuries, and unintentional poisonings – broadly referred to as *unintentional injuries*. Suicide and violence follow unintentional injury as the leading causes of injury in Alberta (IPC, 2020).

While injuries can affect any Albertan regardless of age, gender, race, or economic status, some populations bear a greater burden of injury than others. For example, First Nations, Inuit, and Metis people, men/males, individuals living in rural or remote areas, and those experiencing more social and material deprivation all experience higher rates of unintentional injury and suicide (PHAC, 2018). The underlying factors that contribute to this greater burden are distal determinants - the political, economic, and social conditions that construct intermediate and proximal determinants on the health of these populations (Loppie & Wien, 2009).

Vision

The Pathway's vision is AHS' vision: Healthy Albertans. Healthy Communities. Together.

Mission

The Pathway is guided by AHS Safe Health Environments' Mission: Supporting safe and healthy communities together through engagement, connection, promotion, prevention, and protection.

Pathway Goals

1. Increase the conditions and opportunities that make health-promoting behaviors easier and more accessible, create connections and economic stability, promote positive social norms, and foster resilience for all Albertans.

2. Reduce and prevent unintentional injury, suicide, and violence across Alberta.

Walking the Pathway, Together: Work in Partnership

To effectively address the burden of injury, key injury prevention partners must connect, share expertise, pool finite resources, collaborate and cooperate. Within these collaborations, a willingness and commitment by partners to take leadership and/or support roles, as appropriate, and to work to scope is also required.

Approach, Framework, Strategies, and Health Equity

The Pathway integrates multiple, essential components to create a comprehensive approach to injury prevention. It includes evidence-informed frameworks and approaches, internationally recognized strategies, and a health equity focus. These components are:

1) A Population Health approach, which aims to improve the health of the entire population and reduce inequities in health status between population groups by addressing the social and distal determinants of health.
2) The Ottawa Charter for Health Promotion (WHO, 1986) strategies:
   a) Building healthy public policy at all sectors and levels of government
   b) Strengthening community action to improve living and working conditions
   c) Creating supportive environments
   d) Developing personal skills through information, education for health, and enhancing life skills
   e) Reorienting health services toward health promotion

3) A framework that centers on a vision for health and well-being by addressing risk and protective factors across all levels of the socio-ecological model.
4) A commitment to concrete, sustainable action on health equity, and a focus on injury-related outcomes.

Conclusion

The Pathway is intended to be dynamic, shaped by emerging injury prevention and health promotion evidence, population needs, organizational shifts, and socio-ecological influences. The Pathway prioritizes populations and initiatives across Albertans' lifespans in multiple domains. It recognizes the importance of community identified and led work, centered in health equity. It moves away from a focus on what is not wanted and instead focuses on what is desired – protective and health promoting factors. The work is broad and wide-reaching and calls for collaboration and shared responsibility.

We know that most unintentional injuries, suicide, and violence are preventable. We know that collectively, we can make a difference. Albertans can live free from injury and thrive in safe, caring, and connected communities.

Introduction

In 2017…

*Injuries cost Albertans **$7.1 billion** and **2,230** lives.*

***879** people experienced total and permanent disability **and 7,904** were partially disabled.*

In 2021…

***462,928** Albertans visited emergency or urgent care for injuries. **31,239** were hospitalized.*

Unintentional injuries, suicide, and violence are common and costly. "Injuries are the leading cause of death for Albertans one to 44 years of age and claim more children's lives than all other causes. "Injuries cost Albertans 2,230 lives in 2017.[1] This translates into an annual death rate of 53 people per 100,000, and an estimated 62,187 potential years of life lost." A further 879 people experienced total and permanent disability, and 7,904 were left with a permanent, partial disability (IPC 2020). Over the last ten years in Alberta, injuries have been the leading cause of emergency/urgent care visits and the fourth leading cause of hospitalization. In 2021, 462,928 Albertans had injuries that required an emergency/urgent care visit and 31,239 required hospitalization (AHS 2022b). In addition to this staggering impact on Albertans, injuries also cost[2] Albertans $7.1 billion in 2017 alone (IPC 2020).

The good news is that most unintentional injuries, suicide, and violence can be prevented where people are born, grow, live, learn, work, play, and age by[3]:

- Understanding the burden of injury in Alberta
- Collaborating with partners,
- Taking a population health approach,
- Addressing risk and protective factors across settings and the lifespan and,
- Attending to health equity.

[1] At the time of this writing 2017 is the most recent year for injury costs.

[2] "Costs" refer to health care costs and costs related to reduced productivity from hospital admissions, disability, and premature death (IPC 2020).

[3] For a snapshot of the overall direction of the Pathway, please see Appendix 1.

Vision

The Pathway to Injury Prevention (Pathway) vision is Alberta Health Services' (AHS') vision: Healthy Albertans. Healthy Communities. Together.

Mission

The Pathway is guided by AHS Safe Health Environments' Mission: Supporting safe and healthy communities together through engagement, connection, promotion, prevention, and protection.

Pathway Goals

1. Increase the conditions and opportunities that make health-promoting behaviours easier and more accessible, create connections and economic stability, promote positive social norms, and foster resilience for all Albertans.
2. Reduce and prevent unintentional injury, suicide, and violence across Alberta.

The Burden of Injury: Priority Areas of Focus

Injuries can affect any Albertan regardless of age, gender, race, or economic status. In addition, data illustrates that some populations bear a greater burden of injury than others.[4] Injured Albertans suffer direct injury impacts ranging from temporary discomfort to severe disability and death. Injuries can also have ripple effects that impact families and communities across Alberta.

Alberta's leading mechanisms of injury include falls, transportation-related injuries, and unintentional poisonings (broadly referred to as *unintentional injuries*), as well as suicide and violence (see Table 1; IPC 2020). As such, these are priority areas of focus in this Pathway.

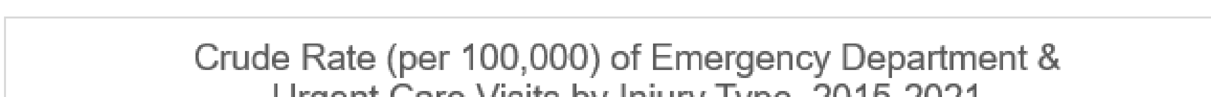
In addition to analyzing the burden of injury, the following critical factors help to narrow the Pathway's focus: research-based evidence, political will, availability of funding, the priorities of communities and other Alberta partners, existing and potential momentum, and feasibility.

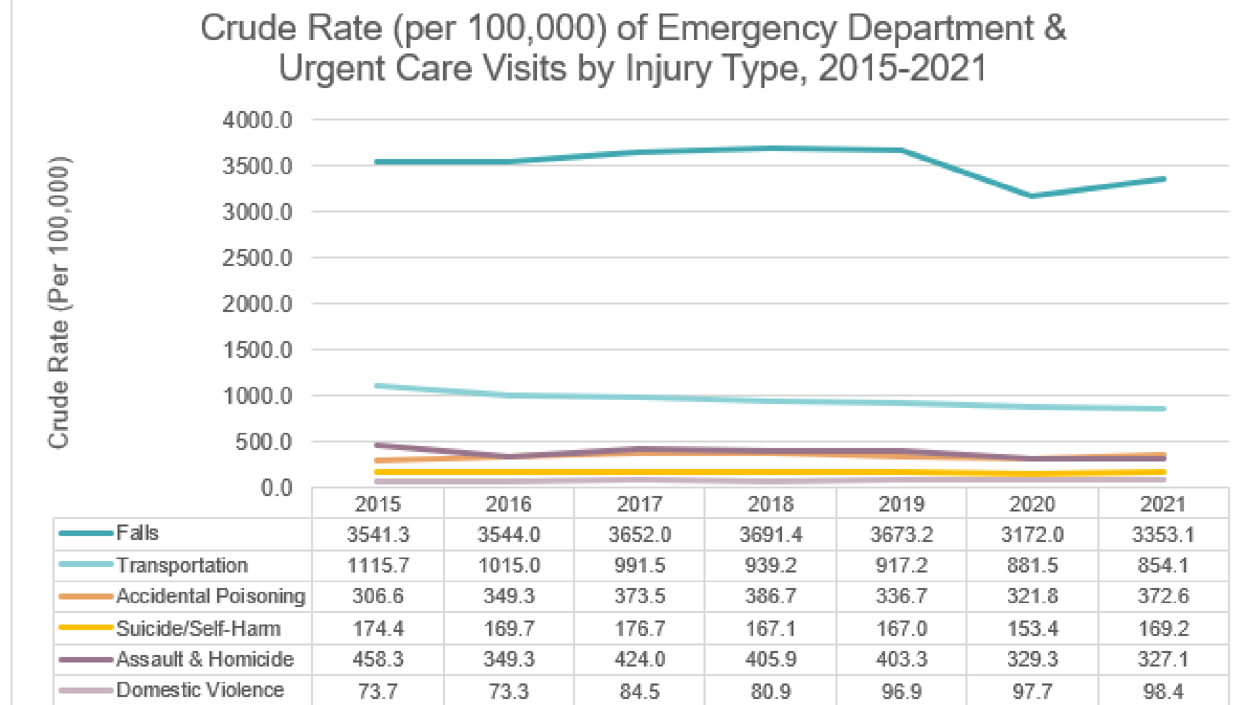
[4] Much of the Alberta-based data that follows is aggregated data and, is limited. Disaggregated Canadian injury data that illustrates the disparities and inequities across populations is described later in this section.

Unintentional injuries significantly impact Albertans' health. In 2017, 70% of deaths, 89% of admissions to hospital, 95% of emergency department visits, and 91% of permanent disabilities in Alberta were related to unintentional injury. They also accounted for the highest proportion of costs[5] at $6.0 billion (IPC 2020).

Suicide and violence follow unintentional injury as the leading causes of injury harms and costs in Alberta. In 2017, 564 Albertans lost their lives to suicide, and 66 lost their lives to violence (IPC 2020). Related specifically to domestic violence, 165 individuals died between 2010 and 2019 in Alberta (GOA 2021). In addition, it was estimated in 2017 related to suicide and violence that the direct and indirect costs[6] to the health system and to Albertans were $418 million and $551 million, respectively (IPC 2020).

Table 1: Injury Rates in Alberta Leading to Emergency Department/Urgent Care Visits (AHS 2022a; AHS 2022b)[7]





	2015	2016	2017	2018	2019	2020	2021
Falls	3541.3	3544.0	3652.0	3691.4	3673.2	3172.0	3353.1
Transportation	1115.7	1015.0	991.5	939.2	917.2	881.5	854.1
Accidental Poisoning	306.6	349.3	373.5	386.7	336.7	321.8	372.6
Suicide/Self-Harm	174.4	169.7	176.7	167.1	167.0	153.4	169.2
Assault & Homicide	458.3	349.3	424.0	405.9	403.3	329.3	327.1
Domestic Violence	73.7	73.3	84.5	80.9	96.9	97.7	98.4

[5] "Costs" refer to health care costs and costs related to reduced productivity from hospital admissions, disability, and premature death (IPC 2020).
[6] Direct costs refer to health care costs and indirect costs are related to reduced productivity from hospital admissions, disability, and premature death (IPC 2020).
[7] The definition of domestic violence (DV) used here likely includes some visits which may not be DV (i.e., the perpetrator is not a family member). Also, the definition may not include all visits related to DV as individuals do not necessarily disclose that their injuries are related to DV (AHS 2022a; AHS 2022b).

Figure 1: Injury Rates in Alberta Leading to Hospitalization (AHS 2022b)

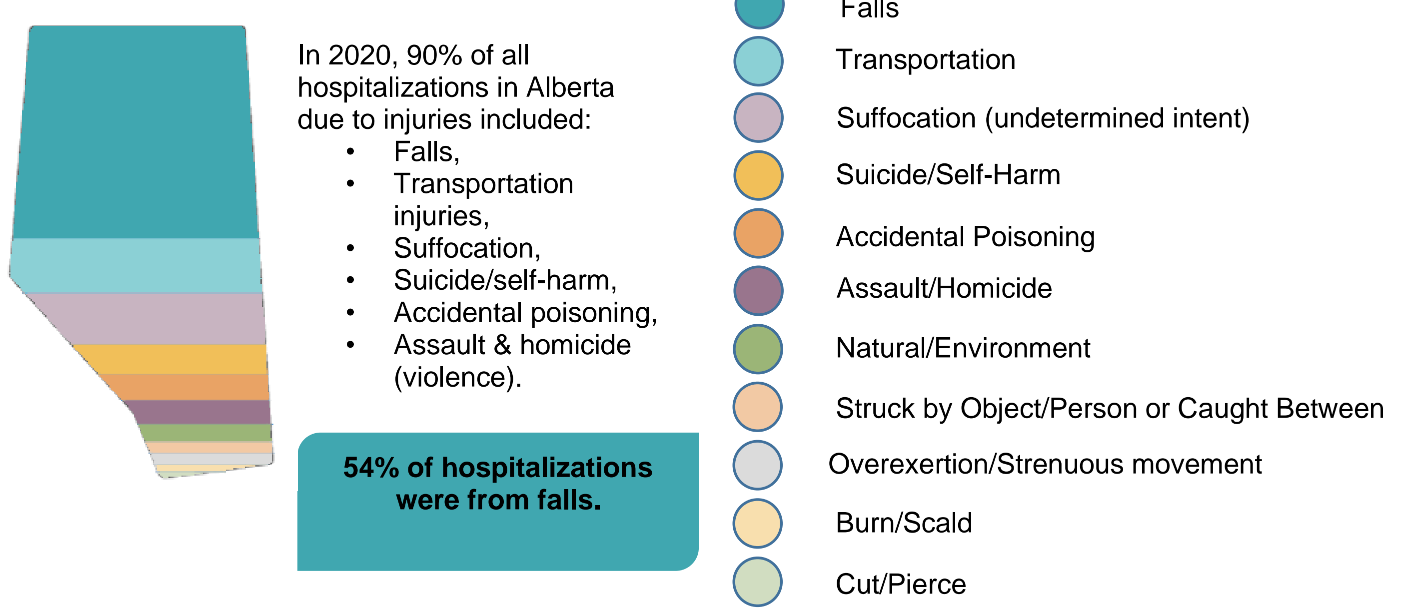
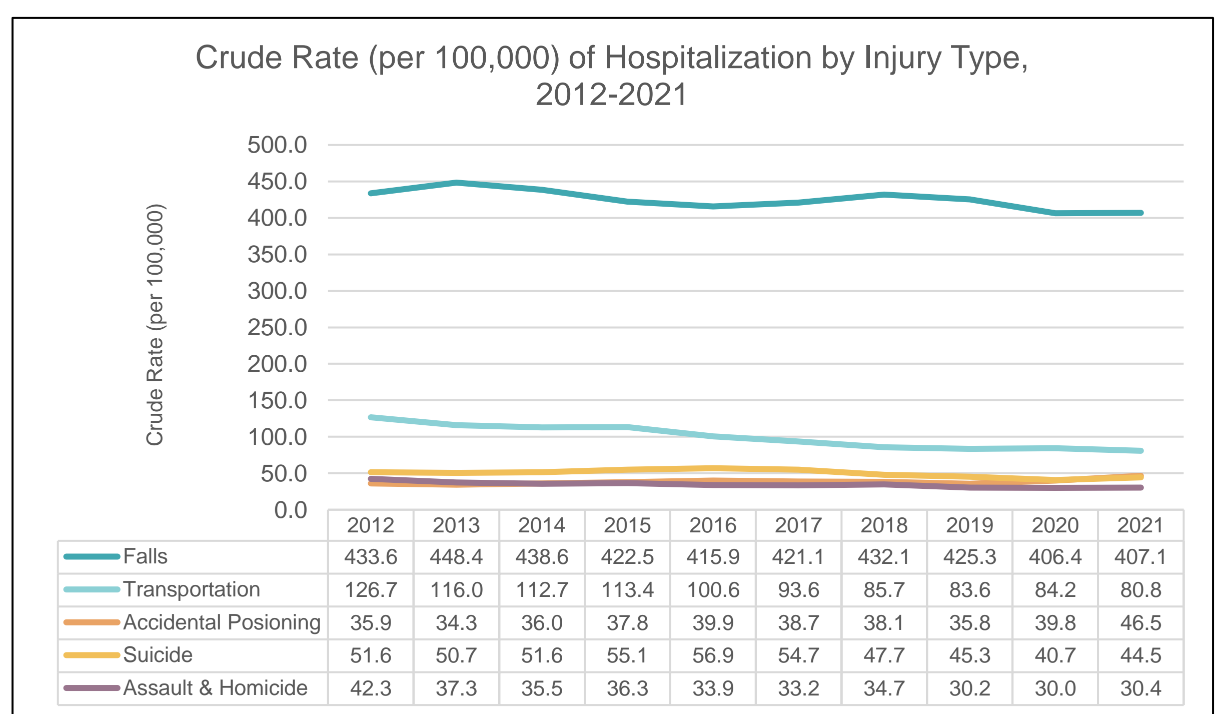


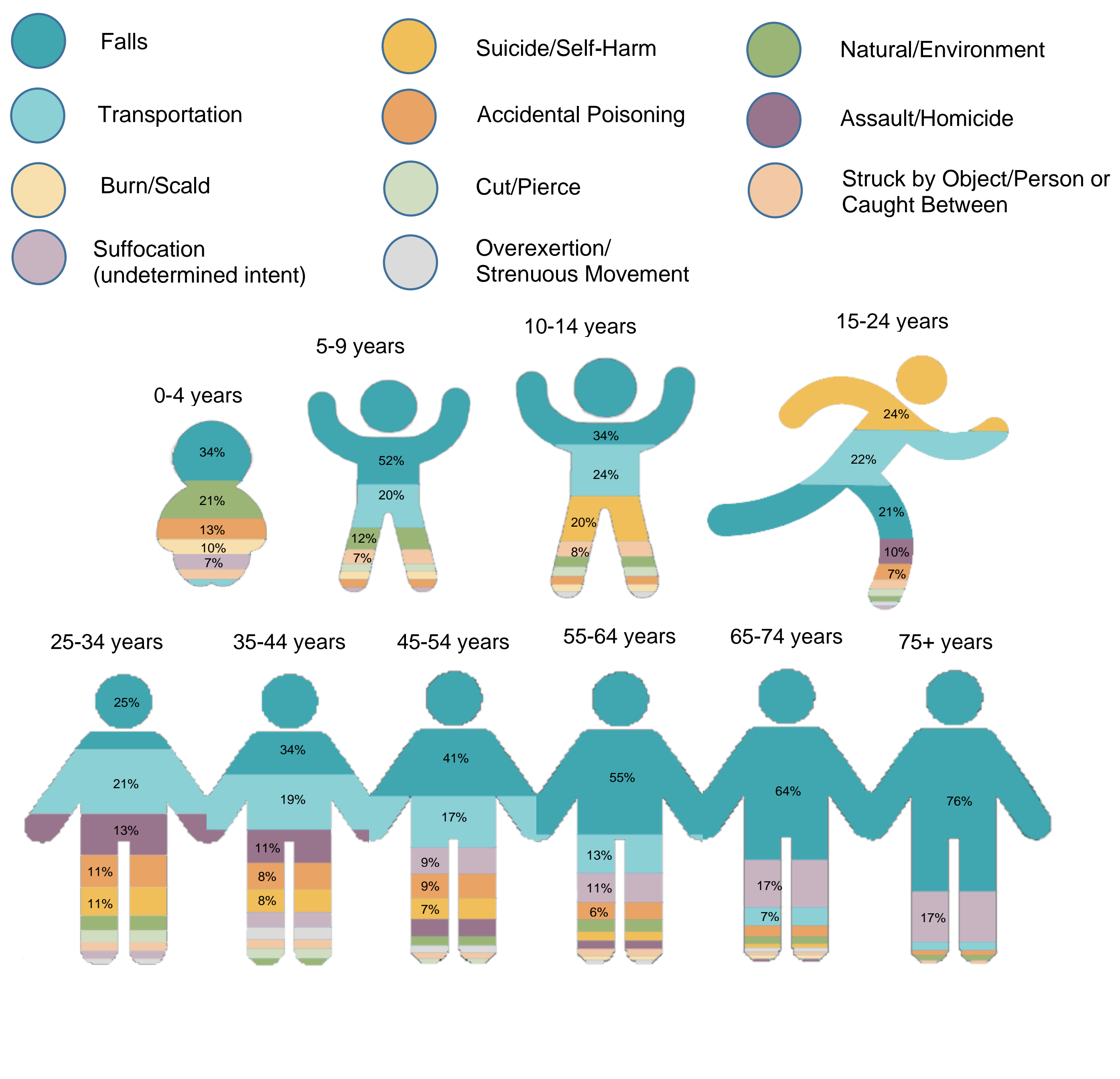
Table 2: Injury Rates in Alberta Leading to Hospitalization (AHS 2022b)



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Falls	433.6	448.4	438.6	422.5	415.9	421.1	432.1	425.3	406.4	407.1
Transportation	126.7	116.0	112.7	113.4	100.6	93.6	85.7	83.6	84.2	80.8
Accidental Posioning	35.9	34.3	36.0	37.8	39.9	38.7	38.1	35.8	39.8	46.5
Suicide	51.6	50.7	51.6	55.1	56.9	54.7	47.7	45.3	40.7	44.5
Assault & Homicide	42.3	37.3	35.5	36.3	33.9	33.2	34.7	30.2	30.0	30.4

Figure 2: Percentage of Injury Type Leading to Hospitalization by Age Group in 2020 (AHS 2022b)8

Falls account for most hospitalizations in every age group except for 15-24 years, where suicide/self-harm resulted in most hospitalizations.



[8] Please refer to Appendix 2 for specific counts and rates for the top 10 injuries leading to emergency/ urgent care visits and hospitalizations for each age group

As noted above, it is well-documented in literature and clear in health surveillance data that some populations bear a greater burden of injury than others (PHAC 2018). For example, health inequalities in Canada are reported for unintentional injury and suicide by age, sex/gender, and other social stratifiers including income, education, immigrant status, Indigenous identity (First Nations, Inuit, or Métis), rural/urban residence, and social and material deprivation (PHAC 2018).[9]

Addressing socioeconomic health inequalities is a key component of a population health approach that can improve health outcomes and advance health equity (AHS 2020a), an approach that is further discussed throughout this Pathway.

There is a disproportionate impact of injury on some populations. In Canada unintentional injury mortality is higher:

- for First Nations, Inuit, and Métis peoples (3.5, 3.2, and 2.7 times higher, respectively),
- among men than women (1.9 times),
- in remote areas compared to urban centres (1.9 times), and
- among Canadians living in the most materially deprived areas (1.6 times).

Similarly, there are clear disparities in suicide rates, with higher rates for:

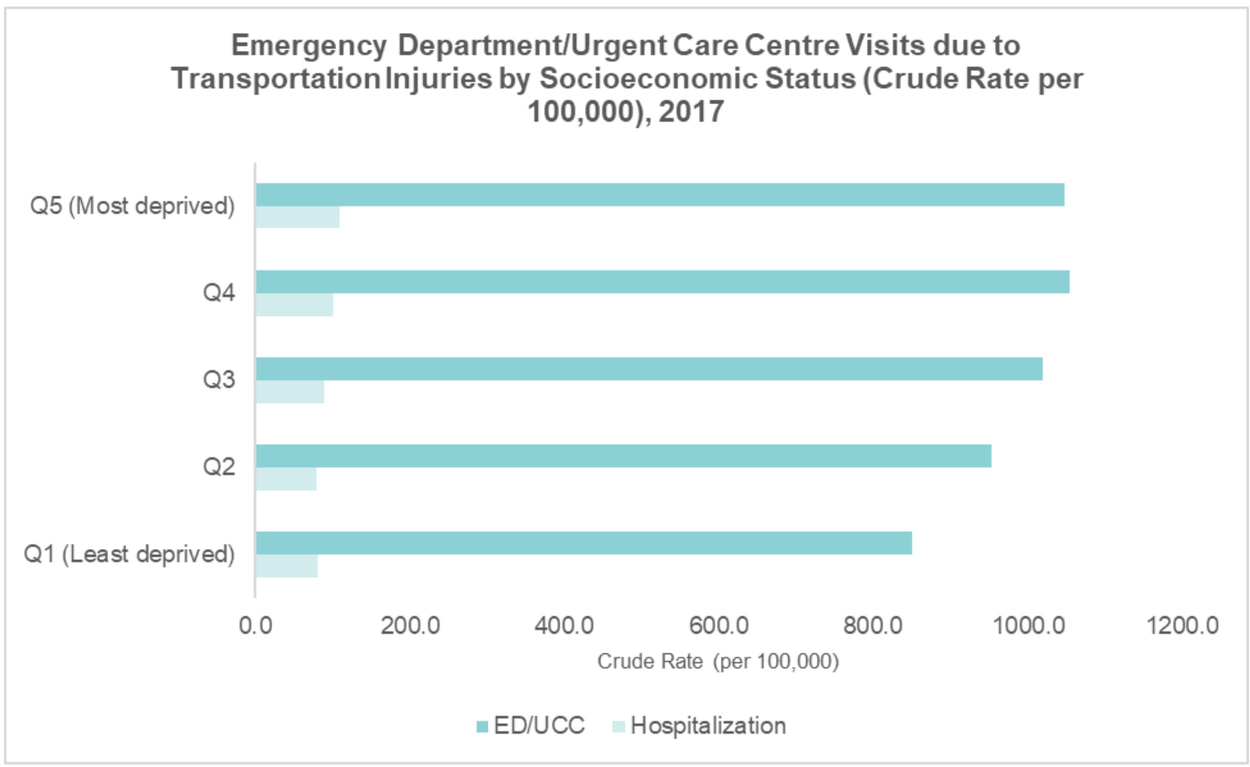
- those with lower income, less education, and more social and material deprivation (1.8, 1.6, and 2.7 times, respectively),
- in areas with more people who identify as Inuit, First Nations, and Métis (6.5, 3.7, and 2.7 times higher, respectively),
- among males than females (3.3 times) and especially for males in areas with higher concentration of people who identify as Inuit (6.8), and
- in remote areas compared to large cities (1.9 times).

(PHAC 2018)

[9] Note, the data on suicide could not be stratified by ethnicity, disability, or LGBT identities as it was unavailable. The report references other international population-based studies which indicate, for example, that suicide rates are 4 times higher among gay and bisexual men and 2 times higher among lesbian and bisexual women.

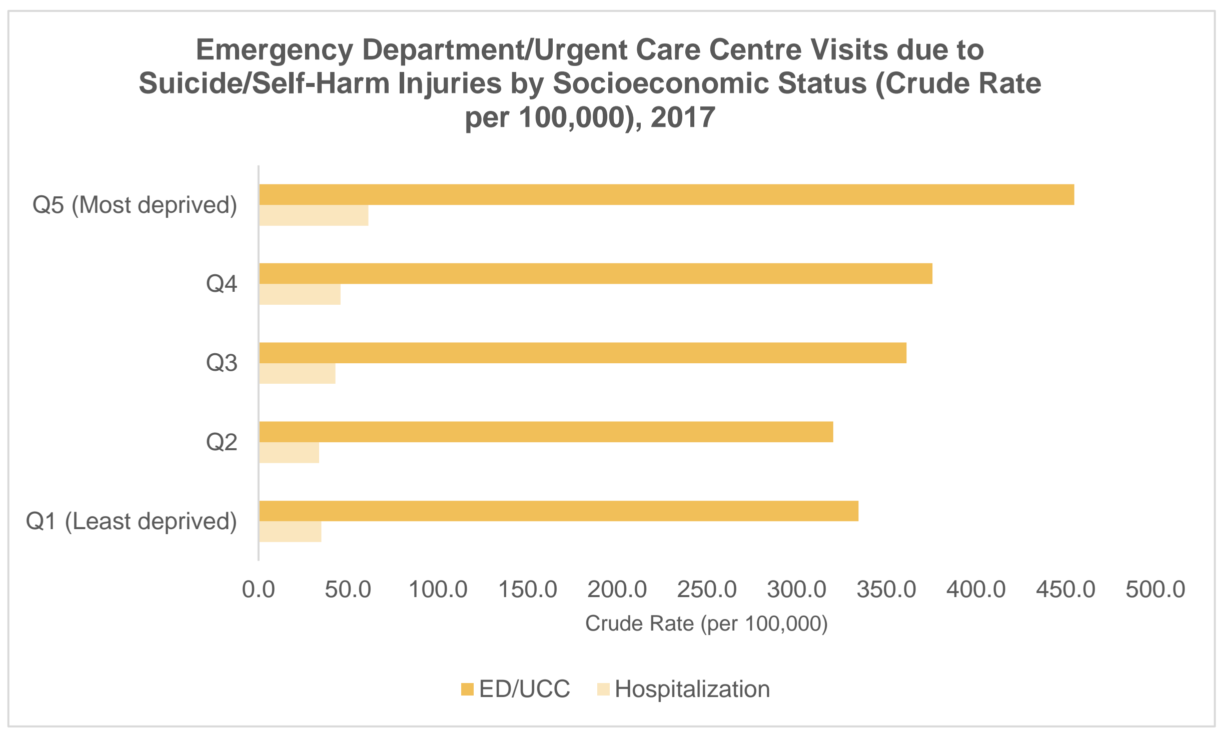
Alberta-specific data is also clear that socioeconomic status is significantly related to rates of injury, with the highest rates of emergency department visits and hospitalizations for transportation-related injuries and suicide-related concerns among those who experience the greatest socioeconomic deprivation (Table 3; AHS 2022b).

Table 3: Injury Rates by Socioeconomic Status[10] in 2017 (AHS 2022b)



[10] "Q" in the Table is "Quintile." Each quintile represents 1/5 or 20% of the range of values for the indicator. Q1 is least deprived socioeconomic status and Q5 is most deprived socioeconomic status.

Table 4: Injury Rates by Socioeconomic Status in 2017 (AHS 2022b)



In conclusion, the five injury mechanisms highlighted above have the greatest impact on Albertans compared to other mechanisms of injury, and despite some limitations in the Alberta-specific data, there is strong national and international evidence that these injuries disproportionally impact some populations more than others.

Subsequent sections of this Pathway outline what needs to be done to address injury, especially for those who are most impacted. This includes working in partnership, taking a population health approach, addressing risk and protective factors across the social ecology, using the Ottawa Charter strategies, and focusing on health equity.

Work In Partnership

Injury prevention is the business of many key partners across Alberta, Canada, and beyond. Cooperation, collaboration, and a pooling of finite resources and expertise to address the burden of injury is required. Partners willing and ready to take leadership roles and support roles and who are committed to working to scope is necessary.

Lead and Support

There are many examples of partners collaborating and taking on both leadership roles and support roles in the realm of injury prevention. Here are two.

1. Among a vast array of injury prevention initiatives, the Injury Prevention Centre (IPC) is Alberta's leader in preventing falls related injury via Finding Balance, their education program and public awareness campaign. AHS PIP and AHS Zones support their efforts on an annual basis by reinforcing their media messaging and sharing their resources during, for example, Falls Prevention Month. IPC and AHS PIP also partner to deliver important information to health-practitioners during Practitioners Day – a key event during Falls Prevention Month.

2. In the fall of 2022, AHS PIP implemented *Strengthening Opportunities for Adolescent Resilience, Inclusion and Growth (SOARING),* a community funding program prioritizing youth. This program is provincially coordinated by PIP, but locally led and implemented by youth and community partners across Alberta. AHS Zones have been instrumental in supporting this pilot through their connections to local communities and the expertise they bring in health promotion. SOARING details can be found in Appendix 3.

Work to Scope

Partners who understand where they can influence and how to commit their time and energy (working to scope) is critical. For example, those with the scope to address economic stability can consider family socioeconomic status and societal income inequality as it relates to car/booster seat use. Those with the scope to work in school

communities can attend to creating/maintaining welcoming school environments, an integral part of creating connectedness which is a key injury prevention protective factor (CDPHE n.d.). And those with the capability to affect change in built environments can support innovative initiatives such as addressing alcohol outlet density which can reduce alcohol related harms, including falls and other unintentional injury (Vallance et al., 2019; Chikritzhs and Livingston 2021).

Fortunately, several partners and networks have a vested interest in this work. Injury prevention partners include, but are not limited to:

- AHS Zone teams
- AHS Provincial teams
- Community organizations
- Indigenous (First Nations, Métis, and Inuit) partners
- Government of Alberta (e.g., Health, Education, Children's Services, Seniors, Community and Social Services, etc.,)
- Municipal governments
- Local coalitions and advocacy groups
- Provincial academic and non-profit partners
- Provincial and national business and industry partners
- National non-profit partners
- Community members of all ages across their lifespans

The collective impact of an array of committed partners can advance better health and well-being for Albertans to live free from unintentional injury, suicide, and violence by nurturing, safe, supportive communities.

Approach, Framework, Strategies, and Health Equity

Impacting health at a population level requires action across the range of health determinants using multi-level and multi-sectoral health promotion strategies. Evidence indicates that comprehensive approaches are most effective in impacting health outcomes, and that employing a combination of health promotion strategies is more effective than single-track actions (WHO 1986, 1997).

Approach

A population health approach aims to improve the health status of the entire population and reduce inequities in health status between population groups. It uses both surveillance data and the voices of communities to identify population health priorities. Critically, this approach prioritizes health equity and considers the entire range of factors and conditions (determinants of health) known to influence health. A population health approach acknowledges that much of the reason that some groups are healthier than others is because of unfair and unequal distribution of these important factors (AHS 2020a), which include, but are not limited to, income, employment, access to health services, and social supports (Health Canada 2020).

Essential features of a population health approach:

- Focuses on health and well-being rather than illness and injury.
- Uses a population-oriented approach rather than an individual approach.
- Addresses upstream determinants of health.[11]
- Listens to and follows the lead of communities.
- Understands needs and solutions through population-level data.
- Commits to community engagement.
- Attends to cultural perspectives.
- Engages in inter-sectoral partnership and action.

An upstream approach to address the determinants of health is any approach that disrupts structural barriers to transform quality of life and health outcomes. By improving determinants like income, financial stability, education, food access, and housing stability, health outcomes can change. By mitigating and eliminating the gaps that create stress, predictable worse health outcomes, and community violence, sustained quality of life for people is possible (BMC n.d.).

[11] Social Determinants of health further defined on p. 21.

The population health approach is critical as it is most effective at supporting people across all populations to reach their full health potential while reducing the social and economic burden of injury to families, workplaces, communities, and the healthcare system (McLaren 2018). See Appendix 3 for examples of the population health approach in action.

Framework

The framework for the Pathway follows the Colorado Department of Public Health and Environment's (CDPHE) framework outlined in their 2016 injury prevention – mental health promotion strategic plan. The framework centers on a vision for health and well-being by addressing **risk and protective factors** across all levels of the **socio-ecological model.** The focus is to strengthen individual, family, school, and community connections, socialize inclusive social norms, enhance the conditions and opportunities that make health promoting behaviours easier and more accessible, foster economic stability, and support the development of resilient communities.

Risk and Protective Factors and an adapted Socio-Ecological Model

Risk factors are characteristics or conditions that increase the probability of unintentional injury, suicide, and violence (CDC 2020; CDPHE n.d.). Protective factors are characteristics, situations, or conditions that mitigate the risk of unintentional injury, suicide, and violence. They help remove barriers to health and well-being and build resilience for people to thrive in their day-to-day lives. Protective factors help people cope in healthy ways, and access relevant support when faced with adversity. These risk and protective factors are relevant to those affected by unintentional injury, suicide, and violence, and relevant among those responsible for inflicting injury or violence.

The socio-ecological model considers the complex interplay of factors between:

- ***Individuals:*** *The biological and personal history factors that include, for example, age, education, income, and gender,*
- ***Relationships:*** *An individual's closest social circles. For example, family members, chosen family, friends, peers and partners,*
- ***Community:*** *Sense of connection among people with shared places* norms, values, beliefs, customs, behaviours and/or identity**,** and*
- ***Society:*** *Broad societal norms and policies that influence the way people live, learn, work and play including social, cultural, political, educational, economic, and health aspects.*

(Braubach and Grant 2010; CDC 2021; CDPHE n.d.)

In addition, "there is a considerable body of evidence linking the built and natural environment (natural and human made or modified physical surroundings) with health and wellbeing" (Bird et al., 2018); thus, the model for this Pathway (Figure 3, p.21) includes ***Built and Natural Environment*** *as an additional domain.*

** "Places" are the settings, such as schools, workplaces, neighborhoods, and virtual spaces in which social relationships occur.*

Implementing a combined risk and protective factor approach helps prevent and reduce multiple forms of injury at the same time, as different types of injuries share similar risk and protective factors. For example, substance use is a risk factor for motor vehicle crashes, sexual violence, interpersonal violence, and suicide[12] (CDPHE n.d.).

The CDPHE implemented a process to categorize several risk and protective factors across the socio-ecological model and group them into overarching concepts focused on protective factors. These include:

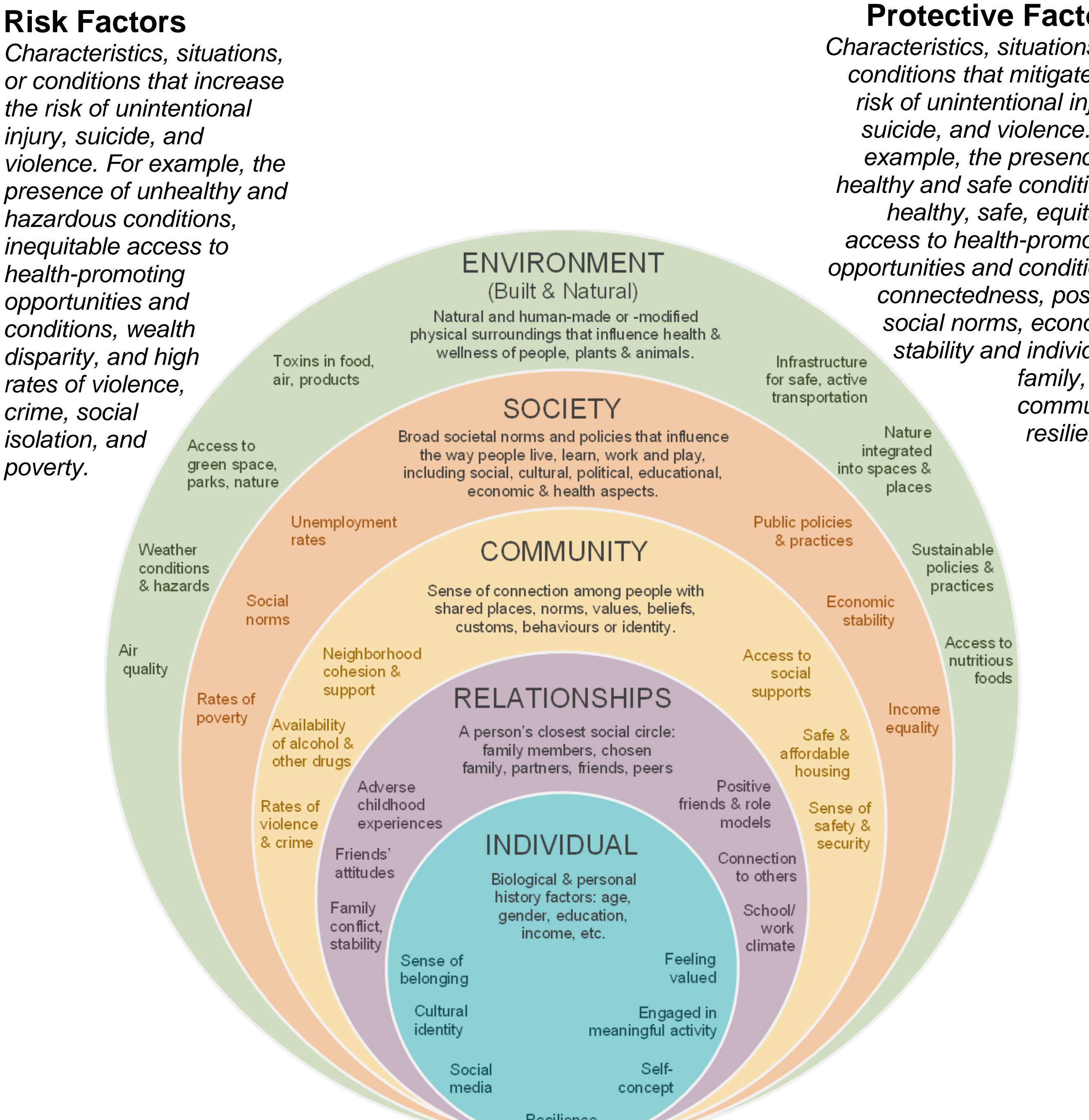
- Connectedness (family, school, and community),
- Positive social norms,
- Health promoting conditions and opportunities,[13]
- Economic stability, and
- Individual, family, and community resilience.

Each overarching concept encompasses several risk and protective factors and could be applicable in one or more domains across the socio-ecological model. Evidence suggests this is the most effective method for preventing unintentional injury, suicide, and violence (CDC 2021; CDPHE n.d.).

This combined risk and protective factor approach also allows for leveraging resources and partnerships with and between organizations working similarly but with slightly different focuses or end goals. Partnerships are already happening and may further form or be strengthened between, for example, the Government of Alberta, AHS departments, non-profits, academic organizations, and community-based partners. This can, in turn, also have the benefit of breaking down silos and reducing duplication of efforts, information, services, programs, and/or initiatives. For instance, AHS PIP's work can benefit the work of other AHS departments and community partners across Alberta and vice-versa as outlined in the Partnerships section above. Collectively, we can do more with our finite resources.

[12] Please note, substance use, like many risk factors, is influenced by many intersecting personal, social, and environmental experiences, conditions, and distal determinants of health. The distal determinants are root causes (seen in the roots of the Equity Tree Model, p. 26) including underlying structures, institutions, and systems that create and sustain inequity and discrimination.
[13] CDPHE referred to this protective factor as "good behavioural health." However, since the focus of good behavioural health is to provide the optimal conditions to support people, and feedback from partners outlined that the word "good" could be interpreted as moralistic, the wording for this protective factor in this Pathway was adapted.

Figure 1: Adapted Socio-ecological model and risk and protective factors



(Adapted from: Braubach and Grant 2010; CDC 2021; CDPHE n.d.)

Strategies

Ottawa Charter for Health Promotion

Influencing a population's health requires action across health determinants employing multi-level and multi-sectoral health promotion strategies. As mentioned above, comprehensive approaches are most effective in affecting health outcomes and employing a combination of health promotion strategies is more effective than single-track actions (WHO 1986; WHO 1997). The *Ottawa Charter for Health Promotion* (WHO 1986) remains a foundational document that groups strategies into five streams:

- Building healthy public policy at all sectors and levels of government
- Strengthening community action to improve living and working conditions
- Creating supportive environments
- Developing personal skills through information, education for health and enhancing life skills
- Reorienting health services towards health promotion

There are many tactical approaches and tools that can be used to implement the above strategies. For example, AHS' Alberta Healthy Communities Approach is a guide for community-driven action to build healthy communities based on foundational building blocks of community engagement, multi-sectoral collaboration, asset-based community development, political commitment, and healthy public policy. It addresses health through a socio-ecological lens, the social determinants of health, as well as health equity (ACPLF 2019).

Health Equity

Health equity is the "absence of socially produced, unfair, and unjust inequalities in health between groups with different levels of social advantage/disadvantage" (AHS 2020b, p 2). It is created when all groups have fair opportunity to reach their fullest health potential (Health Canada 2020), and it requires:

- access to health-promoting conditions, environments, and opportunities (e.g., access to transportation, green spaces, and air quality),
- inclusion and fair distribution of power (e.g., representation and voting power at decision-making tables),
- truth and reconciliation (e.g., adoption of the Truth and Reconciliation Commission's Calls to Action), and
- just systems for all (e.g., access to income safety and security)

(Braubach and Grant 2010)

In contrast, health inequity is the difference in health outcomes or in the distribution of health resources between different population groups, arising from the social conditions in which people are born, grow, live, learn, work, play, and age. Health inequities are unfair, unjust, and modifiable (WHO 2018; Health Canada 2020), and are created by social and economic policies, practices, institutions, and environments that create barriers to opportunity (i.e., unearned disadvantage) for some while creating access (i.e., privilege/unearned advantage) for others (AHS 2020a). Further, patterns of unearned advantage and disadvantage will continue to perpetuate until we act on the systems that keep them in place (Nixon 2019).

Privilege is "automatic unearned benefits bestowed upon perceived members of dominant groups based on social identity" (Case 2013, p.2) (e.g., white, male, heterosexual, cis-gender, settler, able-bodied, educated, middle class, etc.). or something that is "given to us by society" (Mullaly and West 2018, p.181).

Understanding equity: The Determinants of Health and Intersectionality

The determinants of health are critical to understanding health equity. Health is influenced by many factors, which are typically organized into five broad categories known as the determinants of health: genetics, behavior, environmental and physical influences, medical care, and social factors. All these categories are interconnected. The last category – social – encompasses the economic and social conditions that influence the health of people and communities (CDC 2019).

The **social determinants of health** often shape an individual's place in society related to, for example, income, education, or employment, as determined by the dominant cultural and political groups and the systems they create and maintain. These determinants of health can be categorized as distal (e.g. historic, political, social and economic contexts), intermediate (e.g. community infrastructure, resources, systems and capacities), and proximal (e.g. health behaviours, physical and social environments) (Loppie & Wien, 2009, p. 1). We see the distal determinants in the roots, and the intermediate determinants in the trunks of the Equity Tree Model below (Figure 4). Although not specifically illustrated in this model, proximal determinants would emerge as the branches from which health outcomes (the leaves) emerge.

AHS acknowledges racism as one of the "system drivers" that influence the social, economic, and environmental circumstances that play a fundamental role in shaping health outcomes (AHS 2020a).

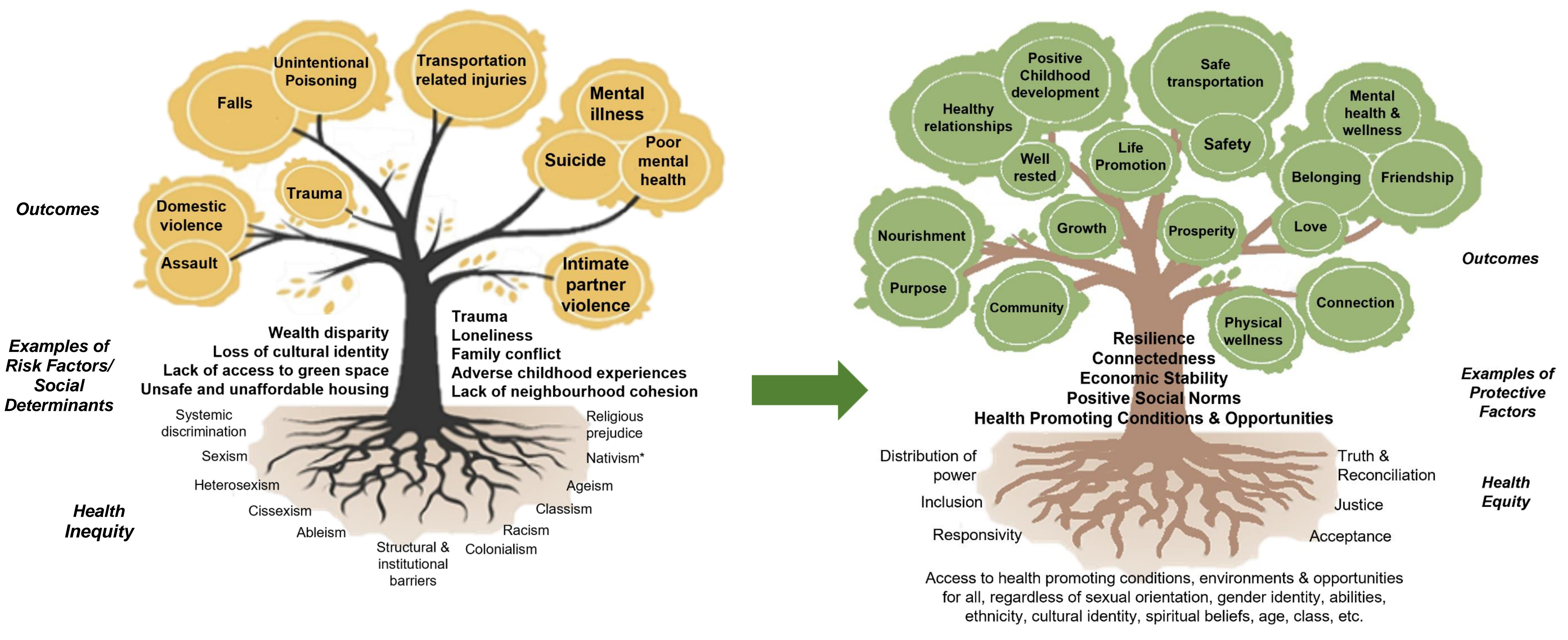
The **distal determinants of health** "have the most profound influence on the health of populations because they represent the contexts [or "roots"] that construct" all other health determinants (Loppie and Wien 2009, p.1 & 20; 2022, p. 15). These "roots", seen in the Equity Tree Model below (Figure 4), include the underlying structures, institutions, and systems that create and sustain inequity and discrimination. These include, but are not limited to racism, heterosexism, ageism, ableism, cissexism, sexism, colonialism (Health Canada 2020; Loppie and Wein 2009, 2022; Sanusi n.d.) and 'nativism'[14] (RACE.ED 2022; Newth 2021).

[14] 'Nativism' is a racist and xenophobic discourse. It has an exclusionary vision of 'the nation' in which the 'native' is constructed as a disadvantaged and threatened 'in-group' and is juxtaposed to a racialized 'non-native', 'foreigner', or 'non-integrated co-citizen.' It ties race and nationality together to portray the 'native' as a disadvantaged group being exploited by 'non-natives' (RACE.ED 2022 & Newth).

It is especially important to recognize the *intersectionality* of these distal determinants (Crenshaw 1991; Hanivsky and Christoffersen 2008), that is, “how a person’s experience is influenced by the interplay of multiple interconnected systems of privilege and oppression (i.e., the distal determinants of health) rather than by any single system or aspect of their identity alone” (Egale Canada n.d.). For example, reflecting on the Equity Tree Model below (Figure 4), consider potential differences in health equity for someone who identifies as a transgender woman of colour, or an Indigenous youth with a disability, versus a white, settler, middle-class, cisgender, heterosexual, woman. The white, settler, middle-class, cisgender, heterosexual woman may experience inequities due to gender. However, the other individuals may experience inequities and related oppression due to multiple, intersecting root causes (racism, cissexism, colonialism, ableism, ageism) and be potentially impacted or harmed further. These impacts call for a more comprehensive approach to examining and addressing inequities to work more effectively toward equity. How people’s lived experience and identities interface with distal determinants and oppressive structures can lead to better health outcomes for some or worse outcomes for others, simply based on who they are. For example, people with higher incomes are often healthier than those with lower incomes because of factors such as safer neighborhoods and environments, food security, air and water quality, and accessible healthcare services.

The first tree, fed by roots planted in systems of health *inequity* result in poor overall and injury-related health outcomes: more so for some people/populations than others. The second tree, fed by roots planted in health *equity* result in better health outcomes for all people regardless of identity.

Figure 2: The Equity Tree Model



**Nativism is a racist and xenophobic discourse. It has an exclusionary vision of 'the nation' in which the 'native' is constructed as a disadvantaged and threatened 'in-group' and is juxtaposed to a racialized 'non-native', 'foreigner', or 'non-integrated co-citizen.' It ties race and nationality together to portray the 'native' as a disadvantaged group being exploited by 'non-natives' (RACE.ED 2022 & Newth 2021).*

Adapted from Sanusi n.d

Commitment to Action on Health Equity

A commitment to concrete action is required for health equity to be realized in our work and in the lives of the people/populations we serve. Applying a health equity lens and analysis to research, policies, projects, programs, and service is a start. Establishing clear plans for implementing equity-focused work creates meaningful, real-life changes. Commitments to action may include but are not limited to:

- Becoming, through commitment and action, better allies to all people and populations impacted by our work.
- Participating in community-led partnerships.
- Analyzing, understanding, and redistributing power in our work with communities and populations we serve.
- Including community members on advisory committees and project development working groups and committing dedicated time to listening to and integrating their knowledge and wisdom into our work and project/program objectives.
- Embedding anti-oppressive language and practices into all interactions and documents, even when such language may not yet be fully adopted or integrated by all areas of our organizations/institutions.
- Investing in Participatory Action Research.

(Chandanabhumma and Narasimhan 2020; Nixon 2019; Ozer et al 2020)

We can realize the benefits of looking inwardly and changing our approaches and activities, as we aspire to co-create equity for all, together. An injury prevention case study is provided in Appendix 4. It illustrates how an up-steam, equity-focused approach can be applied in practice.

Alignment

High performing health systems around the world are taking active roles in promoting health and advancing health equity to improve health outcomes for the whole population (AHS 2020a). This Pathway includes many key partners across Alberta and Canada, who are invested in this global direction. Additionally, a focus on population health and attention to health equity is consistent with key players locally, as outlined below.

Alberta Health Vision

A population health approach underlies Alberta Health's vision of 'Healthy Albertans in a Healthy Alberta'. As Alberta Health sets policy to realize a sustainable and accountable health system that promotes and protects the health of Albertans, it can advance measures that put better health in reach for everyone in the province.

Alberta Health Services Vision

Achieving the AHS vision, 'Healthy Albertans. Healthy Communities. Together', is the vision that this Pathway also prioritizes. It requires a new focus on shaping the places where people spend their time and the circumstances in which they live. One of four priorities that AHS is focused on is improving patient and population health outcomes.

Provincial Population Public Health (PPPH) Strategic Clinical Network's Transformational Roadmap 2020

The PPPH SCN Transformational Roadmap (Roadmap) provides direction and galvanized action to support AHS in successfully improving population health outcomes. The Pathway used this key document to help shape its strategy and direction. There are key similarities between the Pathway's and Roadmap's approach, strategies, and focus, namely the use of a population health approach, strategies from the Ottawa charter, focus on "places" or settings, working across the lifespan, and attention to health equity. Finally, this Pathway clearly articulates the same vested interest in and commitment to partnership work with the PPPH SCN, the Alberta Healthy Communities approach, other AHS departments and teams, and external partners.

Moving Forward

Unintentional injury, suicide, and violence are critically impacting Albertans. Injury takes a toll on individuals, families, and communities. Injury is associated with significant trauma, death, and disability as well as economic costs. Committed partners understand this burden and prioritize innovative and effective strategies to prevent injury.

The approach outlined in this Pathway prioritizes populations and initiatives across Albertans' lifespans in multiple domains. It recognizes the importance of community identified and led work, centered in health equity. It moves away from a focus on what is not wanted and instead focuses on what is desired – protective and health promoting factors. These factors include equitable access to health and wellbeing, meaningful social connections, positive social norms, health-promoting conditions and opportunities, economic stability, and resilience.

This approach leverages resources and partnerships across Alberta to achieve these protective and health promoting factors. This work is broad and wide-reaching and calls for collaboration and shared responsibility – this means to reach out to partners actively and consistently and align work where possible. This also means working to scope as detailed in the partnership section. We know that most unintentional injuries, suicide, and violence are preventable. We know that collectively, we can make a difference. Albertans can live free from injury and thrive in safe, caring, and connected communities.

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Appendix 1 - Pathway Snapshot

Unintentional injuries, suicide, and violence are common and costly. "Injuries are the leading cause of death for Albertans one to 44 years of age and claim more children's lives than all other causes. The good news is that most unintentional injuries, suicide, and violence are preventable. By collaborating with partners, focusing on population health, attending to health equity, and managing risk and protective factors across the lifespan, injuries can be reduced and prevented where people are born, grow, live, work and play.

1. **We will understand the burden of injury through**
   - Surveillance and injury trends
   - Research based evidence
   - Evaluation
   - Staff, community, and stakeholder competencies (i.e., knowledge, skills, and expertise)
   - Networks and communities of practice

2. **To take a Population Health Approach with attention to health equity and a focus on**
   - Addressing the social determinants of health
   - Working within our spheres of influence to act on underlying systems of oppression (racism, colonialism, sexism, heterosexism, cissexism, ableism, etc.,) that produce health inequities

3. **To implement these strategies**
   - Building healthy public policy
   - Strengthening community action
   - Creating supportive environments
   - Developing personal skills
   - Reorienting health services

4. **Through collaboration with partners such as**

- AHS Zone teams
- AHS Provincial teams
- Community organizations
- Indigenous (First Nations, Métis, and Inuit) partners
- Government of Alberta (e.g., Health, Education, Children's Services, Seniors, Community and Social Services, Treasury Board and Finance)
- Municipal governments
- Local coalitions and advocacy groups
- Provincial academic and non-profit partners
- Provincial and national business and industry partners
- National non-profit partners
- Community members of all ages across their lifespans

5. **To Address Risk and Protective Factors in these Domains**

- Individual
- Relationships
- Community
- Society
- Built & Natural Environment

6. **To support Albertans to**

- Connect with caring networks and communities that support healthy and safe behaviours
- Have positive social norms about
    - Help-seeking behaviours
    - Making safe and healthy decisions
    - Violence, suicide, and unintentional injury prevention as a community responsibility
    - Gender
    - Culture

- Have access to safe and culturally appropriate social, health and mental health resources and services,
- Experience the conditions and opportunities that make health-promoting behaviours easier and more accessible,
- Experience economic stability through policies that support health, safety, and families, and
- Build and maintain individual and community resilience:
    - Through and beyond challenging life situations or events.
    - With the skills to advocate for needs.
    - Through individual and collaborative problem solving.

7. And ultimately contribute to reducing or preventing

- Unintentional Injury
- Suicide
- Violence

For all Albertans across their lifespans.

Emergency Department/Urgent Care Visits: Top 10 Injury Types for 2020 by age group, Count (Crude Rate per 100,000)

Appendix 2

	0-4 Years	5-9 Years	10-14 Years	15-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75+ Years
1	Fall 13664 (5084.7)	Fall 11199 (4044.0)	Fall 12489 (4578.2)	Fall 14056 (2714.7)	Fall 13409 (1943.1)	Fall 12914 (1831.5)	Fall 12868 (2290.8)	Fall 16466 (2965.3)	Fall 13240 (3596.1)	Fall 21024 (8789.8)
2	Natural/ Environment 5185 (1929.5)	Struck by object/ person 4814 (1738.4)	Struck by object/ person 7205 (2641.2)	Struck by object/ person 10941 (2113.1)	Cut/ Pierce 8758 (1269.2)	Cut/ Pierce 7593 (1076.9)	Cut/ Pierce 5280 (940.0)	Cut/ Pierce 4541 (817.8)	Cut/ Pierce 7822 (645.6)	Natural/ Environment 1440 (602.0)
3	Struck by object/ person 5048 (1878.5)	Transportation 2625 (947.9)	Transportation 4188 (1535.2)	Transportation 10430 (1498.3)	Struck by object/ person 8550 (1239.0)	Struck by object/ person 7182 (1018.6)	Struck by object/ person 4711 (838.7)	Struck by object/ person 4254 (702.5)	Natural/ Environment 1978 (614.1)	Struck by object/ person 1415 (490.4)
4	Cut/ Pierce 1265 (470.7)	Natural/ Environment 2537 (916.1)	Cut/ Pierce 2167 (794.4)	Cut/ Pierce 5981 (1385.5)	Transportation 7220 (1046.3)	Transportation 6031 (855.3)	Transportation 4514 (803.6)	Natural/ Environment 3636 (702.2)	Transportation 2011 (475.9)	Cut/ Pierce 879 (425.6)
5	Burn/ Scald 997 (371.0)	Cut/ Pierce 1729 (624.4)	Overexertion/ Strenuous movement 2015 (738.7)	Natural/ Environment 4402 (850.2)	Natural/ Environment 6114 (886.0)	Natural/ Environment 5277 (748.4)	Natural/ Environment 4357 (775.6)	Transportation 3567 (642.4)	Struck by object/ person 1365 (470.4)	Transportation 807 (337.4)
6	Accidental Poisoning 873 (324.9)	Overexertion/ Strenuous movement 594 (214.5)	Natural/ Environment 1527 (559.8)	Overexertion/ Strenuous movement 5248 (773.5)	Assault & Homicide 4424 (641.1)	Overexertion/ Strenuous movement 3783 (536.5)	Overexertion/ Strenuous movement 2882 (513.1)	Overexertion/ Strenuous movement 2322 (418.2)	Overexertion/ Strenuous movement 1117 (303.4)	Suffocation, undetermined intent 913 (305.6)
7	Transportation 811 (301.8)	Burn/ Scald 275 (99.3)	Suicide/Self-Harm 671 (246.0)	Assault & Homicide 2929 (703.8)	Overexertion/ Strenuous movement 4069 (589.6)	Assault & Homicide 3202 (454.1)	Accidental Poisoning 1768 (314.7)	Accidental Poisoning 1173 (211.2)	Accidental Poisoning 505 (137.2)	Overexertion/ Strenuous movement 358 (263.8)
8	Overexertion/ Strenuous movement 700 (260.5)	Accidental Poisoning 138 (49.8)	Assault & Homicide 284 (104.1)	Suicide/Self-Harm 3313 (550.8)	Accidental Poisoning 3792 (549.5)	Accidental Poisoning 2904 (411.8)	Assault & Homicide 1710 (304.4)	Assault & Homicide 920 (165.7)	Suffocation, undetermined intent 299 (81.2)	Accidental Poisoning 209 (141.7)
9	Suffocation, undetermined intent 155 (57.7)	Assault & Homicide 93 (33.6)	Accidental Poisoning 272 (99.7)	Accidental Poisoning 1674 (496.7)	Suicide/Self-Harm 2625 (204.9)	Burn/ Scald 1175 (166.6)	Burn/ Scald 822 (146.3)	Burn/ Scald 636 (114.5)	Burn/ Scald 395 (80.9)	Burn/ Scald 296 (70.7)
10	Assault & Homicide 88 (32.8)	Machine Related 52 (18.8)	Burn/ Scald 254 (93.1)	Burn/ Scald 1181 (228.1)	Burn/ Scald 903 (202.2)	Suicide/Self-Harm 826 (117.1)	Suicide/Self-Harm 730 (98.1)	Machine Related 539 (97.1)	Machine Related 245 (68.4)	Machine Related 88 (55.6)
Total	**2895 (10754.8)**	**24095 (8708.5)**	**31072 (11446.5)**	**60155 (11514.6)**	**59864 (8773.5)**	**50887 (7387.8)**	**39642 (7188.7)**	**38054 (6964.7)**	**28977 (6569.9)**	**27429 (11572.2)**

Hospitalizations in Alberta: Top 10 Injury Types for 2020 by age group, Count (Crude Rate per 100,000)

	0-4 Years	5-9 Years	10-14 Years	15-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75+ Years
1	Fall 220 (81.9)	Fall 300 (108.3)	Fall 270 (99.0)	Suicide/Self-Harm 610 (117.8)	Fall 749 (108.5)	Fall 989 (104.3)	Fall 1242 (221.1)	Fall 2317 (417.3)	Fall 2952 (801.8)	Fall 8519 (3561.7)
2	Natural/ Environment 134 (49.9)	Transportation 119 (43.0)	Transportation 187 (68.6)	Transportation 554 (107.8)	Transportation 642 (93.0)	Transportation 568 (80.6)	Transportation 507 (90.3)	Transportation 547 (98.5)	Suffocation, undetermined 766 (208.0)	Suffocation, undetermined 1918 (801.9)
3	Accidental Poisoning 85 (31.6)	Natural/ Environment 67 (24.2)	Suicide/Self-Harm 158 (57.9)	Fall 532 (102.8)	Assault & Homicide 391 (56.7)	Assault & Homicide 320 (45.4)	Suffocation, undetermined 274 (48.8)	Suffocation, undetermined 458 (82.5)	Transportation 337 (91.5)	Transportation 255 (106.6)
4	Burn/ Scald 62 (23.1)	Struck by object/ person 42 (15.2)	Struck by object/ person 60 (22.0)	Assault & Homicide 247 (47.7)	Accidental Poisoning 336 (48.7)	Accidental Poisoning 247 (35.0)	Accidental Poisoning 273 (48.6)	Accidental Poisoning 266 (47.9)	Accidental Poisoning 182 (49.4)	Accidental Poisoning 156 (65.2)
5	Suffocation, undetermined 42 (15.6)	Cut/ Pierce 17 (6.1)	Natural/ Environment 34 (12.5)	Accidental Poisoning 187 (36.1)	Suicide/Self-Harm 327 (47.4)	Suicide/Self-Harm 238 (33.8)	Suicide/Self-Harm 203 (36.1)	Natural/ Environment 156 (28.1)	Natural/ Environment 123 (33.4)	Natural/ Environment 106 (44.3)
6	Struck by object/ person 42 (15.6)	Burn/ Scald 16 (5.8)	Cut/ Pierce 28 (10.3)	Struck by object/ person 122 (23.6)	Natural/ Environment 131 (19.0)	Suffocation, undetermined 148 (21.0)	Assault & Homicide 159 (28.3)	Suicide/Self-Harm 155 (27.9)	Suicide/Self-Harm 65 (17.7)	Struck by object/ person 92 (38.5)
7	Transportation 34 (12.7)	Accidental Poisoning 13 (4.7)	Accidental Poisoning 24 (8.8)	Cut/ Pierce 82 (15.8)	Cut/ Pierce 118 (17.1)	Overexertion/ Strenuous movement 114 (16.2)	Natural/ Environment 121 (21.5)	Assault & Homicide 119 (21.4)	Overexertion/ Strenuous movement 61 (16.6)	Suicide/Self-Harm 54 (22.6)
8	Cut/ Pierce 11 (4.1)	Suffocation, undetermined 7 (2.5)	Burn/ Scald 18 (6.6)	Natural/ Environment 62 (12.0)	Struck by object/ person 114 (16.5)	Struck by object/ person 111 (15.7)	Overexertion/ Strenuous movement 99 (17.6)	Struck by object/ person 82 (14.8)	Struck by object/ person 57 (15.5)	Overexertion/ Strenuous movement 51 (21.3)
9	Assault & Homicide 11 (4.1)		Overexertion/ Strenuous movement 14 (5.1)	Overexertion/ Strenuous movement 55 (10.6)	Suffocation, undetermined 113 (16.4)	Cut/ Pierce 105 (14.9)	Struck by object/ person 96 (17.1)	Burn/ Scald 67 (12.1)	Burn/ Scald 46 (12.5)	Assault & Homicide 35 (14.6)
10				Suffocation, undetermined 48 (9.3)	Overexertion/ Strenuous movement 84 (12.2)	Natural/ Environment 102 (14.5)	Cut/ Pierce 72 (12.8)	Overexertion/ Strenuous movement 66 (11.9)	Assault & Homicide 43 (11.7)	Burn/ Scald 34 (14.2)
Total	**641 (240.0)**	**582 (213.8)**	**793 (298.8)**	**2292 (505.1)**	**2666 (463.3)**	**2681 (442.0)**	**3046 (567.0)**	**4175 (787.9)**	**4617 (1273.6)**	**11196 (4704.3)**

Appendix 3 - Examples of the Population Health Approach to Injury Prevention

1. Walk with the Mayors is an annual community event hosted in the town of Penhold and organized by the Central Alberta Falls Prevention Coalition (CAFPC) which is comprised of several partners, including Alberta Health Services (AHS) Public Health and Allied Health, the Wolf Creek and Red Deer Primary Care Networks, Golden Circle, the City of Red Deer, several Family and Community Support Services (FCSS), Lifeline and citizens at large. It was organized to draw attention to the serious issue of older adult falls. To learn more about this event visit the Alberta Health Services' Healthier Together website.

2. Move Your Mood is a research-based program that promotes physical activity and healthy lifestyle practices to improve the mental and physical well-being of participants. The AHS Prevention & Promotion Central Zone team works with identified communities to establish partners that want to assist in the delivery of Move Your Mood programs.

3. Together to Live (TTL) guides communities through developing, implementing, and evaluating a community suicide prevention plan. This process encourages a wide range of community members to come together in creating the plan and looks at shared goals across the community to reduce suicide and promote positive mental health (CSP n.d.). Currently, staff from North and Central AHS Zones are participating in the TTL Task Group with Provincial Injury Prevention staff and staff from the Centre for Suicide Prevention. The purpose of the TTL Task Group is assess whether the TTL *Make a Plan* resources meet the needs of Alberta communities and, if so, provide support to use them. In addition, members of the Vermilion Area Mental Health Strategy and the Regional Suicide Prevention Council: East Central Alberta are currently using aspects of TTL in their current work.

4. Community Helpers Program is a mental health promotion and suicide awareness peer support program for youth and young adults ages 12-30. Delivered in community-based settings (e.g., schools) participants take training to learn how to help friends when they are struggling, what community resources are available to refer friends to, how to set boundaries when helping and the importance of self-care (AHS n.d.).

5. Elementary Road Safety is a program designed to make school communities safer by implementing evidence-based solutions that will address issues within each community that adopts the program (Parachute 2020).

6. For Seniors by Seniors: Community Conversations is a project that aims to create a virtual gathering space connecting seniors with each other and experts to address the issues that matter most to them when it comes to aging in place healthily and safely (Parachute 2020).

7. IMPACT is a provincial collective impact initiative whose purpose is to define a common understanding of the issue of domestic and sexual violence (DSV) and then to eradicate it. Through identifying what drives and contributes to violence, it can be stopped before it begins. The initiative relies on a collective infrastructure to address complex social issues and create deep, sustainable change (IMPACT n.d.).

8. Living Hope: A community plan to prevent suicide in Edmonton was developed by a committee of organizations and individuals who believe that suicide can be prevented in Edmonton. The plan aims to bring the community significantly closer to preventing suicide in Edmonton which will position Edmonton as a leader in suicide prevention.

9. Safe Routes to School (SRTS) encourages increased student physical activity through safe and active transport to and from school. It promotes walking, cycling, or other forms of active transportation among students and their families. SRTS can include educating the community and improving the built environment to ensure safe places for children and adolescents to walk and bike to and from school. Key elements of SRTS include:
   - City planning and engineering approaches to transportation that address built environment needs and ensure safe conditions for walking and biking
   - Tools, guides, and resources to encourage participation in safe and active transport
   - Educational activities for students, parents, and community members about rules of the road and traffic safety
   - Enforcement approaches to encourage safety and reduce unsafe behaviors among drivers, bicyclists, and pedestrians
   - Evaluation activities to monitor and measure the impact of these programs

   (CDC 2018)

10. Strengthening Opportunities for Adolescent Resilience, Inclusion and Growth (SOARING) is a community funding pilot prioritizing youth. It is funded by AHS PIP and it is currently in the first year of implementation. SOARING aims to:
    - Increase access and availability of funding for youth-led initiatives to identify and address risk and protective factors that help youth live healthy, safe, and active lives.
    - Support local youth to bring their ideas to life and benefit the community.
    - Strengthen current partnerships and encourage new collaboration among community partners to build youth capacity.

Healthy, safe and active lives can be achieved, and injuries can be reduced among youth by strengthening opportunities for resilience, inclusion and growth (AHS 2022).

11. Systematic approach to achieving population – level impact in injury and violence prevention provides a high-level overview of a systemic approach to population-level injury and violence prevention and how it is being developed and explored by the National Center for Injury Prevention and Control at the Centers for Disease Control and Prevention. It outlines the benefits of shifting toward a systemic change approach to population health in violence and injury prevention, with multiple partners and community members at the center of change that creates buy-in and solutions, vs. application of top-down, research-to-practice, standardized approaches that ultimately might not fit for the issue at hand and the people most affected (Smith et al 2020).

12. Vision Zero is a multi-national traffic safety initiative, founded in Sweden in the late 1990s. It’s based on the philosophy that no one should be killed or seriously injured within the road transport system. Ultimately, the main goal of Vision Zero is to achieve zero fatalities or serious injuries on the road (Parachute 2020). Key activities include:

    - Advocacy for policy change
    - Enhanced regulation and enforcement
    - Raising public awareness and commitment to road safety
    - Road infrastructure changes

Appendix 4 - Equity in practice: An injury prevention example

Lack of use and improper booster seat use is found to be the highest in Alberta in the community of “ABCD.” A team of injury prevention specialists from “Wow Prevention” are tasked to raise awareness and uptake of safe car/booster seat use in the community. Below are two examples of what the team of injury prevention specialists could do.

Option A:

1. Review existing resources that outline proper booster seat use and why safe car/booster use is important.
2. Conduct an environmental scan or evaluation to determine accessibility and discover who can and who cannot access booster seats.
3. Depending on what exists either replicate, adapt, or create a suite of evidence-based resources that outline the proper way to install and use car/booster seats (e.g., presentations, print brochures, etc.) and translate, if necessary. Develop car/booster seat safety check initiative.
4. Engage with local health professionals to request their support to disseminate the print resources and to facilitate presentations to the community, or to participate in safety check initiatives (as entry points to share information/education and increase awareness).
5. Create a pre/post survey to track the uptake of the resources, attendance at the presentations, and/or improvements in safety check outcomes.

Or

Option B:

1. Use data to see where there may be gaps and challenges in safe car/booster seat use.
2. Regularly evaluate WOW Preventions’ policies and procedures to understand where internal barriers to equitable car/booster seat access and use may originate.
3. Ask if and how communities would like to engage to discuss safe car/booster seat use.
4. Led by the community,
    a. seek to understand the issue from perspective community members and leaders,
    b. ask to understand barriers and potential facilitators for safe car/booster seat use,
    c. learn about viable community-led solutions and find out what is meaningful, relevant and/or concerning to the community.

5. Identify where health inequities may be present and require support, advocacy, and action for change. Consider
    a. If the community has experiences of discrimination and oppression by systems and institutions (e.g., first responders, public health, social services, etc.,). This matters as it can be a significant barrier to engagement with solutions. For example: a community that has experienced discrimination and oppression, may not feel safe attending a car/booster seat installation session led by first responders. Nor may they want information branded with a public health logo.
    b. The location and time of interventions (e.g., presentations, car/booster seat installation sessions), they should be easily and safely accessible during times that work for community members.
    c. If people have a car/booster seat, do they also have the installation information in the language they use.
    d. If people have what is required to safely install a car/booster seat. For example, anchors are required to secure some seats; older cars may not have these.
    e. Why some people may use handed down “expired” or ineffective car/booster seats. For example, socioeconomic factors such as affordability may be an issue. Think about what it means to have the privilege of time, money, energy, and support to prioritize attendance at a car seat installation session.
    f. What systemic privileges and biases exist within WOW Prevention that may show up in solutions offered and perpetuate stigma and discrimination.
6. Raise awareness of the greater burden of injury with trusted community leaders (e.g., municipal leaders, elders, faith-based leaders, neighborhood and cultural group leaders, etc.) and community members at large, based on what is relevant and meaningful to the community. Ask community engagement questions and act accordingly. Consider
    a. What would allow the community or “population” to take action more easily toward car/booster seat safety in their own lives? Support actions that integrate local data, ways of knowing and learning, communal wisdom, etc., to address the inequality that is causing disadvantage or barriers.
    b. What might require advocacy on the part of WOW Prevention? What role might they have in advocating to partners such as government agencies and car seat retailers related to access and affordability.
    c. What might this collaborative, community engagement and relationship-building effort offer going forward?

Consider:

Neither A nor B is incorrect. Option A may be appropriate in certain contexts, such as when focused mobilization and reasonably quick action using existing, available print, online and human resources is needed. However, as an upstream approach, Option B shifts the problem from individual behaviors to the social environment and it addresses assumptions of who is the expert in solving the problem (i.e., the people most affected by the injury mechanism of concern). Option B also creates the opportunity to mobilize action and increase equity by removing barriers to health and safety, by using existing community knowledge, skills and expertise to create more relevant, meaningful, and lasting engagement in injury prevention and health-promoting opportunities. This sort of community-led approach can develop trust and ultimately lend to more sustainable, collaborative primary prevention approaches, strategies, and partnerships for ongoing equity-centered injury prevention/health-promoting opportunities. Option A may also be appropriate when the foundation work outlined in option B is complete.