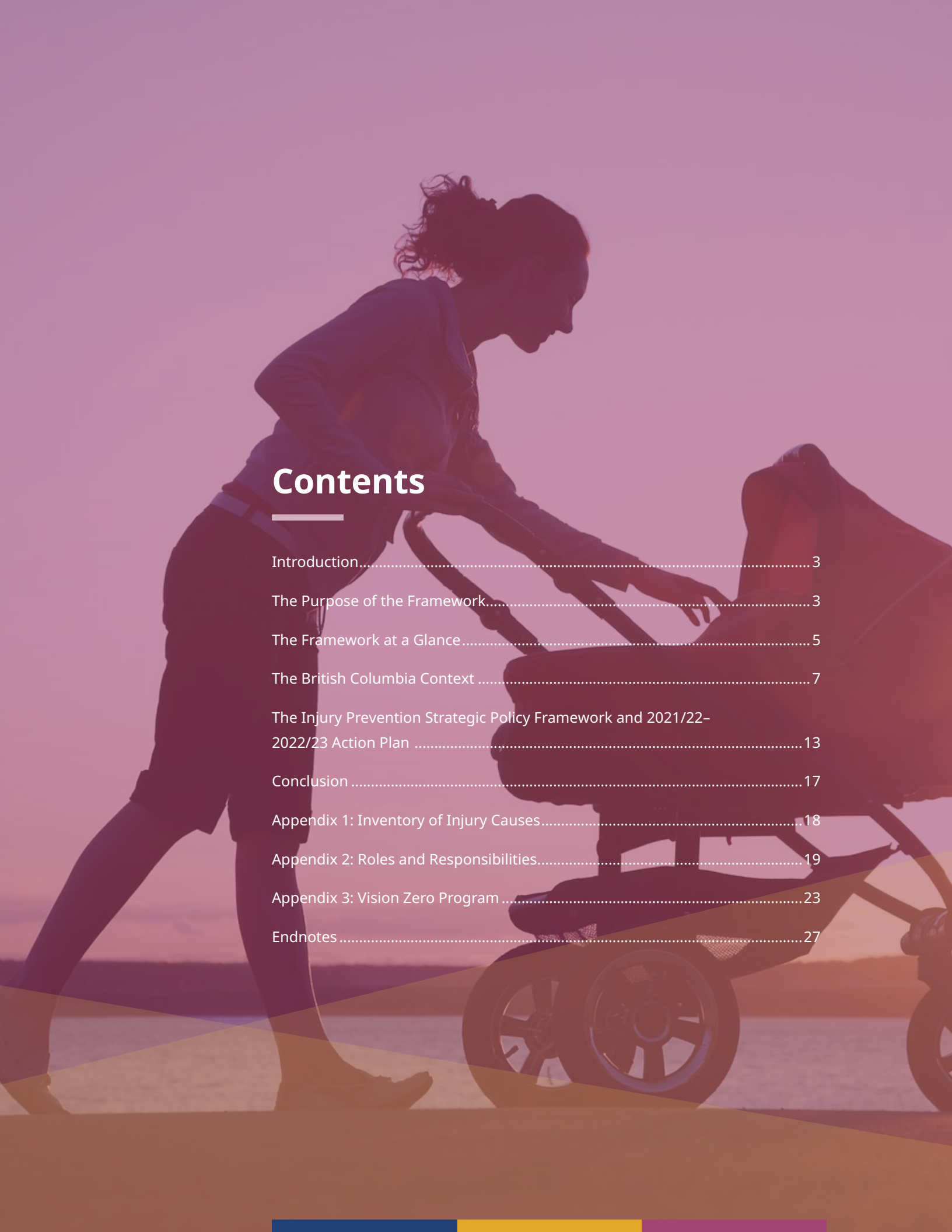
# Injury Prevention Strategic Policy Framework

2021/22 to 2022/23 Action Plan

November 1, 2021

BRITISH COLUMBIA



# Contents

# Introduction

**FACT:**

**Injuries are the leading cause of death for British Columbians aged 1 to 44.**

Injury prevention is a key pillar and has a long history in public health. What is more, is that most injuries are predictable, and researchers estimate that 90 percent of injuries can be prevented if evidence-based interventions are implemented.[1] Unintentional and intentional injury is one of the leading causes of disability, hospitalization and avoidable mortality in the province. At the same time, injury is a significant issue in society and comes with a significant cost – at the individual, family, community and societal levels. Injuries occur across the whole of the life course and in virtually every setting, and inequitably impacts certain groups such as children and young people, older adults, people at the lower end of the socioeconomic spectrum, people in rural and remote areas and Indigenous peoples. There is a large body of scientific evidence supporting the effectiveness of interventions that exist to prevent injuries and injury severities; many of which are low-cost and generate substantial returns on investment.[2 3 4] As well, injury prevention interventions often generate near immediate outcomes, leading to short-term cost savings and a reduced overall burden on society.

# The Purpose of the Framework

**THE FRAMEWORK:**

**A blueprint for action**

The Injury Prevention Strategic Policy Framework and 2021/22 to 2022/23 Action Plan ('The Framework') provides a blueprint to define and guide priorities; guide actions; identify partner and stakeholder roles and responsibilities; and provide a roadmap for a consistent, coordinated and integrated approach to injury prevention across the health system and the province.

The Framework is also intended to support provincial responsiveness to changing conditions. Restrictions associated with the covid pandemic, for example, created complex unintended impacts on injury patterns: some types of injuries and deaths temporarily declined while others are increased.[5] In the future, other public health emergencies may also impact the injury prevention environment. The Framework will therefore remain nimble and responsive to changes over time and may not reflect every topic that is being worked on at any given time.

The practice of injury prevention reflects the reality that injuries are ultimately preventable, and with the right mix of evidence-based interventions, the burden on society, including significant health care costs, can be avoided with minimized pressure on the health system. At the same time, it is important to address the inequities in injury where lower socio-economic groups, children and young people, older adults and Indigenous peoples are significantly over-represented. People living in rural and remote areas are also more affected by injury in part because of emergency response times and access to health care. Actions under this Framework will include the provision of support to injury prevention priorities of the First Nations Health Authority (FNHA) and Métis Nation British Columbia. The overall goal of the Framework is to direct, engage and guide the health system and key British Columbia government ministries and stakeholders to contribute to significant reductions in injuries while alleviating inequities in the incidence of injury.

As such, the Framework:

1. Provides a vision for shared responsibility among key partner ministries and stakeholders in order to leverage the full potential of the province,
2. Sets out a foundation for injury prevention policy and priorities based on the Ministry's three tiers of data, evidence and best practice as well as taking into consideration factors such as implementation feasibility and synergy with other cross-government priorities, and
3. Establishes a formal basis for setting policy direction to the health sector which includes regional health authorities and the Provincial Health Services Authority (PHSA) while collaborating with the FNHA and other health partners.

# The Framework at a Glance

| | |
|---|---|
| Objectives | • To reduce the frequency and severity of serious injury<br>• To improve the lives of British Columbians<br>• To reduce injury inequities including those experienced by Indigenous communities and others<br>• To reduce unnecessary impacts on the health system |
| Strategies | • Direct the health system<br>• Work across all of government<br>• Support FNHA injury prevention priorities |
| Key Priority Areas (2021-2023) | • **Newborns, Children and Youth:** Protect newborns, children and youth by reducing the incidence and severity of Traumatic Head Injury due to Child Maltreatment (THI-CM) and through enhanced concussion management including increasing prevention, awareness and early identification<br>• **Youth suicide and self-harm:** Support changes to address this public health issue, e.g., support the development of a provincial Suicide Prevention Strategy currently in the early stages of development by the Ministry of Mental Health and Addictions and/or take other actions as identified.<br>• **Adults and All-Ages:** Protect the most vulnerable road users in all transport settings through evidence-based safety initiatives (e.g., Vision Zero and linked data research to inform practice) and enhanced injury surveillance capabilities<br>• **Seniors:** Protect older adults in the community by advancing a provincial seniors' falls prevention strategy<br>• **Indigenous Communities:** Better protect Indigenous people from the inequitable harms of injury through enhanced engagement with FNHA, Indigenous communities and other key Indigenous stakeholder organizations |
| Tactics | • Employ multiple tools of influence in the context of a systems approach<br>• Tailor interventions to the stages of the life course<br>• Deliver in key settings<br>• Focus actions to address injury disparities that exist in rural and remote communities |
| Principles | • Address injury inequities<br>• Set direction based on the three tiers of data, evidence and best practice<br>• Utilize a partnership-based approach |

**Cornerstones of injury prevention priority-setting:**

1. **Data Driven:** Data analysis to determine which mechanisms of injury are leading causes of health system usage,
2. **Evidence Informed:** Understanding the evidence that supports the effectiveness, cost and feasibility of an array of available interventions, and
3. **Best practice driven:** Investigating best practices in other jurisdictions to learn what is already working and what elements can be applied in the BC context.

**What it means to employ a safe system approach:**

In the real-world, safety is rarely achieved through a single measure. Instead, better safety involves various partners working together to build in multiple layers of protection across the whole system using multiple tools such as legislation, policy, direction to the health system, program development, funding and education and awareness measures.

**How priorities are set:**

To establish priorities, the Ministry – in concert with its health sector partners – uses the three cornerstones of data, evidence and best practice by using data to define the problem, reviewing evidence to decide on interventions with the greatest efficacy and gauging best practice to ensure real-world implementation feasibility, acceptability and evaluability. In addition, current synergies with cross-government activities, pre-existing priority-setting work, implementation-capacity and other factors are also considered.

## Who do injuries impact?

**Unintentional injury deaths are 2.7 – 3.5 x** for First Nations, Inuit and Métis peoples.

**Unintentional injury deaths are 2.5 x** for those in the lowest income quintiles compared to those in the highest quintiles.

# The British Columbia Context

### COSTS:

**In BC, the estimated cost of injuries is approximately $4.1 billion, increasing to more than $9 billion when the direct cost of injuries incurred by ICBC and WorkSafeBC are included.**

This is equivalent to:

- $1,027,397 per hour, or
- $17,123 per minute.

Injury is the number one cause of death for people age 44 and under across Canada.[6] In British Columbia in 2018, due both to unintentional and intentional injuries, there were 2,669 deaths; 33,256 persons hospitalized; 614,866 ER visits; and 8,753 resulting cases of permanent disability.[7]

Direct health system costs due to injury alone were estimated at $2.7 billion (over 12% of the total BC Health budget), and about 64 percent of the total economic burden of injury in the province which is estimated to be $4.3 billion annually.[8] Of the $2.7 billion in direct health care costs, $652 million was for both inpatient and outpatient services for permanent disability cases[9] and seniors falls alone account for over $962 million annually in BC direct health care costs (over 67% of the costs for falls among all ages).

With respect to the total burden of illness and injury in British Columbia, the contribution of injury-related death is approximately 7 percent.[10] If health care costs from ICBC and WorkSafeBC are added to the total cost of injury, the total economic burden of injury in BC would be approximately $9 billion a year, which amounts to $1.027 million per hour or $17,123 per minute.[11]

## Definition of Injury and Injury Types

Injury prevention is a broad and wide-ranging field and its consequences are vast and often not fully appreciated or adequately measured. As such, it is worthwhile to first visit the definitions of both injury and safety in order that its breadth is fully understood.

**Injury** is defined as bodily harm resulting from a sudden transfer of energy that exceeds the human body's capacity for resistance. The energy transferred is most often mechanical, but may also be thermal, electrical, chemical, radiant or other forms of energy. Injuries can also result from a sudden loss of energy or an element vital to life, such as air.[12]

**Safety** is defined as a state in which the dangers and conditions that could cause physical, psychological or material harm are controlled in a manner to preserve the health and well-being of individuals and the community. It is an essential resource of daily life that permits an individual and the community to achieve health and wellness.[13]

Injuries may result in death or harm that is permanent or temporary in nature. In the context of public health, injury prevention comprises identification and assessment of injury cases, risk and protective factors, mechanisms, and injury impacts as they affect individuals, communities and society. In public health, injuries are classified as either intentional or unintentional. The majority are unintentional. The term covers a broad grouping of instances of immediate bodily harm to individuals where the circumstances were accidental in nature. Intentional injuries, on the other hand, involve deliberate actions to harm oneself or another person and include suicide and self-harm, domestic abuse, and homicides. Despite this delineation, both types of injuries can involve complex behavioural, social and built environment factors that at times blur this dichotomy. As such, all actions within injury prevention are determined from this broad spectrum of injury types following strategic and evidence-based policy analysis (For a full list of injury causes, see Appendix 1).

**Addressing Inequity:**

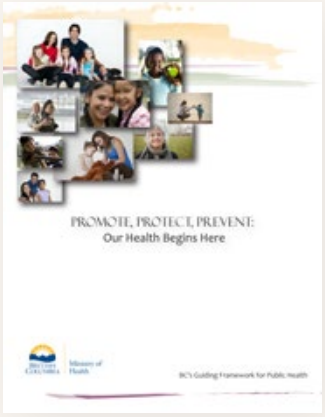
**Evidence shows that injuries overwhelmingly and disproportionately impact children and young people, older adults, people at the lower end of the socioeconomic spectrum and Indigenous peoples.**

Addressing early mortality, injuries, disabilities, illnesses and inequities is fundamental to population and public health the world over. Important priorities of the Ministry are the need to address and reduce the number and severity of injuries and number of deaths from all causes in order to maximize people's health and well-being while minimizing pressure on the health system and reduce costs that will ultimately support a more affordable and sustainable health care system.

To achieve this, it is recognized that injury prevention is embedded in the mandates of many British Columbia government ministries, First Nations governments, local governments and the federal government. In order for the Ministry to direct and influence injury prevention work effectively, there is a need for a coordinated and consistent provincial approach which the Framework represents.

## How the Framework Links to Other Priorities

For injury prevention in British Columbia, several key strategic resources are linked to and support the Framework:




1. *Promote, Protect, Prevent: Our Health Begins Here. BC's Guiding Framework for Public Health* (2013) identifies in Goal 5, Injury Prevention, a set of injury prevention goals and performance measures embodying a multi-sector approach which includes education, enforcement, engineering and environmental design. In addition, Goal 5 includes performance measures which reflect an emphasis on the prevention of all injuries and falls prevention.

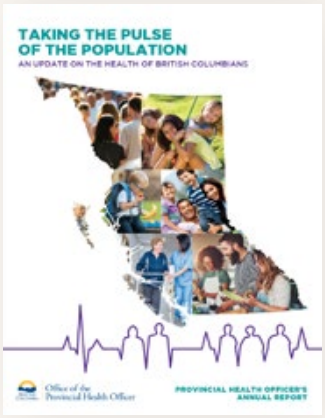
   *Performance measures from the Guiding Framework for Public Health are currently as follows:*

**PERFORMANCE MEASURES**

| MEASURE | BASELINE | 2023 TARGET |
|---|---|---|
| The age-standardized hospitalization rate for unintentional injuries (per 1,000). | 7.7 † (2010/11) | 6.2 |
| The age-standardized mortality rate for unintentional injuries (per 1,000). | 25.5 † (2010) | 15 |
| The age-standardized rate of fall-related hospitalizations for British Columbians aged 75+ (per 1,000). | 28.2 ‡ (2009/10) ‡ | 25 |

† Data source unchanged; updated data available
‡ Data source changed; original source is unknown, is no longer available, or has been replaced.

Source: BC's Guiding Framework for Public Health, Ministry of Health, Updated March 2017.


2. Two reports by the Provincial Health Officer, (1) *Where the Rubber Meets the Road: Reducing the Impact of Motor Vehicles Crashes on Health and Well-being in BC* (2016) and (2) *Taking the Pulse of The Population: An Update on the Health of British Columbians* (2019), each recommends a greater focus on vulnerable road users (pedestrians and cyclists) and the need for provincial strategies and actions to improve the safety of these mode users.

3. A resolution of the Board of the *Doctors of BC*, in 2020, advocates for pedestrian safety in the province with respect to:

   - increased pedestrian safety initiatives and education for all road users, including drivers, cyclists, and pedestrians; and
   - road design and transportation infrastructure that prioritizes pedestrian accommodation and safety

4. Based on input from a number of health sector partners, the BC Injury Prevention Committee identified three top priorities: community-dwelling seniors falls, transport-related injuries and youth suicide and self-harm (see: ***http://www.bccdc.ca/pop-public-health/Documents/bcipc-provincial-injury-prevention-priorities-2017.pdf*** )

## Roles and Responsibilities

It is widely held by international injury prevention practitioners that injury prevention work must be carried out in a coordinated and multi-sector manner. As such it is critical to document the key roles and responsibilities of various entities. These are shown below.

### *Ministry of Health*

The Ministry plays a role on injury prevention by providing health sector leadership; formulating strategic policy; setting priorities; working and coordinating with partners; ensuring a plan for monitoring; directing the health system; and working across all of government. Fundamentally, this means that the Ministry sets direction for the health system and works to influence cross-government priorities and actions to support injury prevention efforts.

### *FNHA and Métis Nation British Columbia (MNBC)*

The FNHA works with First Nations, government partners and others to improve health outcomes for First Nations people. As such it is a key partner in injury prevention that the Ministry works with and supports on an ongoing basis. The MNBC is the governing Métis Nation in BC representing nearly 90,000 self-identified Métis people in BC with over 21,000 registered Métis Citizens. As such, it is also a key partner in injury prevention.

***Regional Health Authorities (RHAs)***

The five regional health authorities (RHA)s are responsible for the implementation of injury prevention priorities. Despite having limited capacity at this time, they remain key partners in the delivery of harm reduction interventions. Importantly, the PHSA has secured new funding as of summer 2021 and is currently hiring injury prevention leads for every RHA. Providing one dedicated position in each RHA will provide the local and regional leadership required for strategic planning, work plan development, and program implementation and evaluation. This expert support will facilitate public health staff to address local, regional, and provincial injury priorities, building off the provincial work and recommendations of the BC Injury Prevention Committee.

At the same time, RHAs have established relationships with local governments and through their ongoing work on Healthy Living Strategic Plans (HLSPs) support a multi-sector approach to injury prevention.

***Provincial Health Services Authority (PHSA)***

The PHSA plans, coordinates and evaluates injury prevention health services in collaboration with the health authorities to provide equitable and cost-effective injury reduction programs for people throughout the province. As such, the PHSA remains a critical partner that the Ministry works within implementing policy direction.

### *Trauma Services BC*

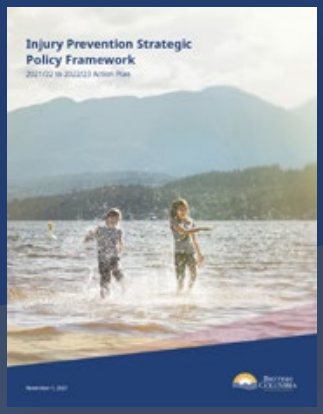
Trauma care programs and networks are key partners in injury surveillance and prevention. Trauma Services BC, in strategic partnership with Regional Trauma Networks and Lead Trauma Hospitals, oversees provincial clinical policy development and implementation, data analytics, reporting, and system-wide integration of services across the continuum of care. This multi-agency provincial approach has many points of leverage in this regard: access to large patient populations and databases defining the burden of serious injuries and their causes; technical expertise in treatment which garners authority and respect from the general public; and the unique opportunity to engage, identify and plan prevention efforts with 'hard to reach' populations that are over-represented in acute care hospital settings.

Trauma Services BC has outlined a provincial Major Trauma Care Tiers of Service (TOS) Framework, intended to provide service delivery expectations for all acute care facilities in BC in the provision of major trauma care. To reflect the full continuum of trauma care, the TOS Framework defines specific injury prevention-related responsibilities for all tiers of service at the local, regional and provincial levels.

These responsibilities include:

- Supporting and endorsing local, regional and provincial injury prevention priorities,
- Participating in advocacy efforts as per identified priorities,
- Participating or leading research in alignment with identified priorities or emerging trends,
- Participating in policy and recommendation development,
- Collecting, sharing, analyzing and reporting trauma related data for injury prevention, and
- Using data to follow up on injury trends and alerting appropriate prevention groups.

Through participation in local, regional and provincial injury prevention activities, the trauma system supports the regional health authorities, the Ministry of Health, and other multi-sectoral stakeholders in implementing injury prevention strategy across BC. (See also Appendix 2 for more details).




# The Injury Prevention Strategic Policy Framework and 2021/22–2022/23 Action Plan

## OBJECTIVE

The objective of the Framework is to reduce the frequency and severity of serious injury, including death, to improve the lives of British Columbians, reduce injury inequities including those found in Indigenous communities and reduce unnecessary impacts on the health system. As such the Framework sets out to achieve this objective through the strategies, key priorities, tactics, and principles enunciated below.

## STRATEGIES

### *Direct the health system*

A primary purpose of the Ministry is to direct the health system and this function can be performed across all the full breadth of the ministry's mandate including injury prevention. This function rests on key phases of work including data, evidence reviews and policy analysis as well as the application of subject matter expertise. Direction to the health system takes the form of the Guiding Framework for Public Health refresh and various policy directives or communiques when needed.

### *Work across all of government*

The World Health Organization recognized long ago that over seventy five percent of the social determinants of health lie outside of the health system and therefore it is critical to ensure a health-in-all-policies approach across the whole of government. Focussing outside of the direct health system is vital if

the majority of the problem is to be addressed and a majority of the solutions are to be implemented. The Framework formalizes collaboration on work that is carried out through other ministries allowing a health lens to be applied while building on key synergies and priorities that exist across all of government.

## KEY PRIORITIES

These priorities reflect research and policy analysis conducted by the Ministry and injury partners including work of the BC Injury Prevention Committee (BCIPC).

### Key Priorities at a Glance

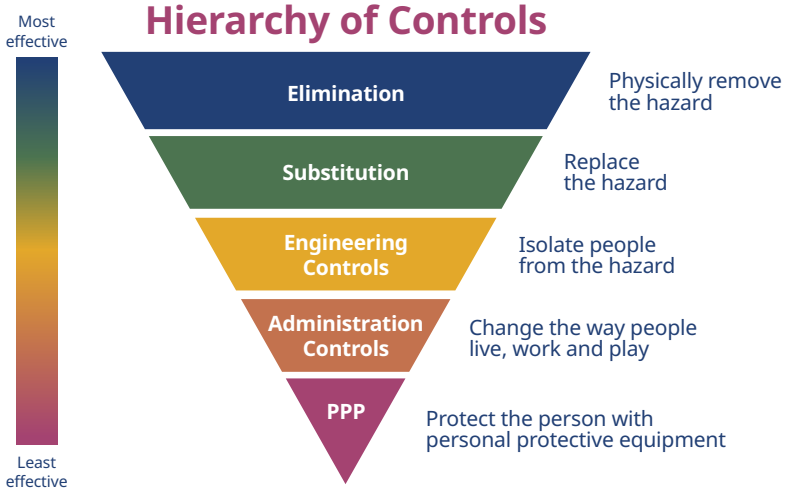
| Population Group | Focus Areas |
|---|---|
| **Newborns, Children and Youth** | 1. Protect newborns, children and youth by reducing the incidence and severity of Traumatic Head Injury due to Child Maltreatment (THI-CM) through enhanced concussion management including increasing prevention, awareness and early identification<br>• Reduce youth suicide and self-harm through the formation of key strategic partnerships including by influencing the development of a provincial suicide prevention strategy |
| **Adults and All-Ages** | • Protect the most vulnerable road users in all transport settings through evidence-based safety initiatives (e.g., Vision Zero and linked data safety research to inform practice) and enhanced injury surveillance capabilities |
| **Seniors** | • Protect older adults living in the community by advancing a provincial seniors' falls prevention strategy |
| **Indigenous Communities** | • Better protect Indigenous people from the inequitable harms of injury through enhanced engagement with FNHA, Indigenous communities and other key Indigenous stakeholder organizations |

Note: See Appendix 3 for more information on the vision zero program.

## TACTICS

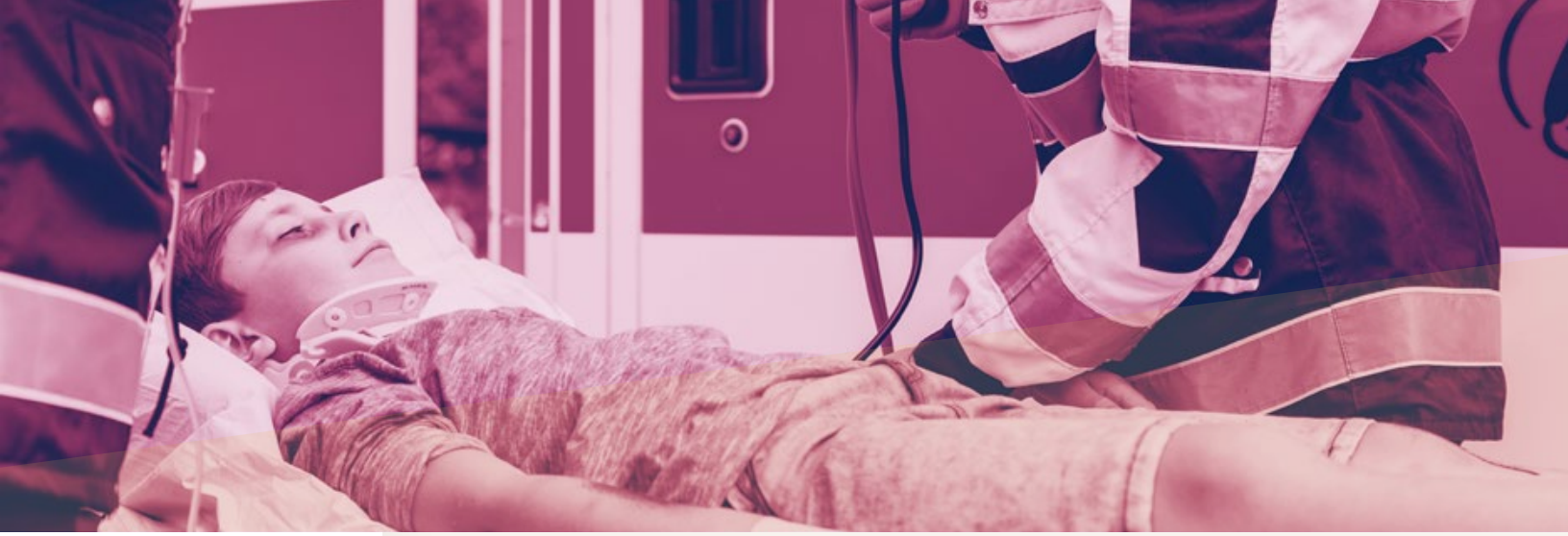
Most unintentional injuries are not the result of a single factor, but rather the result of the interaction of multiple factors (engineering and design, system change, individual behaviour support, etc.), many of which can be subjected to system changes. Different approaches exist to prevent an injury from occurring or reduce the level of injury severity. As such, the Framework will do each of the following.

**Employ multiple tools of influence through a systems approach.**
To build injury prevention efforts systematically across the British Columbia health sector and all of government, the approach must recognize the complex and multi-faceted nature of all injuries and ensure a focus on controls with the highest efficacy (see Hierarchy of Controls) such as the built environment and physical infrastructure. A key component of this is to ensure systematic change through multiple and complementary actions. It requires multiple partners building in safety at all levels of the system. The idea of creating better safety through a safe system approach is well recognized as the leading thinking in the world in injury prevention. A system approach also involves utilization of available tools including legislation, policy, direction, programs, funding and enhanced education and awareness.




**Tailor actions at key stages of the life course.** Reducing the burden of all injuries requires understanding and addressing their causes and consequences across the life course from children to seniors.

**Deliver in key settings.** Injuries can happen anywhere however each setting and mechanism is unique with distinct challenges, circumstances and risks for injury. No single level of government, ministry or organization on its own can support the safety of all people in all settings.



**The inequity of transport injury:** A BC study reveals that people in the lowest employment quantile are seven times more likely to die of a transport-related injury than those in the highest quantile.

**The Injury Prevention Strategic Policy Framework ('The Framework') provides a blueprint to establish priorities; guide actions; identify partner and stakeholder roles and responsibilities; and provide a roadmap for a consistent, coordinated and integrated approach to injury prevention across the health system and the province.**

## PRINCIPLES

### *Address injury inequities*

Evidence shows that injuries overwhelmingly and disproportionately impact children and young people, older adults, people at the lower end of the socioeconomic spectrum and Indigenous peoples. The Ministry of Health provides extensive expertise around inequity and applying a public health lens consistently puts the spotlight on the need to address injury inequities. As such, reducing injury disparities to ensure that the most disadvantaged and under-served groups do not carry a higher burden of injury is critical and represents a moral imperative that the Ministry is uniquely positioned to deliver on.

### *Set direction based on the three tiers of data, evidence and best practice*

In setting strategic direction to the health system, the Ministry uses the three cornerstones of data, evidence and best practice:

1. Data to define the problems that require a response;
2. Evidence to chart out the actions with the greatest efficacy; and
3. Best practice is to ensure that proposed actions are feasible, acceptable and evaluable under real-world conditions by examining what is working or not working in other jurisdictions.

Based on a review and analysis, recommendations are made for what can be considered for implementation in the BC context.

### *Use a partnership-based approach*

As a result of the many settings, life-course stages and contributing factors associated with injury, making progress in reducing the incidence, severity and inequity of injury will only happen by working with injury prevention partners across a range of injury causes. This also demands a flexible, needs-based approach. As such, the development of strategic partnerships, including with FNHA and Indigenous communities, is of high importance (See also Appendix 1 – Roles and Responsibilities).

# Conclusion

The Framework is intended to set a vision of shared responsibility across all of government in addressing the harms of preventable injuries in BC. It positions broadly the development and delivery of strategic injury prevention policy and provides specific direction to the health sector. It is also a mechanism for coordinating cross-government injury prevention actions through the development of strategic partnerships.

The Framework recognizes the complex and multi-faceted nature of unintentional and intentional injury and ensures a focus on controls with the highest effectiveness such as the built environment, physical infrastructure or regulatory approaches. This approach is intended to drive systematic change through multiple and complementary actions. The cross-government, shared responsibility and systems-thinking approach allows broad access to multiple tools including legislation, policy, infrastructure, funding and enhanced education and awareness activities ensuring a multi-faceted approach to the reduction of injuries.

The Framework reflects the need to address the inequitable injury burden through specific priorities for action over the next two years (2021/22 – 2022/23) based on data, evidence and best practice and alignment with the key activities and priorities already underway in the Province.

# Appendix 1: Inventory of Injury Causes

The following list comprises all injury causes that fall within the scope of injury prevention in general (Intentional injury topics are noted in parenthesis):

- Falls
- Transport related (vehicle crashes including the safety of pedestrians and cyclists)
- Suicide and non-suicidal self-injury (intentional)
- Sports and recreation
- Concussion
- Amusement facilities (trampoline parks, zip lines, water slides, bungee jumps etc.)
- Drowning
- Accidental poisoning
- Burns, scalds and other energy-caused (e.g., thermal, chemical, electrical)
- Struck by an object
- Foreign body caused
- Suffocation/choking
- Machinery caused
- Environmental/natural factor (exposure either heat or cold caused, landslide, avalanche, etc.)
- Self-harm that is not suicidal, including cutting and intentional poisoning (intentional)
- Violence, assault, assault and battery (i.e., gun, knife, other mechanisms) (intentional).

# Appendix 2: Roles and Responsibilities

## A SHARED RESPONSIBILITY

It is widely held by international injury prevention practitioners that the most effective prevention programs are those woven into the very fabric of communities. For example, Sweden significantly reduced its child injury rates over many decades by tackling the issue in a coordinated and multi-sector manner. Acting on recommendations from the World Health Organization, that country recognized that injury prevention should be based on population health approaches which are marked by a shared responsibility approach (health-in-all-policies); the involvement of all sectors; and the prioritization of health and safety in all policies, infrastructure designs and public awareness messaging; and informed by ongoing surveillance, research and evaluation.

The Framework is intended to assist stakeholders working across the spectrum of injury prevention to coordinate and integrate activities to maximize effectiveness and reduce fragmentation to better align and strengthen the collective effort made on injury reduction. The result will be more efficient, mutually complementary and sustainable actions that address the full range of policy, social, built environment and engineering determinants of injury.

### *Ministry of Health*

The Ministry plays a fundamental role on injury prevention by providing health sector leadership, formulating strategic policy, setting priorities and strategies, coordinating actions, directing the health system and working across all of government.

### *Regional Health Authorities (RHAs)*

The RHAs implement injury prevention and healthy community priorities. As such, they are key partners and have a major role in implementing this Framework. They also have established relationships with local governments and other partners through their ongoing work on Healthy Living Strategic Plans (HLSPs).

### *FNHA*

The FNHA works with First Nations, government partners and others to improve health outcomes for First Nations people. As such it is a key partner

in injury prevention that the Ministry works with and supports on an ongoing basis.

### *PHSA*

The PHSA plans, coordinates and evaluates injury prevention health services in collaboration with the health authorities to provide equitable and cost-effective injury reduction programs for people throughout the province. As such, the PHSA is a critical partner in implementing this Framework.

### *BC Injury Research and Prevention Unit (BCIRPU)*

The BCIRPU remains the lead injury prevention organization for carrying out injury research and for implementing education, awareness and tools in British Columbia. Key roles of the BCIRPU include:

- The development and implementation of the data surveillance strategy.
- Research and evidence reviews including collaboration with others.
- Data and surveillance, including the ***iDOT tool***.
- Generating landmark ***cost of injury reports***.
- Public awareness and education including knowledge translation.
- Using research, evidence, and data to inform recommendations for action.
- Supporting the health sector to implement Ministry direction in injury prevention.

Because of its close affiliation with the BC Children's Hospital and ongoing connection to the Department of Pediatrics, Faculty of Medicine at the University of British Columbia, the BCIRPU has gained national acclaim for its considerable expertise, research, reports and publicly available health promotion and education tools and resources. The BCIRPU plays a major role for the Ministry and the health authorities in compiling injury data, linking data, and conducting demographic, epidemiological and economic analysis across the full range of injury topics.

### *The British Columbia Injury Prevention Committee (BCIPC)*

The BCIPC, a working group under the Public Health Executive Committee Structure, implements the strategic direction for injury prevention and does so by preparing and implementing multi-year workplans and leveraging the support of the BCIRPU. BCIPC members include the PHSA, FNHA, regional health authorities, BCIRPU and the Ministry of Health. The resulting implementation work is carried out in a multitude of ways including through work with

health authorities and their networks, community health organizations, various government ministries and others.

As part of the public health committee structure, the Injury Prevention Committee identified, in January 2017, its top three priorities which were seniors falls, transport-related injuries and youth suicide and self-harm. These priorities were approved by the Prevention and Health Promotion Policy Advisory Committee (PHPPAC) and the Public Health Executive Committee (PHEC). To date, work on these priorities has led to:

a. The Indicators Project is a suite of indicators to monitor the BC injury system and to drive action. These indicators represent intermediate outputs important for achieving overall injury outcomes. These indicators are developed but not yet implemented as this project is still active.

b. A set of recommendations and a work plan for improving transport safety.

c. Work on falls prevention including recommendations, a workplan and a new Guideline for physicians (Note: A falls prevention strategy is currently under development to further direct this priority).

d. A business case for change.

e. Early-stage work on youth suicide and self-harm prevention.

***BC Government Ministries and Provincial Agencies***

The Ministry is currently involved in the following cross-government initiatives that are either led by Ministry priorities or represent opportunities to bring a Ministry health lens to the work of these other ministries:

1. **Ministry of Transportation and Infrastructure (MoTI)**. With responsibility for the provincial highways network, leads cross-ministry working groups supporting ongoing and future multi-modal transport projects. Three such working groups that MOH participates in include:

    a. The Cross-Ministry Working Group on Active Transportation Grants,

    b. The Cross-Ministry Active Transportation Strategy Implementation Group, and

    c. The Motor Vehicle Act Inter-Ministry Working Group on e-scooter/micro-mobility pilots.

*The **Integration Hub for Healthy Communities** currently engages four provincial ministries including* the Ministries of Mental Health and Addictions, Municipal Affairs and Housing, Transportation and Infrastructure, and Social Development and Poverty Reduction.

*Cross-government work leverages the broader potential of the Province in tackling injury prevention.*

2. **Ministry of Public Safety and Solicitor General (MPSSG)**. Leads cross-government work on the BC Road Safety Strategy, supporting various working groups including:
    a. Providing support to the Steering Committee,
    b. The Education and Awareness Working Group,
    c. The Research and Data Working Group,
    d. The Safe Roads and Communities Working Group.
3. **Ministry of Municipal Affairs and Housing (MMAH)**. Leads cross-government work on Metro Vancouver's Regional Growth Strategy Policy Reviews and TransLink's new Regional Transportation Strategy called, "Transport 2050" both of which are heavily funded and overseen by the MMAH.
4. **MMAH and Technical Safety BC**. Leading effort to improve the safety of the amusement sector including trampoline parks.
5. **Ministries of Transportation and Infrastructure and Citizens' Services**. Provincial lead on major linked data pedestrian and cyclist safety study in partnership with MoTI, the Ministry of Citizens' Services (MCS) and others leveraging $150,000 in MoTI funding. This study will utilize linked data for the first time in the field of road safety through the Province's Data Innovation Program.
6. **BC Coroners Service**. Performs death investigations with and supports data trend analysis and research.
7. **Ministry of Tourism, Arts and Culture and Responsible for Sport**. Vested interest in preventing and dealing with concussion. Supports the Concussion in Sport Working Group under the Parliamentary Standing Committee on Health.

### *The Integration Hub for Healthy Communities*

- The Healthy Communities program has transitioned to an integrated hub model, now known as the **Integration Hub for Healthy Communities**, whereby multiple ministries are engaged with local and First Nation governments, health authorities and NGO partners to better coordinate and integrate efforts to build healthier and safer communities through health promotion, the built environment and injury prevention. An underlying principle of this model is to support a health-in-all-policies approach that responds in a comprehensive and coordinated way to the social determinants of health and injury. Other related groups include Provincial Healthy Built Environment Council; the Healthy Built Environment Alliance; and the BC Alliance for Healthy Living.

# Appendix 3: Vision Zero Program

| Injury Prevention & Healthy Settings | Vision Zero – Policy direction to the health system |
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| **Background / Issue / Problem** | Ministry of Health (the 'Ministry') policy direction to address inequities resulting from deaths and serious injuries of vulnerable and socioeconomically disadvantaged road users.<br><br>From a Ministry perspective, multiple reasons to improve road safety outcomes, for vulnerable road users including pedestrians and cyclists, are as follows:<br><br>**1.** The BC Active Transportation Strategy (announced in June 2019) includes the goal of doubling the percentage of trips taken with active transportation by 2030.[14] This will lead to increased numbers of trips by walking and cycling;<br>**2.** COVID has caused a shift away from public transport and toward walking and cycling however this presents new safety concerns. Local governments and First Nations governments are wanting to move toward greater use of 'public spaces for health' which entails increasing amounts of road space for walking and cycling in order to accommodate social distancing. This, however, must be done in a manner that meets injury prevention objectives.<br>**3.** People who walk and cycle are already disproportionately and negatively impacted by road safety as a result of their sheer vulnerability as road users with little to no physical protection unlike motor vehicle occupants who have protected passenger compartments, air bags, etc.;<br>**4.** The Population and Public Health Division is concerned about socioeconomic inequity as research shows that pedestrian and cyclist trauma is over-represented among lower socioeconomic groups, Indigenous peoples and other vulnerable populations. For example, a BC Coroners study of 33 child pedestrian deaths found a significant over-representation of Indigenous children and children from low-income families.[15] A Toronto study found child pedestrian/motor-vehicle crash rates are 5.4 times higher in low-income versus high-income clusters.[16] Finally, according to a Public Health Services Authority (PHSA) report, British Columbians in the lowest employment quantile are seven times more likely to die of a transport related injury than those in the highest quantile.<br><br>cont'd |

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| | 5. Injuries, including from transport, have a high and disproportionate impact on young people with a resulting large impact on Potential Years of Lost Life (PYLL) – a critical public health metric.<br>6. Transport-related injuries result in $300 million in annual losses accrued directly to the health care system; and<br>7. The Injury Prevention Committee identified three top priorities (previously approved by PHPPAC/PHEC) with one of them being the need to improve safety for vulnerable road users. |
| **Rationale** | This proposal aligns with Section 3.71 of the draft Branch business plan which states:<br>• '[Provide] direction and financial support to the health authorities for a vision zero, public spaces for health grant program responsive to the priority of protecting vulnerable road users and responding to impacts from COVID-19'<br><br>This proposal also aligns with:<br>• Goal #5 (Injury Prevention) of the Guiding Framework for Public Health including its supporting objectives and performance measures;<br>• Work already underway in Fraser Health and Vancouver Coastal Health where 11 vision zero projects were completed in 2019/20;<br>• A major cross-government priority: The Active Transportation Strategy released by MoTI;<br>• Motif's newly released guide, 'Reallocation of Roadway Space for Physical Distancing.'<br>• Healthy community work including a life-course and settings approach;<br>• Healthy built environment work;<br>• The BC Physical Activity Strategy (Active People, Active Places); and<br>• The work of our research partners (e.g., UBC, BCIRPU, SFU) who have concluded that many zero- and low-cost measures already exist to reduce the number of vulnerable road user injuries and deaths. |

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| **Purpose / Goals / Objectives** | This initiative has several objectives as follows:<br>1. Address inequities in transport-related injuries and deaths. This will involve a focus on children, socioeconomically disadvantaged groups and Indigenous peoples;<br>2. Address impacts from COVID by ensuring funding and resources for First Nations and local governments to create 'public spaces for health' initiatives that turn over space for cars to space for people to walk and cycle in order to accommodate social distancing (2 metres) and achieve better safety.<br>3. Increase numbers of non-users of the health care system by making changes to the built environment (e.g., roads; bus stops) to prevent injuries;<br>4. Help mitigate climate change by making changes that directly support more trips by walking, cycling and public transport;<br>5. Build on and leverage existing work and financial contributions available from the regional health authorities and the MoTI; and<br>6. Set injury prevention policy direction to the regional health authorities and support them to build capacity in reducing this major driver of health care capacity and costs. |
| **Major Deliverables** | A number (minimum of 30) of Ministry-directed and supported Vision Zero projects completed by March 2022 that will demonstrate PPH's:<br>• Adherence to vision zero principles and injury prevention,<br>• Focus on addressing inequity,<br>• Responsiveness to COVID, and<br>• A vision zero communities designation program. |

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| **Outcomes** | 1. Reduced inequities in the distribution of transport-related injuries and deaths;<br>2. Reduced overall numbers of injuries and deaths;<br>3. Increased numbers of non-users of the health care system;<br>4. Increased levels of physical activity;<br>5. Improved accommodation for COVID social distancing; and<br>6. Reduced carbon emissions and lowered environmental impacts. |
| **Major Stakeholders/ Partners** | • Regional Health Authorities<br>• FNHA<br>• PHSA<br>• Local communities<br>• BC Healthy Communities Society<br>• BC Physical Activity Strategy (Active People, Active Places)<br>• BC Injury Prevention Committee<br>• BC Injury Research and Prevention Unit<br>• Ministry of Transportation and Infrastructure<br>• Ministry of Environment and Climate Change Strategy<br>• Ministry of Public Safety and Solicitor General |
| **Timeframe** | **Start:** Fiscal 2021/22 \| **End Date:** March 2023 |
| **Major Milestones:** | 1. Launch and announcement (November 1, 2021)<br>2. Direction from MoH and support through vision zero webinar delivered by HLHP Branch staff (November 2021)<br>3. Health authority projects implemented (fiscal 2021/22)<br>4. Symposium to showcase completed projects (Fall 2022)<br>5. Evaluation report (fall 2023)<br><br>**Note:** Health authorities with diverted capacity may choose to have the grant program administered centrally, e.g., BC HCS. |
| **Resources required (funding and FTE):** | **Funding:**<br>$350,000 for fiscal 2021/22 from MoH and $200,000 from MoTI.<br><br>**FTEs:**<br>This policy direction can be implemented with existing FTE HLHP Branch resources. No new FTE resources are required as Branch has the requisite expertise.<br><br>Initial seed budget: $550,000 ($110,000 per regional health authority) for fiscal 2021/22. |

# Endnotes


**1** The Community Against Preventable Injuries. ***https://www.preventable.ca/media/PRESS-RELEASE-JUNE-1-2017-90-percent-of-injuries-are-preventable-banana-peel-draws-attention-to-preventable-injuries.pdf.***

**2** Masters, R., Anwar, E., Collins, B., Cookson, R., Capewell, S. (2016), Return on investment of public health interventions: a systematic review. *Journal of and Community Health*. 71, 827-834.

**3** Hill, J. & Starrs, C. (2011), Saving Lives, Saving Money: the costs and benefits of achieving safe roads. Road Safety Foundation and Royal Automobile Club Foundation for Motoring Limited. United Kingdom.

**4** Rajabali, F., Beaulieu, E., Smith, J., Pike, I. (2018), The economic burden of injuries in British Columbia. Applying Evidence to Practice. *BC Medical Journal* (7) 60 , 358-364.

**5** Anecdotal and media-reported accounts of increased crisis line calls for domestic violence issues and mental illness. In BC, evidence of lower motor vehicle accident deaths is provided by BC Coroners Service for 2019-2020 (up to March 2020).

**6** Statistics Canada. ***Table 13-10-0394-01 Leading causes of death, total population, by age group***

**7** Cost of Injury in BC, 2021 Report (in press).

**8** Cost of Injury in BC, 2021 Report (in press).

**9** *Ibid*.

**10** BC Vital Statistics, Deaths 2018, Retrieved from the Chronic Disease and Injury Data Mart, BC Centre for Disease Control, Accessed May 20, 2020. The percentage is based on the total number of deaths for injuries over the total number of deaths in 2018. In terms of direct costs in Canada, injuries are 12% of the total costs (Economic Burden of illness in Canada, 2010, Public Health Agency of Canada, 2018.

**11** BCIRPU Presentation to Lorie Hrycuik, October 2019.

**12** Lavoie, M., Maurice, P. & Rainville, M. Prévention des traumatismes: une approche pour amélioré la sécurité des populations. *Dans Trousse media en prevention des traumatismes*. ***http://www.inspq.pc.ca/prevention-traumatismes/une-approche-pour-ameliore-la-securite-des-populations***.

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**14** Move, Commute, Connect, BC's Active Transportation Strategy. ***https://www2.gov.bc.ca/assets/gov/driving-and-transportation/funding-engagement-permits/grants-funding/cycling-infrastructure-funding/activetransportationstrategy_report_web.pdf***.

**15** E. Desapriya, M. Sones, T. Ramanzin, S. Weinstein, G. Scime, & I. Pike (2011), Injury prevention in child death review: Child pedestrian fatalities, *Injury Prevention 17* (Suppl. 1), i4–i9.

**16** Rothman L, Cloutier M, Manaugh K, et al. (2018), Child pedestrian risk and social equity: spatial distribution of roadway safety features in Toronto, Canada. *Injury Prevention*, 24:A49-A50.

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