

AT THE INTERSECTION OF INTIMATE PARTNER VIOLENCE AND BRAIN INJURY

A call to action

This document has been put together for Parliamentary Secretary Grace Lore by an informal collaborative of non-profit organizations, networks and researchers in BC committed to better identification, reporting, data, support and services for people experiencing brain injuries as a result of intimate partner violence.

April 2022

The information in this document has the support of the following
BC organizations and individuals representing those organizations:



Jody Paterson
Executive Director



Adam Richards
Executive Director



Amy Juschka
Director, Advocacy and Communications



Karen Mason
Director of Community Practice



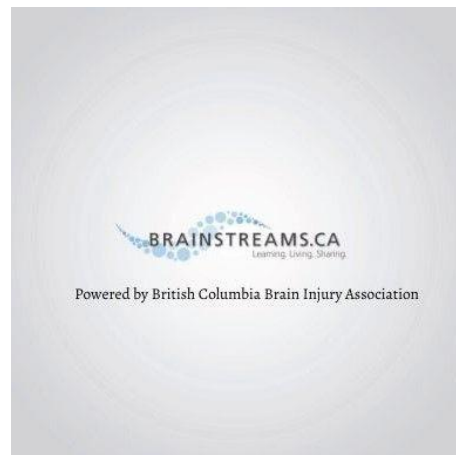
Khairun Jivani
Senior Director, Strategy



Amy S. Fitzgerald
Executive Director



Ian Batey
Executive Director



Geoff Sing
President



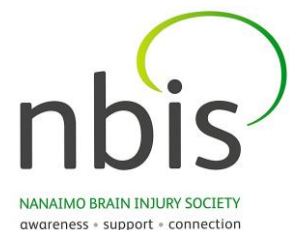
Julia Schmidt
Principal Investigator, GF Strong
Rehabilitation Research Program



Amanda McFarlane
Interim CEO



Janelle Breese Biagoni
Founder and CEO



Kix Citton
Executive Director

Table of Contents

Summary of intimate partner violence and brain injury	Pg 3
BC ministries and provincial organizations affected by IPV-BI	Pg 4
Appendix A – Facts and Statistics on IPV-BI	Pg 7
Appendix B – Barriers in diagnosis/awareness of IPV-BI	Pg 13
Appendix C – Select stats from StatsCan Survey of Safety in Public/Private spaces	Pg 18
Appendix D - Infographics from 2021 BC Heads Together Think Tank series	Pg 22

At the Intersection of Intimate Partner Violence and Brain Injury

Violence between intimate partners is a critical concern in British Columbia and around the world. More than 90,000 Canadian victims report domestic violence to the police every year, with women accounting for eight of every 10 of those victims. An unknown number of additional cases go unreported.

A number of major research projects over the last decade have produced disturbing evidence that as many as 92% of victims of intimate partner violence are living with one or more brain injuries due to a concussion or strangulation at the hands of a current or previous partner. In Canada, an estimated 230,000 women a year receive brain injuries caused by their intimate partners; 30% of all violent crimes reported to police involve intimate partner violence.

What is a brain injury? It's an insult to the brain caused by a hard blow or jolt that causes the head or brain to move rapidly back and forth. Brain injury can also happen from loss of oxygen to the brain, from strangulation or suffocation. It can cause physical, mental, and emotional difficulties, as well as changes in behaviour.

People with a brain injury can face a long list of physical, mental and emotional impacts. They can have headaches, fatigue, dizziness or balance problems, or sleep too little or not enough. They may be prone to depression, sadness, anger, sensitivity to noise and light and more. Those living with brain injuries may have trouble listening, be easily distracted, struggle to learn new things or follow instructions, or find themselves forgetful, tired, or irritated. They may anger easily, struggle to adapt to change, and experience inappropriate emotional responses.

Brain injury caused by intimate partner violence (IPV-BI) often goes undocumented, undiagnosed and untreated (see Appendix B for barriers in reporting and diagnosis). Brain injury is often a silent and wholly invisible condition, resulting in challenges and behaviors that can be difficult to quantify but which have devastating effects on a woman's life.

But resources for diagnosing and treating the spectrum of acquired brain injury symptoms are largely directed toward male athletes, even though statistically for every NHL player who sustains a concussion in sport each year, it's estimated that 5,500 Canadian women sustain a brain injury from intimate partner violence.

This is still relatively new information for our communities, province and country. Designated services and supports for people who have experienced a brain injury as a result of domestic violence are virtually non-existent in Canada at this time. Among the issues that must be tackled to address this:

- Training for professionals in community social services, health care, housing, police/first responders, justice system in recognizing the link between intimate partner violence and brain injury
- Uniform questions at all points where data is being gathered on/from victims of physical assault due to intimate partner violence to establish statistics on the incidence of assaults that can be presumed to have potentially caused a brain injury (blows/impact to the head, strangulation/restriction of airways, etc)
- Specialized, trauma-informed services and supports for people experiencing IPV-BI

- Easily accessible assessment of a brain injury and the impact it is having on someone's daily life for people who have experienced IPV that
- Public awareness of IPV-BI
- Prevention of brain injury as a key strategy in reducing IPV-BI, as research has found that more than half of the perpetrators of IPV have brain injuries themselves

Acquired brain injuries are lifelong conditions that affect people diversely across all the quadrants of their lives. The impact of a brain injury varies significantly from person to person, depending on the severity of the impact, the number of incidents experienced, the region of the brain affected, and the health, genes and social situation of the person affected.

Such injuries can be managed in a number of ways when people are well-supported and understand how their brain injury impacts them. But if the injury remains undiagnosed, too often it can appear to the individual as well as friends, families and professionals in their lives that the person just "can't get their life together." Here are just a few of the impacts of IPV-BI on a person's daily life:

- The person may struggle to find and maintain work, relationships, and manage parenting or a household budget
- They may suffer routinely from fatigue and overly strong and unpredictable emotional responses – and all the social and economic implications of that - without ever understanding that it's related to a brain injury
- They can be forgetful and disorganized, with dire implications as a result on issues such as court appearances, child custody matters, and parental access
- Their housing situation becomes unstable and they're at risk of homelessness
- Their children may end up in care, or victims of brain injury themselves in violent households
- They are at increased risk of poverty due to not being able to work
- Mental health issues are exacerbated
- Substance use issues are exacerbated

BC ministries and provincial services affected by this issue

The intersection of intimate partner violence and brain injury has a diverse and largely unknown and undocumented impact on the following provincial ministries and organizations:

- Children and Family Development
 - Apprehensions, children in care, CYSN services
- Attorney General
 - Crown counsel, housing
- Public Safety and Solicitor General
 - Corrections, violence prevention
- Social Development and Poverty Reduction
 - Gender equity, violence prevention, poverty, higher rates of IPV-BI for women with disabilities
- Mental Health and Addictions
 - IPV/Bi exacerbates existing mental health issues and harmful substance use

- Education
 - Parent/s experiencing IPV-BI, children experiencing violence
 - Impact on childcare
- Advanced Education
 - Social services, post-secondary, training
- Health authorities
 - Responsibility for brain injury diagnosis/supports
 - Long-term costs due to risks of early-onset Alzheimer's, dementia and other health concerns for victims of IPV-BI
- Ministry of Health
 - Responsibility for health authorities and health spending
- Indigenous Relations
 - Higher rates of IPV and thus brain injury for Indigenous women
- Jobs, Economy and Innovation
 - Workforce potential that can't be realized, vacancies that can't be filled
- Community Living BC
 - Responsibility for people with developmental disabilities
- BC Housing
 - Impact on supported/supportive housing, subsidized housing
- Provincial treatment centres
 - Impact of undiagnosed brain injury on person's ability to access services and maintain recovery/harm reduction
- BC Women's Hospital and Health Centre
 - Impact of undiagnosed brain injury across services to women who have experienced IPV

Moving forward

Now that we know that brain injury is very much an issue for women – and for their children - what needs to happen?

First, we need to recognize the prevalence of this issue, and ensure that services and processes for women who have experienced domestic violence are adapted for the high likelihood that these women also have a brain injury. We urgently need to gather data at all points where we are gathering statistics in order to begin to quantify this issue.

We need to ensure that the people experiencing intimate partner violence are being screened for possible brain injury, and that those who have experienced partner violence in the past have awareness that there's a high chance they may be living with an undiagnosed brain injury.

Many community-based services are already supporting women who have experienced intimate partner violence. But they will need training and increased awareness of the fact that brain injury is also a factor in the lives of most of these women they are working with. Specialized services will need to be developed. The provincial and federal governments will need to show leadership in funding this work.

Training of medical professionals, emergency room staff, first responders and police will also be essential. Women who have suffered a brain injury due to IPV routinely experience not just disbelief but a complete lack of knowledge and trauma-informed practices when they ask for help with a diagnosis.

They know that something's wrong in their lives, but the lack of knowledge around IPV/BI in the broad community – and the current practice of not providing a diagnosis without an MRI, or in some cases not even documenting head trauma or suspected concussion – too often leaves them to struggle without sufficient support, or even an understanding as to why they struggle.

Brain injury assessments tailored to IPV and including strangulation are critically necessary. (Additionally, there is a risk of future death from stroke as a result of strangulation, and doctors may not know to look for tears in the carotid artery from the violence).

Support must also go to community- and evidence-based prevention programs aimed at keeping people from becoming either a victim or a perpetrator of domestic violence. This includes intervention programs for the perpetrators of intimate partner violence, half of whom have brain injuries themselves.

Appendix A

Facts and figures on brain injury and intimate partner violence

Research:

- A review of literature conducted on traumatic brain injury from intimate partner violence found prevalence of 60 to 92% of abused women obtaining a TBI directly correlated with IPV. Adverse overlapping health outcomes are associated with both TBI and IPV. Genetic predisposition and epigenetic changes can occur after TBI and add increased vulnerability to receiving and inflicting a TBI. Health care providers and community health workers need awareness of the link between IPV/TBI to provide appropriate treatment and improve the health of women and families. (2016, *Intimate Partner Violence and Traumatic Brain Injury: State of the Science*)
- Between 44-75% of women who experience intimate partner violence sustain repetitive mild traumatic brain injuries. Given that 42 million women over age 15 in the US experience physical or sexual abuse, that translates into 31.5 million who have sustained at least one IPV-related TBI, and 21 million who have sustained multiple brain injuries. Compare that to fewer than 19,000 people in the US military and the National Football League combined who have sustained a TBI. (2019: *White Matter Correlates of Mild Traumatic Brain Injuries in Women Subjected to Intimate Partner Violence* (Eve Valera et al, Department of Psychiatry, Harvard))
- In a study assessing 99 battered women in the US for brain injury, 75% sustained at least one partner-related brain injury and half sustained multiple. (2003, *Brain Injury in Battered Women*, same author led this study and the White Matter study above)
- The lifetime prevalence of non-fatal intimate partner strangulation has been estimated to be about 10% of women in the US. In a 2021 study of US emergency department visits by adult women who had experienced IPV, 1.2% reported being strangled. Higher odds of strangulation were noted in younger women, and increased incidence of strangulation events among women visiting the emergency ward due to IPV has been observed.
- When researchers in the US mined more than 12 million health records from 1999-2017 related to the intersection of IPV and TBI, they found that the following conditions were “highly significant” at the joint presence of IPV and TBI: (2020 *BMC Women’s Health*)
 - Malnutrition
 - A bleeding disease that leads to a severe reduction in platelet counts known as acquired thrombocytopenia
 - Post-traumatic wound infection
 - Local wound infection
 - Poisoning by cardiovascular drug
 - Alcoholic cirrhosis
 - Alcoholic fatty liver
 - Drug-induced cirrhosis

- Non-fatal intimate partner strangulation is associated with multiple negative and psychological outcomes for women, but a literature review of 13 relevant US studies found that at least 30% of strangled women reported not seeking health care after experiencing violence. In some of those studies, 95% of victims did not seek health care. (2018, *Injuries of Women Surviving Intimate Partner Strangulation and Subsequent Emergency Health Care Seeking*)
- Current studies have identified sequelae of cognitive dysfunction, posttraumatic stress disorder, and depression in women experiencing IPV, yet most fail to determine the role of TBI in the onset and propagation of these disorders. Imaging studies indicate functional differences in neuronal activation in IPV, but have not considered the possibility of TBI contributing to these outcomes. (2011, *TBI in IPV: A Critical Review of Outcomes and Mechanisms*). The Institute for Strangulation Prevention highlights that women who have been strangled are 750 times more likely to be killed in a subsequent incident.
- Despite evidence that more than 80% of female victims of intimate partner violence, seen for medical treatment of violence-related injuries, have sustained facial injuries, traumatic brain injury is often overlooked as a consequence of those injuries. (2007, *Overlooked But Critical*)
- In 21 interviews with nine US women who self-reported passing out from being hit in the head by their intimate partners, themes of extreme control and manipulation from abusers emerged, and women described living with instability from cycles of incarceration, drug and alcohol use, and fear of losing their children. Women did not receive medical care for head injury because the abusers often used forced sex immediately after the head injury to instill fear and authority. (2018, *Extreme Control and Instability: Insight Into Head Injury From Intimate Partner Violence*)
- Sixty-two women were surveyed in 2001 at two women's shelters in Dallas, Texas and Los Angeles, California and at a violence intervention prevention centre in Dallas. Sixty-eight per cent reported being strangled by their intimate partner who was a husband (55%), boyfriend (31%), or fiancé (5%). (Three women reported being strangled by someone who wasn't an intimate partner.) Strangulation as a method of domestic violence is quite common in women seeking medical help or shelter in a large urban city. This study suggests that strangulation occurs late in the abusive relationship; thus, women presenting with complaints consistent with strangulation probably represent women at higher risk for major morbidity or mortality. (2001, *Survey results of women who have been strangled while in an abusive relationship*)

Supporting Survivors of Abuse and Brain Injury through Research (SOAR)

- Estimates suggest 230,000 Canadian women suffer a violent physical attack at the hands of an intimate partner each year. As many as 92% of them report symptoms consistent with BI.
- Many professionals who work with women survivors, aren't educated in brain injury, and don't have the skills or training to support them. Yet the varied symptoms of brain injury from concussion or strangulation can make it harder for an already-traumatized IPV survivor to cope. It may cause her to:
 - not listen
 - be easily distracted
 - have difficulties learning new things
 - have trouble following instructions and remembering appointments or chores
 - be tired and irritated easily
 - get angry or rage at her children or others
 - have difficulties adapting to life in a communal shelter setting

Concussion Awareness Training Tool for Women's Support Workers (SOAR)

- Symptoms of concussion can be delayed for up to two days after the incident occurs. Loss of consciousness is only seen in about 10% of cases.
- Recognize that a concussion can result in mental health symptoms, including:
 - Worries and fears.
 - Trouble controlling emotions or reactions.
 - Nervousness or panic attacks.
 - Sadness.
 - Depression.
 - Hopelessness.
 - Anger or rage.
- A blow to the head is not the only way an individual can sustain a concussion—a concussion may be caused by a direct blow to the head, face, neck, or a blow elsewhere on the body with an 'impulsive' force transmitted to the head. Concussions occur from blows to different parts of the body of varying magnitude. A relatively minor impact may result in a concussion, while a high-magnitude hit may not. There is therefore no way to know for certain whether a particular blow will lead to a concussion.
- Signs and symptoms of a concussion can be delayed for several hours or even a few days following an incident
- Good concussion management is pivotal to minimizing the risk of brain damage and may reduce long-term health consequences.

- A concussion can have a significant impact on physical, cognitive, and emotional functioning. The recovery process involves managing activities in order to not trigger or worsen symptoms—the key is finding the “sweet spot” between doing too much and too little.
- On average, it typically takes 2 to 4 weeks to recover from concussion. However, 15 to 30 percent will continue to experience persistent symptoms beyond this period. Persistent symptoms have the potential to cause long-term difficulties. If there is no improvement or symptoms are worsening 4-12 weeks after a concussion, physician referral to an interdisciplinary clinic is recommended.
- Returning to high risk activities before full recovery and medical clearance can put the individual at risk of sustaining another concussion with more severe symptoms and a longer recovery period. *(Note how this would play out for women who are being abused by their intimate partners and do not have the luxury of a “full recovery.”)*
- Brain injury can happen when you are
 - Punched, or hit in the head, face or neck with an object.
 - Violently shaken.
 - Pushed down stairs.
 - Thrown out of a moving vehicle.
 - Strangled/choked or suffocated. If you had trouble breathing or blacked out from something your partner did, you may have a brain injury

Questions for women to ascertain whether they have a brain injury (adapted HELPS brain injury assessment) from the CATT guide for women’s support workers:

- Have you ever **H**it your head, or been hit on the head or shaken roughly? Did your partner strangle you?
- Were you ever seen in the **E**mergency room, hospital, or by a doctor because of a brain injury? Have you ever felt you needed medical attention but did not seek it?
- Did you ever **L**ose consciousness or experience a period of being dazed and confused because of an injury to your head?
- Do you experience any of these **P**roblems since you hurt your head?
- Have you experienced any significant **S**icknesses or physical symptoms?

If a survivor answers “Yes” to H, E, L, or S, and is experiencing at least two of the chronic problems listed under “P,” the survivor may have experienced a brain injury.

ABI Research Lab (University of Toronto):

- Worldwide, estimates are that around 30% of all women experience intimate partner violence. Experiencing assault in the family violence context can lead to an acquired brain injury (ABI); with the connection between these two phenomena established through research in the last 20 years.

- By 2031, traumatic brain injury (TBI) is expected to be among the most common neurological conditions affecting Canadians, along with Alzheimer's disease and other dementias, and epilepsy¹
- TBI can affect anyone; it is not the result of belonging to any specific social group. However, some people are more affected than others due to life circumstances that increase their risk of injury
- TBI is common among women survivors of IPV, homeless persons, persons using substances, and criminalized populations²
- Strangulation is one of the most dangerous forms of IPV, and an indicator of a victim at serious risk of being killed by her partner in a future assault. Women who experience strangulation at the hands of their intimate partner are 7.5 times more likely to be killed in a subsequent assault.³
 - Strangulation causes brain injury due to the brain being deprived of oxygen
 - Some victims can die weeks after being strangled because of the underlying brain damage, even if there is no visible injury⁴
- Women who experience IPV-related TBI with persistent symptoms are at a higher risk for worse psychosocial health outcomes 18 months later
- The short- and long-term effects of TBI can be grouped into the following categories:
 - THINKING – memory, reasoning, decision-making, planning
 - PHYSICAL – vision, balance, other body injury, disability
 - COMMUNICATION – expressing and understanding messages
 - FEELING – depression, anxiety, aggression
 - IDENTITY/SENSE OF SELF – personality, social roles, parenting/mothering
 - Impairment in any one of the above areas can make it more difficult for a woman to leave her abusive partner, recognize that she needs help, or seek support. These impairments can also affect her success navigating the programs and services where she receives care.
- Previous head injury is a risk factor that can prolong and complicate the brain injury recovery process.
- The short and long-term effects of brain injury can change the way a survivor acts, thinks, and feels. It may seem as though survivors are being deliberately difficult, not listening, or not following instruction. However, these behaviours can be the after-effects of one or multiple injuries to the brain and are not intentional.
- An extreme consequence of having sustained multiple brain injuries is called chronic traumatic encephalopathy (CTE) and its symptoms are similar to those experienced in traumatic brain injury, but more pronounced, and worsening over time. At its extreme, CTE can mimic Alzheimer's disease and other dementias, and it is thought to be associated with the development of neurodegenerative diseases. Symptoms of CTE include:

¹ Public Health Agency of Canada, "Mapping Connections: An Understanding of Neurological Conditions in Canada," Ottawa, 2014.

² E. J. Shiroma, P. L. Ferguson, and E. E. Pickelsimer, "Prevalence of traumatic brain injury in an offender population: A meta-analysis," *J. Correct. Heal. Care*, vol. 16, no. 2, pp. 147–159, 2010.

³ N. Glass, K. Laughon, J. Campbell, C. R. Block, G. Hanson, P. W. Sharps, and E. Taliaferro, "Non-fatal Strangulation is an Important Risk Factor for Homicide of Women," *J. Emerg. Med.*, vol. 35, no. 3, pp. 329–335, 2008.

⁴ Alberta Justice and Solicitor General and Alberta Crown Prosecution Service, "Domestic Violence Handbook for Police and Crown Prosecutors in Alberta," Edmonton, AB, 2014.

- Memory loss
- Impulsivity
- Impaired judgment
- Aggression
- Depression
- Difficulty with coordination

How does brain injury occur in IPV?

Traumatic brain injury

- Bump, blow, or jolt to the head, neck, or face
- Penetration of the skull (e.g., by shooting, stabbing)
- Forceful and repeated shaking
- Thrown to the ground or down a flight of stairs

Hypoxic ischemic brain injury

- Strangulation
- Suffocation
- Choking
- Near-drowning
- Low blood pressure resulting from blood loss

ACEP Now – Emergency Medicine website

- In sports, due to increased awareness of the sequelae of TBI, particularly in repeated brain injuries, athletes are encouraged not to return to play until symptoms have resolved. Victims of IPV, on the other hand, may suffer repeat episodes of TBI within a similar time frame, as they are at high risk of multiple violent encounters. Also, while strangulation causing anoxic brain injury is uncommon among other patients at risk of TBI, it is disturbingly common among victims of IPV.

Appendix B

Barriers in brain injury diagnosis/awareness for people with histories of intimate partner violence

The victim

- Unable to seek medical help because abusing spouse won't allow
- Unwilling to seek help or call police for fear of retribution from her partner
- Doesn't know that IPV causes permanent brain injury
- Fear of not being believed or helped by police or medical staff based on previous experiences in the system
- Not seeking medical help because she diminishes the impact of what just happened to her
- Not seeking medical help because of time commitments, not having a doctor or NP, no transportation, can't get off work, etc
- Unwilling to seek medical help for fear of triggering child protection measures or getting her spouse (who may be financially necessary to the family) "in trouble" and risking that person's job or ability to live in the same household
- Unaware that recurring brain injuries are causing accumulated damage, or are responsible for her current state (self-blame: can't get my act together, can't remember anything anymore, etc)
- Because of the undiagnosed brain injury, she may be living a chaotic, impoverished life in which finding the financial and organizational resources to get help feels impossible
- People who live chaotic, impoverished lives are at risk for increased mental health problems and harmful drug use, but neither the community-based nor medical-based services for those issues (when available) are adapted for people with brain injuries
- Services for brain injury and services for intimate partner violence exist in separate "bins" in most of BC and are not adapted to serve clients who have both: e.g. scarce trauma- and violence-informed brain injury services; scarce brain-injury-informed IPV services
- No services in the community

The police officer

- Many incidents of domestic violence are never reported to police in the first place
- When they are, police who respond may not know to ask about possible brain injury as result of domestic violence
- Even when they do know to ask, they don't ask the right questions (e.g. "Have you experienced a concussion?" as opposed to "Have you ever seen stars when your partner hits you?")
- Domestic violence remains significantly unreported in the first place and stigmatized, with victim-blaming a reality at all levels of intervention
- With IPV a stigmatized condition, there may be an unconscious prioritizing of people into "deserving" and "less deserving" categories for attention

- Doesn't see their role as following up/supporting someone who may have experienced a brain injury

Community social service worker

- May not know to ask about possible brain injury
- Even when they do know to ask, they may not be asking the right questions (e.g. "Have you experienced a concussion?", as opposed to "Have you ever seen stars when your partner hits you?" or "Does your partner strangle you?" as opposed to "Has he ever put his hands around your neck and squeezed to the point that you couldn't breathe?"
- Doesn't know signs/symptoms of brain injury and so ascribes behaviour of person to other factors – unorganized, doesn't care, forgetful, on drugs/medication, etc
- Doesn't know how best to proceed even when brain injury is suspected
- Lack of training and knowledge of the nuances and complexities of IPV mean even brain injury experts in the health system may not be positioned to provide the care and support women need
- Victim minimizes impact of her injury to the worker in order to not trigger child protection measures, put her housing situation at risk, or lose services
- Worker is not able to advocate for the woman to a medical professional because woman doesn't have a doctor and relies on walk-in clinics
- Scarce services available even when worker is clear that a brain injury has occurred, and supports are "siloed" – e.g. transition houses are not equipped/trained for women with brain injury; brain injury services are not equipped/trained for trauma-based injuries

The emergency room visit

- Triage nature of emergency rooms means victim's "mild" symptoms may not be taken seriously or will lead to very long waits as other people are deemed to be in more critical need – increasing the woman's reluctance to go to emergency the next time
- Nature of injury not disclosed by victim, or if it's a repeat injury, previous history of injury is not revealed
- Even when they do know to ask, they don't ask the right questions (e.g. "Have you experienced a concussion?", as opposed to "Have you ever seen stars when your partner hits you?"
- Attending physician and emergency room personnel have no familiarity with the link between IPV and BI and attend only to superficial symptoms
- Attending physician and emergency room personnel do not ask questions to ascertain whether there's a history of IPV and thus the possibility that this is one of many brain injuries and its seriousness needs to be viewed in the context of repeat injury/impact
- No services or support staff to refer the victim to even when brain injury is suspected

The doctor

- May not know to consider brain injury after report of abuse
- Patient covers up that the injury was from intimate partner violence, which hides the fact that the injury could be a repeat injury
- With IPV a stigmatized condition, there could be an unconscious prioritizing of people into “deserving” and “less deserving” categories for attention
- Even when the doctor does know to ask, they don’t ask the right questions (e.g. “Have you experienced a concussion?” as opposed to “Have you ever seen stars when your partner hits you?”)
- Lack of trauma-informed-practice training and knowledge of the nuances and complexities of IPV mean even those in the health care system who are brain injury experts may not be positioned to provide the care and support these women need.
- MRI wait – the time it takes from when a doctor approves you to go to a specialist can be many months, during which time the woman may lose heart, lose track, or sustain other brain injuries
- No familiarity with community support options or who to refer woman to for additional support
- Factors in the wait are variable and wildly different depending on region of BC:
 - a patient's priority is determined by a patient's medical status;
 - the specialist your physician refers you to may have longer wait times because they receive more referrals from family physicians or share operating time in a hospital with a greater demand for operating room resources, or perform fewer procedures or choose to work fewer hours in a period of time;
 - the capacity of hospitals or regions to do the procedure;
 - how fast your community and region are growing; and,
 - how busy specialists are overall in your community.
- Services for brain injury and services for intimate partner violence exist in separate “bins” in most of BC and are not adapted to serve clients who have both: e.g. scarce trauma- and violence-informed brain injury services; scarce brain-injury-informed IPV services

The specialist

- A specialist’s training is the opposite of “multi-disciplinary” and they are not trained to take a holistic approach when assessing the person
- The nature of brain injury impact can make it more challenging for a victim without support to manage the many steps and long delays in seeing a specialist
- With IPV a stigmatized condition, there could be an unconscious prioritizing of people into “deserving” and “less deserving” categories for attention
- There’s a significant wait time to get an MRI even once the specialist makes the referral. Half of people in BC referred by a specialist will wait 2 months or more after their specialist appointment to get their MRI
- Some communities don’t even have specialists or MRI equipment, entailing extensive travel out of the victim’s region and increasing her difficulty in following through
- Privatized MRI clinics are available but charge \$1000 a scan and are not an option for people with low incomes

The courts and justice system

- Don't know correlation between IPV and brain injury
- Woman's past criminal history clouds what just happened to her: Victim-blaming
- Problematic behaviours that result in bail breaches are attributed to wilful behaviour rather than brain injury
- With poverty a likely outcome for an unsupported victim of IPV/BI, legal counsel is available only through a harried public defence office unable to provide more than the bare minimum support
- No familiarity, guidance or thought to sentencing differently for people who have experienced brain injury
- No specialty correctional services or alternative measures for referring women with brain injuries even if courts are aware of the need for specialized services

The brain injury community

- While brain-injury groups in BC are increasingly aware of the intersection of IPV and brain injury, not every organization has IPV on its radar yet
- IPV is stigmatized and may be viewed differently than a sports or accident-related cause
- With IPV so newly understood as a major factor in brain injury, a woman may not find a "community" to connect with through the brain injury group
- The community supports that are funded in BC are not available unless someone has an MRI demonstrating a brain injury has occurred
- Few community services available to refer people to even when IPV/BI is recognized and MRI confirms it
- Services for brain injury and services for intimate partner violence exist in separate "bins" in most of BC and are not adapted to serve clients who have both: e.g. scarce trauma- and violence-informed brain injury services; scarce brain-injury-informed IPV services

The state of data and research

- Largest body of research is out of the US and can potentially be discounted by policy-makers as "not applying" in Canada
- Majority of brain injury research still focused on sports/accident-related brain injury, and the male brain
- Data on brain injury as a result of IPV is not being asked about or correlated in provincial statistics
- Extensive lack of awareness of the correlation between IPV and BI raises the issue of the right questions not being asked, or information not being gathered/shared in a form that helps support shifts in policy or development/funding of services

The abusive partner

- Research has established that more than half of those who commit intimate partner violence have a brain injury themselves, highlighting that addressing difficulties in getting a diagnosis and accessing brain-injury-informed services is critical in the work of prevention.

Appendix C

Intimate Partner Violence and Brain Injury: Physical violence statistics from Statistics Canada 2018 “Survey of Safety in Public and Private Spaces”

February 2022, prepared by Board Voice Society of BC

This federal survey made its debut in 2018, with statistics made available to the public in spring 2021. The sample for the survey involved two streams: 43,296 people ages 15 or older living in a Canadian province (response rate 43%); and 2,597 living in a Canadian territory (response rate 73%). This means that approximately 20,000 Canadians responded to this survey.

The survey categorizes experiences of intimate partner violence in three broad categories: emotional/psychological violence; physical violence; and sexual violence. For the purposes of this summary, we’re focusing on physical violence, as that is the form of abuse most likely to result in a brain injury.

These are the questions in the physical abuse category with particular relevance to brain injury:

- Shook, pushed, grabbed or threw you
- Hit you with a fist or object
- Choked you
- Slapped you
- Beat you

SSPPS findings relevant to IPV-BI

There were several types of IPV behaviour that were more than five times more prevalent among women than among men. These forms of violence tended to be the less common but more severe acts measured by the survey. Women, relative to men, were considerably more likely to have experienced certain abusive behaviours in their lifetime, including being choked (7% versus 1%).

Physical and sexual abuse are much more likely than other forms of abuse to induce a fear state among victims. Among victims of IPV who experienced solely psychological forms of abuse, 12% of women and 4% of men stated that they had ever been afraid of a partner. In contrast, 55% of women who experienced physical or sexual IPV feared a partner at some point, as did 14% of men.

30% of women and 27% of men stated that at least one type of IPV (physical, sexual or psychological) had occurred repeatedly: either on a monthly basis or more often.

Of the half of respondents who reported that they were victims of abusive behaviours less than monthly but still repeatedly in the previous year, women were twice as likely as men to have experienced at least one abusive behaviour on a daily or almost daily basis in the past 12 months (12% versus 6%).

Twenty per cent of women and 12% of men report being injured as a result of IPV. Three per cent of women victims report losing consciousness. The comparable percentage for men was too low for survey confidence.

Reporting to police and seeking additional support

Women who experienced IPV on a monthly basis or more (13%) were more likely to say that the abuse had come to the attention of police, compared to those who had experienced IPV once (2%) or a few times (5%). Regardless of frequency, however, the vast majority of IPV did not come to the attention of police.

(*The 2019 General Social Survey found that 80% of those who experienced spousal violence did not report it to the police. This lack of reporting has increased since 1999, when 28% of domestic violence victims reported the violence to police.)

This could reflect the fact that some of the IPV behaviours measured may not be perceived by victims as a criminal matter or as something that can or should be reported to police. According to the 2014 General Social Survey, the two most common reasons for not reporting spousal violence to the police were a belief that the abuse was a private or personal matter and a perception that it was not important enough to report

As noted, the majority of IPV victims had not used or consulted a formal service in the past 12 months. The most common reasons given by IPV victims who did not use these services were that they didn't want or need help (51% of women and 56% of men) or that the incident was too minor (38% of women and 29% of men).

Populations with the highest rates of IPV victimization

Three in ten (29%) women 15 to 24 years of age reported having experienced IPV in the past 12 months, more than double the proportion found among women between the ages of 25 to 34 or 35 to 44, and close to six times higher than that among women 65 years of age or older. Likewise, for men, 26% of 15- to 24-year-olds had experienced some form of IPV in the past 12 months, declining to 5% among those 65 years of age and older.

Women with a history of physical or sexual abuse before the age of 15 were about twice as likely as women with no such history to have experienced IPV either since age 15 (67% versus 35%) or in the past 12 months (18% versus 10%).

This pattern was also evident among men; over half (53%) of those who were physically or sexually abused during childhood reported experiencing IPV at some point in their lifetime, while this was the case for three in ten (30%) men who were not abused during childhood. Likewise, men who were abused during childhood were more likely than those who were not to have experienced IPV in the past 12 months (17% versus 10%).

The gendered nature of this violence is notable here: while physical assault outside of intimate partner relationships was more common for men (33%) than women (26%), physical assault within an intimate relationship was more common among women (23%) than men (17%).

Physical versus sexual violence

For women, the most common type of assault differed depending on the type of relationship. When looking at violence committed by an intimate partner, physical assault was more common than sexual assault. The reverse was true when looking at violence not committed by an intimate partner. For men, regardless of the relationship to the perpetrator, physical assault was far more common than sexual assault.

The 2019 General Social Survey found that 39% of female victims and 23% of male victims reported being physically injured from domestic violence.

Rates for female victims for specific questions of physical abuse relevant to brain injury

- Shook, pushed, grabbed or threw you
 - Overall, 17.9%;
 - Indigenous women, 31.6%;
 - visible minority, 9.3%;
 - young women 11.6%;
 - sexual minority women 30.8%;
 - women with disabilities 23.9
- Hit you with a fist or object
 - 11.3% overall;
 - 26.4% for Indigenous women;
 - visible minority 5.9%;
 - young women 7.6%;
 - sexual minority women 22.3%;
 - women with disabilities 16.5%
- Choked you
 - 6.5% overall;
 - 17.3% for Indigenous;
 - 3.2% visible minority;
 - women 5.9%;
 - sexual minority women 16.5%;
 - women with disabilities 10.2%
- Slapped you
 - 11.4% overall;
 - 25.5% Indigenous;
 - 6.2% visible minority;
 - young women 8.2%;
 - sexual minority women 24.7%;
 - women with disabilities 16.4%

- Beat you
 - Overall 6%;
 - Indigenous 16%;
 - visible minority 3.5%;
 - young women 6%;
 - sexual minority women 11.7%;
 - women with disabilities 9.4%

Other sources in Canada where IPV data is being gathered (with potential for adding brain-injury related questions):

- The 27 items used in the SSPPS were drawn from various sources, including the Conflict Tactics Scale (CTS), the Composite Abuse Scale Revised Short Form (CASr-SF), and new items designed to address gaps in both of these measures.
- General Social Survey on Victimization (GSS) has collected information on intimate partner violence using the Conflict Tactics Scale (CTS) every 5 years since 1999, with data for 2019 available in 2021. In 2014, dating violence was captured through the addition of a brief module, which was expanded to align with the CTS in 2019.
- Uniform Crime Reporting Survey (UCR). The UCR includes details on the incidents, accused, and victims, but is limited only to those incidents that come to the attention of police.
- Prior to the SSPPS, data on lifetime victimization was most recently published based on the 1993 Violence Against Women Survey (VAWS). The VAWS surveyed women 18 years of age and older and was limited to asking about experiences of violence committed by men. Though not directly comparable to the SSPPS for these reasons, the VAWS found that 51% of women had been physically or sexually victimized by a man since they were 16 ([Statistics Canada 1993](#)).

Additional statistics from 2019 Family Violence in Canada (released summer 2021)

Physical assault was the most common type of family violence reported to police, affecting 7 in 10 (71%) victims. More than half (54%) of child and youth victims of family violence were physically assaulted, as were about three-quarters of senior (72%) and intimate partner (75%) victims of violence.

Child and youth, intimate partner, and senior victims of family violence all experienced higher rates of physical assault than other types of violence. There was one exception: girls aged 17 and younger experienced a slightly higher rate of sexual offences—including sexual assault and sexual violations against children—than physical assault (170 versus 167 per 100,000 population).

This is an annual survey from the Canadian Centre for Justice and Community Safety Statistics at Stats Canada. This is from the Uniform Crime Reporting survey.

Appendix D

Infographics from BC Heads Together Think Tanks

The BC Heads Together Think Tanks brought together brain injury survivors, family members, service providers, decision-makers and other stakeholders for a series of four virtual sessions in 2021. They produced three infographics for decision makers, care providers, and survivors and their families.

While there is not yet a specific infographic for brain injury, the infographics we are sharing here highlight the complexity of brain injury as it relates to mental health and addictions.

HEADS TOGETHER

A Series of Think Tanks on Brain Injury, Mental Health, and Addictions

The BC Heads Together Think Tanks brought together brain injury

HEADS TOGETHER

A Series of Think Tanks on Brain Injury, Mental Health, and Addictions

The BC Heads Together Think Tanks brought together brain injury survivors, family members, service providers, decision-makers and other stakeholders for a series of four virtual sessions in 2021 focusing on:

- Behind the Bruises: Intimate Partner Violence and Brain Injury
- Surviving an Overdose: Understanding the Need for Brain Injury Support
- Thinking Outside the Box: Addressing the Chasms in Care
- Before You Mark the Ballot: Government Responsibility at all Levels

CARE PROVIDERS



INTIMATE PARTNER VIOLENCE (IPV)

APPROXIMATELY, 230 000 CANADIAN WOMEN SUFFER FROM A BRAIN INJURY AS A RESULT OF IPV EVERY YEAR

SOAR/CATT ONLINE (2020)



ASK FOR EDUCATION AND TRAINING ON ALL ASPECTS OF BRAIN INJURY AND IPV. LEARN HOW TO SPEAK WITH SOMEONE WITH A BRAIN INJURY DUE TO IPV (STRANGULATION VS. CHOKING)

DIAGNOSIS SHOULD NOT BE A BARRIER TO ACCESSING ADEQUATE CARE AND SERVICES



REDUCE BARRIERS AND IMPROVE NAVIGATION BY COLLABORATING AND INTEGRATING CARE



PREVENT IPV RELATED BRAIN INJURIES: WORK WITH ABUSERS ON HOW TO REGULATE EMOTION, DEVELOPING HEALTHY COPING SKILLS, AND BEING SAFE AROUND OTHERS

OPIOID CRISIS

SURVIVING AN OVERDOSE CAN CAUSE DELAYED NEURAL CONSEQUENCES RESULTING IN GREATER POTENTIAL OF MISDIAGNOSIS AND DELAYED TREATMENT



OVERDOSE SURVIVORS ARE NOT BEING TRACKED OR MONITORED FOR A BRAIN INJURY



ONGOING WRAPAROUND SUPPORTS ARE NEEDED FOR PEOPLE LIVING WITH HYPOXIC OR ANOXIC BRAIN INJURY

BRAIN INJURY FROM AN OVERDOSE CAN AFFECT PERSONALITY, MENTAL AND PHYSICAL HEALTH



CREATE EDUCATION AND TRAINING TOOLS FOR HEALTHCARE PROVIDERS ON THE EFFECTS OF HYPOXIC AND ANOXIC BRAIN INJURIES FROM AN OVERDOSE



HEADS TOGETHER

A Series of Think Tanks on Brain Injury, Mental Health, and Addictions

CARE INTEGRATION

Brain injury is often the root cause of mental health and substance use issues which can lead to homelessness and criminality if unaddressed



Siloed funding creates massive chasms in care for people with concurrent brain injury, mental health and substance use issues

Integrated care provides better support for people with complex needs and costs less than fragmented, siloed care



People living with brain injury, mental health and substance use issues often require affordable, accessible housing, life skills training, counselling, vocational support and family respite

TAKE ACTION NOW!

The number of people with a brain injury has been rising for decades. 30 years of recommendations have not been implemented



Promote **research** to develop a consensus statement of best practices for the intersections of brain injury, mental health and substance use care

Promote **education** for healthcare providers on the incidence and best practices for integrating brain injury, mental health and substance use care



Develop provincial and national **strategies** to improve awareness, prevention, rehabilitation, and services in mental health, substance use and brain injury

For more information visit:
www.headstogetherthinktank.com

HEADS TOGETHER

A Series of Think Tanks on Brain Injury, Mental Health, and Addictions

The BC Heads Together Think Tanks brought together brain injury survivors, family members, service providers, decision-makers and other stakeholders for a series of four virtual sessions in 2021 focusing on:

- Behind the Bruises: Intimate Partner Violence and Brain Injury
- Surviving an Overdose: Understanding the Need for Brain Injury Support
- Thinking Outside the Box: Addressing the Chasms in Care
- Before You Mark the Ballot: Government Responsibility at all Levels

CARE PROVIDERS



INTIMATE PARTNER VIOLENCE (IPV)

APPROXIMATELY, 230 000 CANADIAN WOMEN SUFFER FROM A BRAIN INJURY AS A RESULT OF IPV EVERY YEAR

SOAR/CATT ONLINE (2020)



ASK FOR EDUCATION AND TRAINING ON ALL ASPECTS OF BRAIN INJURY AND IPV. LEARN HOW TO SPEAK WITH SOMEONE WITH A BRAIN INJURY DUE TO IPV (STRANGULATION VS. CHOKING)

DIAGNOSIS SHOULD NOT BE A BARRIER TO ACCESSING ADEQUATE CARE AND SERVICES



REDUCE BARRIERS AND IMPROVE NAVIGATION BY COLLABORATING AND INTEGRATING CARE



PREVENT IPV RELATED BRAIN INJURIES: WORK WITH ABUSERS ON HOW TO REGULATE EMOTION, DEVELOPING HEALTHY COPING SKILLS, AND BEING SAFE AROUND OTHERS

OPIOID CRISIS

SURVIVING AN OVERDOSE CAN CAUSE DELAYED NEURAL CONSEQUENCES RESULTING IN GREATER POTENTIAL OF MISDIAGNOSIS AND DELAYED TREATMENT



OVERDOSE SURVIVORS ARE NOT BEING TRACKED OR MONITORED FOR A BRAIN INJURY



ONGOING WRAPAROUND SUPPORTS ARE NEEDED FOR PEOPLE LIVING WITH HYPOXIC OR ANOXIC BRAIN INJURY

BRAIN INJURY FROM AN OVERDOSE CAN AFFECT PERSONALITY, MENTAL AND PHYSICAL HEALTH



CREATE EDUCATION AND TRAINING TOOLS FOR HEALTHCARE PROVIDERS ON THE EFFECTS OF HYPOXIC AND ANOXIC BRAIN INJURIES FROM AN OVERDOSE

HEADS TOGETHER

A Series of Think Tanks on Brain Injury, Mental Health, and Addictions

CARE INTEGRATION

BRAIN INJURY IS OFTEN THE ROOT CAUSE OF MENTAL HEALTH AND SUBSTANCE USE ISSUES WHICH CAN LEAD TO HOMELESSNESS AND CRIMINALITY IF UNADDRESSED.



Created by: Heads Together Think Tank Project

MANY SURVIVORS, FAMILY AND YOUR COLLEAGUES ARE NOT AWARE OF THE OVERLAP OF BRAIN INJURY, MENTAL HEALTH AND SUBSTANCE USE ISSUES

IT'S ALMOST IMPOSSIBLE TO INTEGRATE CARE FOR PEOPLE WITH COMPLEX NEEDS IF YOU DON'T KNOW WHO ELSE IN YOUR COMMUNITY IS PROVIDING SERVICE.



Created by: Heads Together Think Tank Project

WORK WITH OTHERS IN YOUR COMMUNITY TO CREATE PRACTICAL WAYS TO INTEGRATE LOCAL SERVICES

TAKE ACTION NOW!

SILOEED FUNDING PATTERNS CREATE MASSIVE CHASMS IN CARE FOR PEOPLE WITH CONCURRENT BRAIN INJURY, MENTAL HEALTH AND SUBSTANCE USE ISSUES



SHARE THE LIVED EXPERIENCE OF PEOPLE WHO FALL THROUGH THE GAPS IN SERVICE WITH DECISION MAKERS



GIVE DECISION MAKERS CONCRETE EXAMPLES OF WAYS TO FUND INTEGRATED SERVICES



Created by: Heads Together Think Tank Project



PROMOTE RESEARCH TO IDENTIFY BEST PRACTICES IN INTEGRATED BRAIN INJURY, MENTAL HEALTH AND SUBSTANCE USE ISSUES

FOR MORE INFORMATION VISIT:
WWW.HEADSTOGETHERTHINKTANK.COM



HEADS TOGETHER

A Series of Think Tanks on
Brain Injury, Mental Health,
and Addictions

The BC Heads Together Think Tanks brought together brain injury survivors, family members, service providers, decision-makers and other stakeholders for a series of four virtual sessions in 2021 focusing on:

- **Behind the Bruises: Intimate Partner Violence and Brain Injury**
- **Surviving an Overdose: Understanding the Need for Brain Injury Support**
- **Thinking Outside the Box: Addressing the Chasms in Care**
- **Before You Mark the Ballot: Government Responsibility at all Levels**

Survivors & Families

BRAIN INJURY IS THE SILENT EPIDEMIC...

...it is often the root cause of mental health, addiction issues, homelessness and incarceration



The incidence and prevalence of Brain Injury surpasses that of Breast Cancer, Spinal Cord Injury, Multiple Sclerosis & HIV/AIDS combined and it is the least funded - it is the orphan of our healthcare system!

More than
***1.5 million**
Canadians live with
a brain injury and
they need support



Brain injuries
impact the entire
family - this means
millions more need
support



1.5 million does not include unreported brain injuries (i.e. intimate partner violence, overdose survivors), concussions or military injuries - it's a national crisis

THE NEEDS

Survivors need safe, affordable, and appropriate housing (transitional & forever homes) with wraparound supports that are not time specific



Survivors, families,
and caregivers need
support to navigate
the system



Survivors need
meaningful activities
(employment &
volunteering)
to do every day.
They want to contribute
to their community.



Survivors need access
to services including
mental health and
addiction without
barriers



ASK YOUR CANDIDATE: How will your party approach a national healthcare strategy to address the intersections of brain injury, mental health, and addictions?

For More Information Visit:
www.headstogetherthinktank.com