

THE IMPACT OF ROAD CRASHES ON FIRST RESPONDERS & COMMUNITIES: POST-TRAUMATIC STRESS DISORDER & CRITICAL INCIDENT STRESS

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Each year, collisions on Canadian roads have devastating consequences for communities across the country, and distracted driving is a contributing factor in one in four fatalities. The focus of concern in each of these instances is often, and rightly so, centred on the victims, families and communities who are directly impacted. Less often recognized is the immediate and long-term consequences of these events for the first responders who attend crash scenes, including police, fire and paramedics. Post-traumatic stress disorder (PTSD) and critical incident stress (CIS) syndrome are significant mental health issues resulting from trauma associated with these events. Until recently, awareness of their pervasiveness among first responders has been generally low, but attention to this problem is growing. As an example of leadership, the International Association of Fire Fighters (IAFF) adopted a fundamental shift in policies relating to critical incident stress diffusing and management in 2016.¹

Almost everyone has seen media coverage or passed by crashes, heard stories from others, or knows someone affected. On this basis, there is a sense of familiarity which leads us to believe we understand their impact. But, seeing the realities of each crash and dealing with victims through the eyes of first responders has a profound emotional impact that is difficult to convey. It is also cumulative over time. In fact, many first responders attend hundreds of crash scenes throughout their career, all of which involve victims with varying injuries. Between 2013 and 2017, there were 8,573 fatal collisions which claimed 9,436 lives. In addition, there were 582,067 injury collisions resulting in serious and minor injuries among 793,684 individuals.²

These crashes are not just numbers. For all of those involved, including first responders, it is very personal. To increase awareness about the consequences of PTSD and CIS for first responders, this fact sheet shares knowledge about these prominent mental health issues, ways they are being acknowledged and addressed by professional organizations, and strategies for communities to help support and protect first responders.



What is Post-Traumatic Stress Disorder (PTSD) & Critical Incident Stress (CIS) Syndrome?

Mental health illnesses come in many forms and are increasingly recognized as a serious and growing problem. An estimated 1 in 5 Canadians may develop a mental illness in any given year.³ PTSD may result from a wide range of situations and produce varying levels of distress. According to the Canadian Mental Health Association, PTSD “includes exposure to trauma involving death or the threat of death, serious injury, or

sexual violence.”⁴ While the nature and extent of symptoms may vary among individuals, the effects of the illness are felt beyond those afflicted and influence relationships with family, friends, peers and co-workers.

Within the first responder industry, PTSD is often referred to as Critical Incident Stress Syndrome⁵ which is a normal reaction to an abnormal event, such as a catastrophic collision. In fact, the daily events faced by first responders would be perceived as anything but normal by the rest of us. Situations are physically, emotionally and psychologically demanding and can take a significant toll both in the workplace and at home. Symptoms may emerge immediately following a critical incident or be cumulative and appear long after with varying levels of severity. PTSD and CIS are not uncommon among first responders, and signs and symptoms of CIS may include a wide range of physical, cognitive, emotional and behavioural reactions⁶, such as:

- > exhaustion
- > rapid heart rate
- > shock
- > confusion
- > flashbacks
- > nightmares
- > anxiety
- > guilt
- > anger
- > denial
- > hyper-vigilance
- > withdrawal
- > increased use of alcohol and other drugs
- > divorce

There may be other indications of CIS as well, and those listed above simply illustrate the many ways this illness can affect individuals and their ability to cope with day-to-day occurrences.

The most tragic and disquieting consequence of CIS is suicide.

There are also important distinctions between PTSD and CIS. Notably, one illness does not automatically lead to the other and many factors mediate the outcomes. Of course, the most tragic and disquieting consequence of this illness is suicide. While in most instances, PTSD does not result in this outcome, the stigma surrounding this issue is

a barrier to understanding the magnitude of the problem. There is currently no national system in place in Canada to track suicide rates among first responders. Advocacy groups⁷ further acknowledge that in cases involving suicide, the reasons are not always clear. Families may be simply unaware because victims did not exhibit suicidal ideations, or they may be unwilling to discuss it to protect their privacy.

Why are PTSD and CIS prevalent among first responders?

These individuals chose a profession to help and protect others; they are *fixers*, meaning they care about people and communities. First responders are the professionals who interact with victims in an effort to save their lives. They are also police officers who race to a crash scene, knowing that upon arrival they will face anything from minor injuries to catastrophic life-altering or life-ending loss and ultimately, dreaded next of kin notifications. They are the firefighters



and paramedics inside the vehicle with victims, assessing their injuries and working with their team to safely extract them, sometimes only too aware the extrication process itself will trigger *crush syndrome*,⁸ often resulting in death. They are also the medical professionals, both in the field and in trauma rooms. Paramedics, nurses, trauma teams, and surgeons work tirelessly to literally put the pieces back together and save loved ones. Despite best efforts, they are not always successful and the cost to victims, their families and first responders is immense. Their professionalism, fortitude and bravery make them heroic to all who witness their

actions in the line of duty. But their ability to cope with and function in these distressing situations is only possible by adopting a stoic nature, and this should never be mistaken for indifference. They feel these losses deeply and, in many cases, remain intimately connected to victims and their families years later. The preventable nature of road crashes serves only to intensify these feelings and produce a sense of frustration which is difficult to let go of or overcome.

How prevalent is PTSD among first responders?

In 2017, results from a national study⁹ on Canadian public safety personnel such as police officers, firefighters, dispatchers and correctional officers raised alarm about risks to the mental wellbeing of these professionals. It examined the connection between the exposure of first responders to potentially traumatic events in the course of their duties and the increased likelihood of developing a mental disorder compared to the general population. Statistics Canada reported the rate of developing a mental disorder for the general population was 10% as compared to the survey of first responders, such as police, firefighters, paramedics and 911 operators which revealed almost half of respondents (44.5%) “screened positive for clinically significant symptom clusters consistent with one or more mental disorders.”¹⁰

An estimated 44.5 % of first responders develop a mental disorder.

Results of this Canadian study highlighted the stark difference between the prevalence of mental disorders among the general population compared to the significantly increased risk to public safety personnel. This concerning trend was also evidenced in US data showing an estimated “30% of first responders develop behavioral health conditions including, but not limited to, depression and post-traumatic stress disorder (PTSD), as compared with 20% in the general population” (Abbot et al., 2015). More concerning was the higher rates of suicide attempts and suicidal

ideation rates among firefighters than the general population.¹²

A 2018 study by the American Journal of Preventive Medicine revealed individuals who worked in these “protective service” occupations were “found to have the highest rates of suicide in the workplace — 5.3 per year per 1,000,000 workers.”¹³ Before closing its doors, the Tema Center Foundation shared findings that 16 first responders and six military members died in 2018 by suicide in Canada with 46 first responders and 12 military members committing suicide in 2017.¹⁴

Results of another Canadian study¹⁵ in 2018 into suicidal ideation, plans and attempts among public safety personnel (PSP) provided vital insights for clinicians and policymakers, and also laid the groundwork for further research. The findings highlighted the need to “develop solutions that include broad and nuanced strategies for successfully managing suicidal behaviour risk for PSP, including the rapid and broad dissemination of psychoeducation.” In recognition of the importance of this issue, Public Safety Canada released *Supporting Canada’s Public Safety Personnel: An Action Plan on Post-Traumatic Stress Injuries*¹⁶ in 2019 to provide national leadership on the issue.

What legislation and services are in place to support first responders?

The safety of first responders is protected under provincial legislation, however, the levels of protections afforded vary across jurisdictions. Workers’ compensation legislation in many provinces typically requires proof the PTSD diagnosis was a direct result of job duties versus other negative life circumstances. However, this has changed in recent years with many jurisdictions taking steps to recognize the inherent risks of mental disorders related to traumas encountered in the line of duty. Examples of new legislative protections include:

- > **Ontario.** New legislation (Bill 163: *Supporting Ontario’s First Responders Act (Post-traumatic Stress Disorder)*¹⁷ adopted unanimously by the Ontario government in April 2016 presumes PTSD (as diagnosed

by a psychologist or psychiatrist) is a direct result of a first responder's work duties. This removed the onus from first responders to prove the development of PTSD was directly related to a single, specific workplace incident.

- > **Manitoba.** New PTSD legislation passed in Manitoba¹⁸ was touted by some as the *gold standard* in Canada due, in part, to its inclusion of nurses as well as its early recognition of presumption. Effective January 2016, any Manitoba worker exposed to certain types of traumatic events and diagnosed with PTSD (by a physician or psychologist¹⁹) allows for the Workers Compensation Board (WCB) to presume it was caused by the worker's employment, unless proven otherwise. This presumption simplifies, in some cases, the establishment of a causal connection between PTSD and a worker's job duties and helps to reduce stigma associated with mental illness.
- > **British Columbia.** Bill M 233 – 2017, *Workers Compensation Amendment Act*, 2017 created a presumptive clause for first responders suffering from post-traumatic stress disorder and recognized the crucial role of paramedics, firefighters, police officers, and other first responders to ensure the health and safety of British Columbians. To that end, this Bill guaranteed they receive timely support and treatment following exposure to traumatic events.²⁰ More recently, in April 2018, the Province proposed further amendments to eliminate barriers for first responders to access compensation for mental trauma.²¹ Notably, "If approved by the legislature, these amendments will add PTSD and other mental disorders to the list of conditions that are recognized as being presumptive conditions associated with specific types of jobs. The list includes conditions that are presumed to have been caused by the nature of the work, rather than having to be proven to be job-related."

There are also national and provincial services in place to support first responders.

- > **Badge of Life Canada.** This peer-led, national, charitable volunteer organization is committed to supporting police and corrections personnel dealing with psychological injuries diagnosed from service. Programs, training and resources are available to police, corrections personnel, EMS, fire services, Canadian Border Services Agency (CBSA), special constables and nurses through their website (<https://badgeoflifecanada.org/>). Resources include a list of crisis resources and a vetted list of therapists with experience treating first responder personnel. Programs emphasize resilience building, coping skills, and learning a *new normal*.
- > **Mental Health Commission of Canada (MHCC).** This national organization developed the Road to Mental Readiness (R2MR) program. Key features included reducing stigma and increasing mental health training and resilience in first responder organizations.²² Although R2MR originally targeted police employees, the Centre for Addiction and Mental Health (CAMH) participated in the first R2MR program for paramedic services in Canada.
- > **Public Services Health & Safety Association (PSHSA).** This Ontario organization provides support to employers to establish PTSD prevention plans and programs using their extensive experience in the first responder community. It offers a free, online toolkit, #FirstRespondersFirst (<https://www.firstrespondersfirst.ca/>) consisting of validated, evidence-based resources for first responders to develop a PTSD program.



Although the specific causes of PTSD differ between police, fire, paramedic, sheriffs and other first responders, these programs to assist with coping have the potential to benefit many public safety personnel.

Work is also ongoing in individual agencies to build and expand the programs and systems in place to provide support to first responders and address mental health issues. In December 2019, the Saanich Police Department became the first police department in British Columbia to take trauma training.²³ It was made possible by a partnership between the University of Victoria and Wounded Warriors Canada. The six-week Trauma Resiliency Program was the first step in helping Saanich police recognize the signs of trauma and steps that can be taken to seek support.

Persons in leadership positions within these professions are best-suited to set the example that asking for help is a sign of strength in the face of adversity, and not weakness.

However, while programs are being introduced and enhanced to support first responders dealing with traumatic experiences, challenges remain. Stigma persists and makes those needing help reluctant to seek support or access services. These professionals respond to the worst situations which most of us would find intolerable. Hence, for many of us, it appears an inherent contradiction for them to admit needing help to deal with it. To overcome this barrier, the stigma associated with mental health must be eradicated. Persons in leadership positions within these professions are best-suited to set the example that asking for help is a sign of strength in the face of adversity, and not weakness. Greater recognition of the prevalence of mental health issues and the frequency of diagnosis of PTSD in the general population is needed. This can help overcome stigma and increase acceptance of persons with mental health issues as well as encourage them to seek help.

What structures are in place to support communities?

Communities can likewise suffer the aftermath of collisions involving serious injuries or fatalities. The sudden loss of one or more community members has ripple effects which impact neighbours, friends, schools, and workplaces. Humboldt, Saskatchewan is one such community that suffered unimaginable loss on April 6, 2018. Between 2015 and 2017 there were just six injury collisions among drivers aged 18 years and under. But on April 6th there were 16 fatalities and 13 injuries in a single day. Safe Communities Humboldt & Area reported more than 12 months later, there were first responders from Humboldt and surrounding communities who had not returned to work. Community members, particularly youth, have reported feelings of survivor guilt, increased anxiety on the road and generalized, suicidal ideation and depression. This has highlighted the need for increased mental health services throughout their community.



The first line of defence for communities to deal with collision-related trauma is often in the form of Victims Services Units,²⁴ working in partnership with police services. Victim support workers are trained to respond to traumatic events with compassion, professionalism, sensitivity along with a knowledge of crisis and trauma and where additional resources and services can be accessed. These services are typically offered to those directly impacted by collision trauma but may not be readily available to collision witnesses or members of the public who arrive on scene first to render aid. In these instances, it is important those affected recognize they may need support and know where to seek support or counselling as needed.

Call to action

We can all play a role in reducing the level of trauma first responders experience by choosing to avoid distractions on the road and avoiding preventable collisions. Driving is both a responsibility and a privilege and with that, individuals hold the power to reduce their risk. Everyone has the right to get home safe every day; not just physically, but also emotionally.



Department Critical Incident Stress Management (CISM) programs should be an integral part of organizations and experienced mental health professionals should be in all of them. These are imperative as management of CIS should start within 24 hours of an incident.

The cumulative effects of these incidents on first responders over the duration of their career must be considered. CIS can show up post-retirement and later in life and still be attributed to their time on the job. This development continues to be explored as the mental health field is dynamic with the recognition that CIS can be lifelong or delayed.

Opportunities must be present to offer support or aid to those suffering from trauma. Knowledge and access to resources must be readily available. The stigma surrounding mental health remains a reality faced by many. Each of us plays a role to eliminate it through increased awareness, understanding, and compassion. This can encourage access to vital support systems and protect our first responders and community members.

The most effective method to prevent exposure to collision-related trauma is increased awareness of unsafe behaviours that increase risk combined with our collective commitment to avoid distractions on the road.

Our sincere gratitude and respect to first responders serving Canadian communities every day.

Resources are available

If you or anyone you know is, or may be, suffering from PTSD or CIS, we encourage you to reach out for help. If there is an immediate mental health crisis, call 911, go to the nearest hospital or call a crisis line²⁵ (<https://suicideprevention.ca/need-help>). Help is also available through local Canadian Mental Health Association (CMHA) to connect you with mental health programs and services. Use the Find Your CMHA interactive map at <https://cmha.ca/find-your-cmha>. For help with CIS, contact Critical Incident Stress Management (CISM) at **1-855-969-4321** or Crisis Line: **1-800-784-2433**.

- ¹ https://www.iaff.org/wp-content/uploads/Canada/Canada_2017_IAFF_PTSD_Fact_Sheet.pdf
- ² Transport Canada, National Collision Database Online. <https://wwwapps2.tc.gc.ca/Saf-Sec-Sur/7/NCDB-BNDC/p.aspx?l=en>
- ³ Canadian Mental Health Association, <https://cmha.ca/fast-facts-about-mental-illness>
- ⁴ Canadian Mental Health Association, <https://cmha.ca/documents/post-traumatic-stress-disorder-ptsd>
- ⁵ BC Emergency Health Services, <http://www.bcehs.ca/health-info/support-for-bcehs-family-members/critical-incident-stress>
- ⁶ BC Emergency Health Services, <http://www.bcehs.ca/health-info/support-for-bcehs-family-members/critical-incident-stress>
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- ¹¹ Substance Abuse and Mental Health Services Administration (SAMHSA), Disaster Technical Assistance Center Supplemental Research Bulletin, First Responders: Behavioral Health Concerns, Emergency Response, and Trauma, May 2018

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- ¹⁴ <https://www.caledonenterprise.com/news-story/8956600-tema-conter-foundation-advocating-for-first-responders-with-ptsd-shuts-down/>
- ¹⁵ Suicidal ideation, plans, and attempts among public safety personnel in Canada. *Canadian Psychology/ Psychologie canadienne*, 59(3), 220-231. DOI: 10.1037/cap0000136 <https://psycnet.apa.org/fulltext/2018-05339-001.html>
- ¹⁶ Public Safety Canada, <https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/2019-ctn-pln-ptsd/index-en.aspx>
- ¹⁷ <https://www.camh.ca/en/camh-news-and-stories/ptsd-in-the-first-responder-world>
- ¹⁸ <https://www.wcb.mb.ca/ptsd-presumption-0>
- ¹⁹ In accordance with the most recent “Diagnostic and Statistical Manual of Mental Disorders” published by the American Psychiatric Association
- ²⁰ <http://www.bclaws.ca/civix/document/id/lc/billsprevious/6th40th:m233-1>
- ²¹ <https://news.gov.bc.ca/releases/2018LBR0008-000611>
- ²² <https://www.mentalhealthcommission.ca/English/document/36176/road-mental-readiness-r2mr-one-page-overview>
- ²³ CHEK, Dec. 9, 2019, Saanich PD becomes first BC police department to take trauma training, <https://www.cheknews.ca/saanich-pd-becomes-first-bc-police-department-to-take-trauma-training-628830/>
- ²⁴ Victim services in Canada, <https://www.victimfirst.gc.ca/serv/tvs-tsv.html>

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