

**Appearance before the Senate Standing Committee on Social Affairs, Science  
and Technology (SOCl)**

**April 21, 2021  
4:00 to 5:00 p.m.  
(by videoconference)**

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**POST-TRAUMATIC STRESS DISORDER (PTSD)**

**SYNOPSIS**

The Canadian Institutes of Health Research (CIHR) is actively engaged in the implementation of Canada's Federal Framework on Posttraumatic Stress Disorder (PTSD).

**SOMMAIRE**

Les Instituts de recherche en santé du Canada (IRSC) participent activement à la mise en œuvre du Cadre fédéral relatif au trouble stress post-traumatique (TSPT).

**KEY MESSAGES**

- The Canadian Institutes of Health Research – or CIHR – recognizes the importance of research on post-traumatic stress disorder, also known as PTSD, due to its impacts on individuals, families, communities and workplaces alike.
- A committed partner in the implementation of the Federal Framework on PTSD, CIHR is working to strengthen knowledge and collaboration on PTSD and its impacts.
- Over the last 5 years, CIHR has invested over \$13.9M in research related to post-traumatic stress disorder.
- Through these investments, CIHR has launched initiatives designed to develop the new research evidence and tools needed to address gaps in PTSD among public safety personnel in Canada.
- In addition, Budget 2018 committed an investment of \$20 million over 5 years to support a new national research consortium between CIHR and the Canadian Institute for Public Safety Research and Treatment – or CIPSRT– to address the incidence of PTSD among public safety personnel.
- Recently, CIHR and CIPSRT collaborated to host an 8-session webinar series to highlight researchers and share best practices on effective interventions to strengthen and inform practices and programs related to PTSI in public safety personnel.
- With more research, we can better determine which policies, programs, and treatments will make the most difference for the mental wellness and resilience of people in public safety occupations.

***IF PRESSED ON PTSD IN THE CONTEXT OF COVID-19...***

- CIHR investments in mental health and substance use services research are building the evidence base needed to inform policy-makers and clinicians on how to deliver the most effective mental health and substance use services for Canadians during COVID-19, including those living with and impacted by PTSD.
- For instance, a project led by Dr. Suzette Brémault-Phillips of the University of Alberta studied the utilization of digital health and remote mental health services for trauma-affected populations, including military members, veterans struggling with PTSIs, and public safety personnel, in the COVID-19 context.

## BACKGROUND

Over the last 5 years (2015-16 to 2019-20), CIHR has invested over \$13.9M in research related to post-traumatic stress disorder.

Examples of recent research initiatives supported by CIHR include:

- In March 2019, CIHR announced the results of the *Catalyst Grants in Post-Traumatic Stress Injuries (PTSI) among Public Safety Personnel (PSP)* competition, a total investment of \$2.95M to support 22 grants. These projects primarily focused on understanding, identifying, mitigating and/or preventing PTSI and adverse mental health outcomes among PSP.
- In April 2020, CIHR announced the results of the *Mental Wellness in Public Safety Personnel Team Grants* competition, a total investment of \$7.86M, to support 8 four-year research projects designed to develop the new research evidence and tools needed to address gaps in PTSI among public safety personnel in Canada.

### National Research Consortium

Budget 2018 committed \$20 million over five years, starting in 2018-19, to support a new national research consortium on PTSI in PSP between CIHR and the Canadian Institute for Public Safety Research and Treatment (CIPSRT).

This National Research Consortium will build the evidence base related to post-traumatic stress injuries among PSP and disseminate research evidence to public safety stakeholders, knowledge users, and policy makers. As part of the National Research Consortium, CIPSRT serves as the hub for knowledge mobilization.

From October 2020 to February 2021, the CIPSRT, in collaboration with CIHR, hosted an 8-session webinar series to highlight the research undertaken by grantees of the PTSI among PSP Catalyst grant competition. This series shared best practices on effective interventions (e.g., return-to-work programs and peer support networks) to strengthen and expand the evidence base needed to inform current and future policies, practices and programs related to PTSI in PSP.

### CIHR Post-Traumatic Stress Research and Knowledge Mobilization Initiative

CIHR, under the scientific leadership its Institute of Neurosciences, Mental Health and Addiction (INMHA), is developing a PTS Research and Knowledge Mobilization Initiative. As a first step, in 2018, CIHR-INMHA brought Canadian research experts in PTSD and related conditions together to define communities most impacted by these disorders and identify research gaps to inform future CIHR PTS research initiatives. In January 2020, CIHR-INMHA hosted a follow-up two-day event, organized in collaboration with people with lived experience (PWLE) as well as other stakeholders, to further identify knowledge gaps and key research areas in the development of the PTS research and knowledge translation initiative.

### COVID-19 and Post-Traumatic Stress Disorder

In April 2020, the Government of Canada announced a \$115-million investment in Canada's rapid research response to COVID-19, which included approximately \$10 million for research on the impact of COVID-19 and confinement measures on mental health and substance use needs. Under the leadership of the CIHR-INMHA, the CIHR COVID-19 and Mental Health (CMH) Initiative was developed. Through the CMH initiative, several funding competitions were designed and launched to rapidly synthesize evidence and efficiently mobilize research results to decision makers, in response to the immediate mental health and substance use services needs in the COVID-19 context, including for healthcare, front-line workers and public safety personnel.

CIHR investments in mental health and substance use services research are building the evidence base needed to inform policy-makers and clinicians on how to deliver the most effective mental health and substance use services for Canadians during COVID-19, including those living with and impacted by PTSD. Projects funded through the CMH initiative that examine PTSD/PTSI include:

- A project led by Dr. Suzette Brémault-Phillips (University of Alberta) studied the utilization of digital health and remote mental health services for trauma-affected populations, including military members, veterans struggling with PTSIs, and public safety personnel, in the COVID-19 context.
- Dr. Skye Fitzpatrick (York University) is investigating the effectiveness of a couples-based, internet-delivered PTSD intervention designed for Canadian military members, veterans, and first responders with COVID-19 related trauma exposure and their partners: <https://couplehopes.com/>

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# Catalyst Grants in Post-Traumatic Stress Injuries (PTSI) among Public Safety Personnel

## Sponsor(s)

Funding provided by the Canadian Institutes of Health Research Institute of Neurosciences, Mental Health and Addiction (CIHR-INMHA).

**Program Launch Date:** 2018-07-26

**Application Deadline:** 2018-09-25

**Funding Start Date:** 2019-03-01

## Description

Public safety personnel (PSP) such as firefighters, police, paramedics, search and rescue volunteers, correctional services workers and officers, border services officers, operational and intelligence analysts, and Indigenous emergency managers, all play a critical role in keeping Canadians safe. They put themselves in harm's way to protect Canadians from a spectrum of threats, often at great personal risk. In doing so, PSP are repeatedly exposed to potentially traumatic or disturbing experiences that can take a significant toll on their mental health and well-being. Chief among these mental health issues are post-traumatic stress injuries (PTSI), which refer to a broad set of persistent psychological difficulties including those resulting from operational duties performed as PSP (also known as operational stress injuries). Extending beyond clinically diagnosed post-traumatic stress disorder (PTSD), PTSI can also include substance use, anxiety, depression, and other mental health conditions.

Efforts to advance the knowledge base of PTSI, and PTSD in particular, are underway in other populations such as the military; nevertheless, data examining the impact of PTSI on mental health outcomes among distinct PSP groups and their unique occupational environments remain limited in Canada. Both public safety and health stakeholders have identified a need for additional research in this area.

Building on previous investments in brain and mental health research, CIHR-INMHA is launching the Post-Traumatic Stress Injuries among Public Safety Personnel funding opportunity to catalyze research projects that have a primary focus on understanding, identifying, mitigating and/or preventing PTSI and adverse mental health outcomes among PSP.

## Research Areas

This funding opportunity will support applications relevant to one or more of the following priority areas:

- Data collection, analysis and/or reporting on the incidence and prevalence of PTSI in PSP, which may also include information on relevant co-morbidities and health determinants
- Biological, clinical and social characteristics of PTSI, including differences that contribute to the risk for developing PTSI and measures/characteristics that may be associated with better treatment outcomes and resilience among PSP
- Prevention, including measures, programs and interventions with potential to limit the number of new cases of PTSI among PSP
- Diagnosis, including assessment procedures and guidelines to improve existing or establish new clinical validation tools for PTSI in PSP
- Treatment and intervention, such as psychological and clinical approaches related to symptom reduction in PSP

- Mental health awareness, stigma reduction, anti-discrimination, and/or literacy programs that have the potential to improve mental wellness among PSP

**Funds Available**

The total amount available for this funding opportunity is \$2.25 million, enough to fund approximately 15 grants. The maximum amount per grant is \$ 150,000 per year for up to 1 year, for a total of \$ 150,000 per grant.

**Objectives**

This Funding Opportunity is expected to:

- Strengthen and expand the evidence base needed to inform current and future policies, practices and programs related to PTSI in PSP
- Improve the mental wellness and resilience of Canada's PSP through innovative research

## Team Grant: Mental Wellness in Public Safety Team Grants

### Sponsor(s)

Funding provided by CIHR Institute of Neurosciences, Mental Health and Addiction (CIHR-INMHA), in partnership with the Canadian Institute for Public Safety Research and Treatment (CIPSRT).

**Program Launch Date:** 2019-01-22

**Application Deadline:** 2019-11-05

**Funding Start Date:** 2020-04-01

### Description

A key responsibility of Canada's Federal government is ensuring Canadians are safe and protected. Public safety personnel (PSP) are the backbone of the broad and multi-sectoral system which maintains public safety. PSP include, but are not limited to, first responders, such as firefighters, police, and paramedics; search and rescue volunteers; correctional services officers; border services officers; operational intelligence analysts; Indigenous emergency managers; and others.

The large bulk of PSP engage in prevention and response work to protect Canadians from a spectrum of threats and to provide assistance during emergencies, often at great personal risk. In doing so, they can work in hazardous and unpredictable environments, and are often more likely to witness and experience traumatic or disturbing situations than the general population. This can present a host of challenges to their physical and mental health, and social well-being. Central among these challenges are post-traumatic stress injuries (PTSI), which refer to a broad set of persistent psychological difficulties including those resulting from operational duties performed as PSP (also known as operational stress injuries). Extending beyond clinically diagnosed post-traumatic stress disorder (PTSD), PTSI can also include substance use, anxiety, depression, and other mental health conditions.

Previous research has indicated that women are more likely to develop PTSD, even though men are more likely to live through potentially traumatic events. Nevertheless, many earlier studies focused largely or exclusively on men, creating a knowledge gap that persists for PTSI research. Given the growing numbers of women PSP, there is a need for PTSI research that appropriately integrates sex as a biological variable and gender as a social determinant of health.

Although much of the research in PTSI has focused primarily on military and veteran populations to date, there is growing awareness of the incidence of PTSI among PSP. While PSP face similar traumatic experiences as military personnel, the unique circumstances in which they undertake their duties can have a significant impact on their wellbeing. For example, unlike military personnel who may be afforded breaks between deployment periods, PSP are continually deployed within their own communities, increasing the likelihood that they will be exposed to traumatic situations, sometimes involving someone they know, without interventions to prevent future health issues. When PSP experience stress- and trauma-related psychological difficulties, their ability to function at the individual and professional level may be compromised (presenteeism). Both public safety and health stakeholders have identified a need for additional research in this area to ensure the mental health risks associated with carrying out public safety work are well understood and resources are effectively deployed to ensure PSP well-being.

The National Research Consortium for PTSI among PSP is a joint initiative between CIHR and CIPSRT announced in the 2018 federal budget. The consortium represents a \$20 million federal investment over

five years to support research and knowledge translation activities in core areas of research expertise and strategic importance related to PSP mental health.

To fulfill this federal commitment and build on previous investments in PTSD and PTSI research, CIHR is launching the Mental Wellness in Public Safety Team Grants funding opportunity, to support the development of new research evidence and tools needed to address existing and emerging gaps in PTSI as it relates to PSP in Canada. As part of the consortium, researchers funded by CIHR through this initiative will work with CIPSRT who will serve as the consortium's national hub for coordination and knowledge translation. This could include, for example, participating in CIPSRT-led knowledge translation activities.

### **Research Areas**

This funding opportunity will support projects relevant to one or more of the following strategic priority areas:

- **Causes and Determinants**, such as biological, clinical and socio-cultural characteristics of individuals with PTSI, including differences that contribute to the risk for developing PTSI and measures/characteristics that may be associated with better treatment outcomes and resilience among PSP, including long-term effects across the life course.
- **Diagnosis**, such as screening and assessment procedures, and guidelines to improve existing or establish new clinical validation tools for PTSI in PSP.
- **Intervention Strategies**, including psychological or other clinical approaches related to symptom reduction among PSP.
- **Awareness and Prevention Strategies**, such as measures, programs and interventions with potential to limit the number of new cases of PTSI among PSP. Programs focusing on mental health awareness, stigma reduction, anti-discrimination, socio-supports and/or literacy that have the potential to improve mental wellness among PSP are eligible.

Incorporating the strategic priority areas mentioned above, this funding opportunity will support projects relevant to the following research areas:

- Firefighters
- Paramedics
- Police
- Correctional Services
- Other Areas of Research Related to Mental Wellness in PSP (General Pool)

### **Funds Available**

The total amount available for this funding opportunity is \$8,400,000, enough to fund 16 development grants and 8 team grants.

- Development grants of up to \$30,000 per grant will be offered to successful applications at the Letter of Intent (LOI) stage. The total amount of funding for the LOI stage is \$480,000, enough to fund up to 16 development grants.
  - Development grants will be used to facilitate collaboration and strengthening activities to build/and or develop the research team. Successful applicants at the LOI stage will be invited and expected to participate in a strengthening workshop. It is expected that through this workshop, applicants interested in the same areas of research and strategic priority will self-organize to collaborate and/or develop full-applications.
  - Following the strengthening workshop, successful applicants to the LOI stage will be invited to submit Full Applications for team grants.

- The total amount of funding for the Full Application stage is 7.92 million, enough to fund 8 team grants. The maximum amount per team grant is \$330,000 per year for up to three years, for a total of \$990,000 per team grant.
- Of this \$7,920,000:
  - \$990,000 is available to support an application relevant to Firefighters
  - \$990,000 is available to support an application relevant to Paramedics
  - \$990,000 is available to support an application relevant to Police
  - \$990,000 is available to support an application relevant to Correctional Services Personnel
  - \$3.96 million is available to support four applications relevant to any of the pools above and/or the General Pool –other areas of research related to mental wellness in PSP.

### **Objectives**

The overall objectives of the Mental Wellness in Public Safety Team Grant program are expected to:

- Promote interdisciplinary and multi-sectoral collaboration in PTSD research
- Promote knowledge dissemination and translation of PTSD research in the public safety and related contexts
- Improve the mental wellness and resilience of Canada's PSP through innovative research
- Improve understanding of sex and gender differences in the etiology, prevention, diagnosis and treatment for PTSD among PSPs

## Mental Health

### SYNOPSIS

The Government of Canada has committed to work with the provinces and territories to increase the availability of high-quality mental health and addiction services for Canadians, particularly in the context of the current COVID-19 pandemic.

### QUESTION

How are CIHR's activities informing the work of the federal government in delivering on its mental health, addiction and suicide prevention commitments?

### KEY MESSAGES

- Thanks for the question. CIHR continues to recognize the importance of funding innovative and timely research that will improve health outcomes for people with mental illness, particularly during the COVID-19 pandemic.
- In April 2020, CIHR began leading the **COVID-19 and Mental Health Initiative** in close collaboration with Health Canada, the Public Health Agency of Canada and others to provide evidence to decision makers on mental health responses in the context of COVID-19.
- Through this research initiative, CIHR is supporting 101 research teams across the country that are conducting rapid knowledge synthesis of current evidence on mental health and substance use, with a focus on priority and vulnerable populations.
- For example, CIHR is supporting a project led by Dr. Suzette Brémault-Phillips on the use of digital health and remote mental health services for trauma-affected populations, including military members, veterans struggling with PTSIs, and public safety personnel, in the COVID-19 context.
- In addition to supporting the creation of research evidence, CIHR has also ensured that research results are shared with policy makers.
- For instance, in November 2020, we brought together provincial policy and decision makers, researchers and other key stakeholders to gain an understanding of how virtual care can meet the unique and evolving mental health and substance use

service needs of British Columbia's diverse population during and after the COVID-19 pandemic.

- These, and other initiatives will continue to provide timely, high quality, and relevant evidence to decision makers at municipal, provincial, territorial, and federal levels.

## **BACKGROUND**

Between 2015-16 and 2019-20, CIHR invested over \$333 million in mental health and behavioural disorders research. This represents more than 1700 projects led by experts across the country.

For example, CIHR, in partnership with the Graham Boeckh Foundation, is supporting ACCESS Open Minds, a national project that is transforming the way youth aged 11-25 access mental health care by developing and testing evidence-informed approaches. There are currently 17 sites operating in 7 provinces and one territory. These sites have transformed youth mental health services in diverse ways based on local context. For example, in Ulukhaktok, a remote community in the Northwest Territories where professional service providers are not always available, the site is evaluating a model where lay health workers are trained to provide support to youth in distress.

Between 2015-16 and 2019-20, CIHR has invested over \$20 million dollars in research related to suicide prevention. This research will lead to the discovery of new, effective solutions for better prevention.

### ***COVID-19 and Mental Health Initiative (CMH)***

The mental health of Canadians has worsened during the pandemic. As noted in the brief submitted to HESA on March 4, 2021, in April 2020, CIHR launched the CMH initiative to provide timely evidence to decision makers on mental health and substance use responses in the context of COVID-19. To date, CIHR has launched three funding opportunities under this initiative, supporting a total of 101 projects for a total investment of \$13.5M from CIHR and partners:

1. In April 2020, CIHR launched a **rapid synthesis and knowledge-to-action funding opportunity** for current evidence on mental health services needs, delivery and guidelines, practice and related issues, in the COVID-19 context. In total, 45 projects were funded, including those considering the unique needs of priority populations including older Canadians, health care professionals, and Indigenous populations. This represents \$2.2M in investments.
2. In April 2020, CIHR provided the Canadian Research Initiative in Substance Misuse (CRISM) with a \$1M directed grant to undertake urgent activities to support people who use drugs, decision-makers and care providers in light of COVID-19. This includes the **creation of six national guidance documents and a rapid assessment of the challenges faced**

**by people who use drugs during the COVID-19 crisis** to guide future policy decisions.

3. In June 2020, CIHR launched the **COVID-19 Mental Health & Substance Use Service Needs and Delivery funding opportunity** to advance research on understanding rapid system transformations, developing innovative adaptations of services and/or delivery and matching access to service with needs. In total, 55 projects were funded, representing a total investment of \$10.3M from CIHR and partners.

### ***Best Brain Exchange (BBE)***

In November 2020, CIHR hosted the ‘Innovations in Virtual Care for Mental Health and Substance Use’ BBE in collaboration with the British Columbia Ministry of Health, British Columbia Ministry of Mental Health and Addictions, and Michael Smith Foundation for Health Research. This BBE brought together provincial policy and decision makers, researchers and implementation experts, non-governmental organizations and other key stakeholders to gain an understanding of how virtual care can meet the unique and evolving mental health and substance use service needs of British Columbia’s diverse population during and after the COVID-19 pandemic.

### **CONSIDERATIONS**

As per the Minister of Health’s 2019 mandate letter, she must lead work with the Deputy Prime Minister and Minister of Intergovernmental Affairs, the Minister of Finance and the Minister of Seniors to “set national standards for access to mental health services so Canadians can get fast access to the support they need, when they need it.”

On March 4, 2021, CIHR submitted a written brief to the House of Commons Standing Committee on Health (HESA), in contribution to its study on mental health and COVID-19. The brief highlighted CIHR’s activities to support and translate COVID-19 and mental health research.

Standing Committee on Social Affairs, Science and Technology

Wednesday, April 21, 2021

Partial In Camera

4:08 PM ET

Location: By videoconference

Clerk: Daniel Charbonneau (613) 301-7565

Study matters relating to social affairs, science and technology generally, as described in rule 12-7(9)

Topic: The implementation and success of a federal framework on post-traumatic stress disorder (PTSD) by the Government of Canada

- The Honourable Patty Hajdu, P.C., M.P., Minister of Health (Health Canada)
- Candice St-Aubin, Vice-President, Health Promotion and Chronic Disease Prevention Branch (Public Health Agency of Canada)
- Iain Stewart, President (Public Health Agency of Canada)
- Dr. Michael Strong, President (Canadian Institutes of Health Research)

Consideration of a draft agenda (future business)

Meeting with Transcription and Interpretation

## Estimated CIHR Investments by Research Area (\$millions)

As of March 2021

Area	2019-20	2015-16 to 2019-20
Access to care	\$39.11	\$227.22
Addiction	\$28.26	\$110.64
Aging	\$95.58	\$449.93
Amyotrophic Lateral Sclerosis (ALS)	\$9.22	\$37.00
Alzheimer's	\$42.05	\$203.14
Antimicrobial resistance (AMR)	\$26.28	\$130.72
Arthritis	\$23.96	\$114.39
Asthma	\$11.08	\$47.70
Autism	\$18.99	\$58.84
Autoimmune disease	\$29.85	\$115.55
Cannabis (Addiction)	\$4.26	\$15.71
Cannabis	\$11.12	\$29.42 (last 3 FY only)
Cancer	\$218.35	\$927.49
Cardiovascular	\$104.63	\$530.40
Circulatory & respiratory health	\$198.27	\$904.88
Cystic fibrosis	\$5.55	\$28.56
Diabetes	\$47.10	\$237.89
Eating disorders	\$0.82	\$4.13
Ebola	\$0.46	\$4.82
E-health	\$17.34	\$82.08
Epilepsy	\$10.58	\$42.08
Gastrointestinal	\$37.33	\$167.60
Genetics	\$535.98	\$2,317.25
Global health	\$29.33*	\$152.88*
Hepatitis	\$14.51	\$63.37
HIV-AIDS	\$45.62	\$224.62
Indigenous peoples' health	\$45.56	\$153.90
Infection & immunity	\$335.77	\$1,509.68
Influenza	\$4.44	\$22.03
Kidney	\$30.15	\$135.20
Liver	\$13.38	\$68.19
Lyme disease	\$1.57	\$3.72
Mental health	\$83.63	\$333.38
Metabolism	\$38.28	\$154.49

Area	2019-20	2015-16 to 2019-20
Multiple sclerosis	\$5.44	\$31.53
Musculoskeletal health & arthritis	\$132.95	\$536.17
Neuroscience	\$173.42	\$642.97
Nutrition	\$48.57	\$212.74
Obesity	\$35.18	\$180.74
Oral health	\$9.95	\$34.09
Opioids (Addiction)	\$7.64	\$35.51
Opioids	\$14.07	\$33.93 (last 3 FY only)
Parkinson's	\$17.28	\$64.84
Population & public health	\$162.71	\$750.34
Post-traumatic stress injury (PTSI)	\$3.72	\$13.91
Prescription Drug Abuse	\$3.66	\$16.36
Rare diseases	\$39.77	\$200.91
Respiratory	\$51.16	\$265.45
Spinal cord injury	\$6.09	\$28.12
Stem cell	\$75.48*	\$352.06*
Stroke	\$25.85	\$144.97
Suicide	\$4.27	\$20.70
Transplantation	\$25.36	\$110.10
Traumatic brain injury	\$10.59	\$38.52
Tuberculosis	\$5.89	\$27.91

**Notes:**

Amounts for individual projects may be double-counted in the case where a project was found relevant to more than one research area (e.g., a project could be relevant to both diabetes and obesity). Therefore, the sum of individual research areas will not reflect the overall expenditures by CIHR.

For areas marked (\*), the most recent data available is FY 2018-19.