



# MENTAL DISORDER SYMPTOMS AMONG NURSES IN CANADA

Andrea M. Stelnicki, PhD, R. Nicholas Carleton, PhD, Carol Reichert, MA



# WE ARE CANADA'S NURSES

The CFNU represents close to 200,000 frontline care providers and nursing students working in hospitals, long-term care facilities, community health care and our homes. We speak to all levels of government, other health care stakeholders and the public about evidence-based policy options to improve patient care, working conditions and our public health care system. Throughout this project, we also collaborated with BCNU, FIQ and several other health care unions.



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A cycle of excessive overtime and unsustainable workloads, with widespread verbal and physical violence, have led to a decline in nurses' health, including nurses' mental health. With a growing nurse shortage evident in many parts of the country, and further nurse shortages on the horizon, this situation is likely to worsen.

— Linda Silas



# ACKNOWLEDGEMENTS

Our sincere thanks to CFNU’s member organizations as well as BCNU, FIQ and other health care unions for their help in promoting the survey that forms the basis for this report. To all the nurses who participated in this study, we also extend a heartfelt thank-you. By adding your voice to the collective voice of so many other nurses you will help make a difference in the mental health of nurses. The authors would also like to thank Dr. Michelle McCarron, Dr. Ron Martin, Emilie Kossick and Andréanne Angehrn for their helpful comments and contributions to the preparation of this report.

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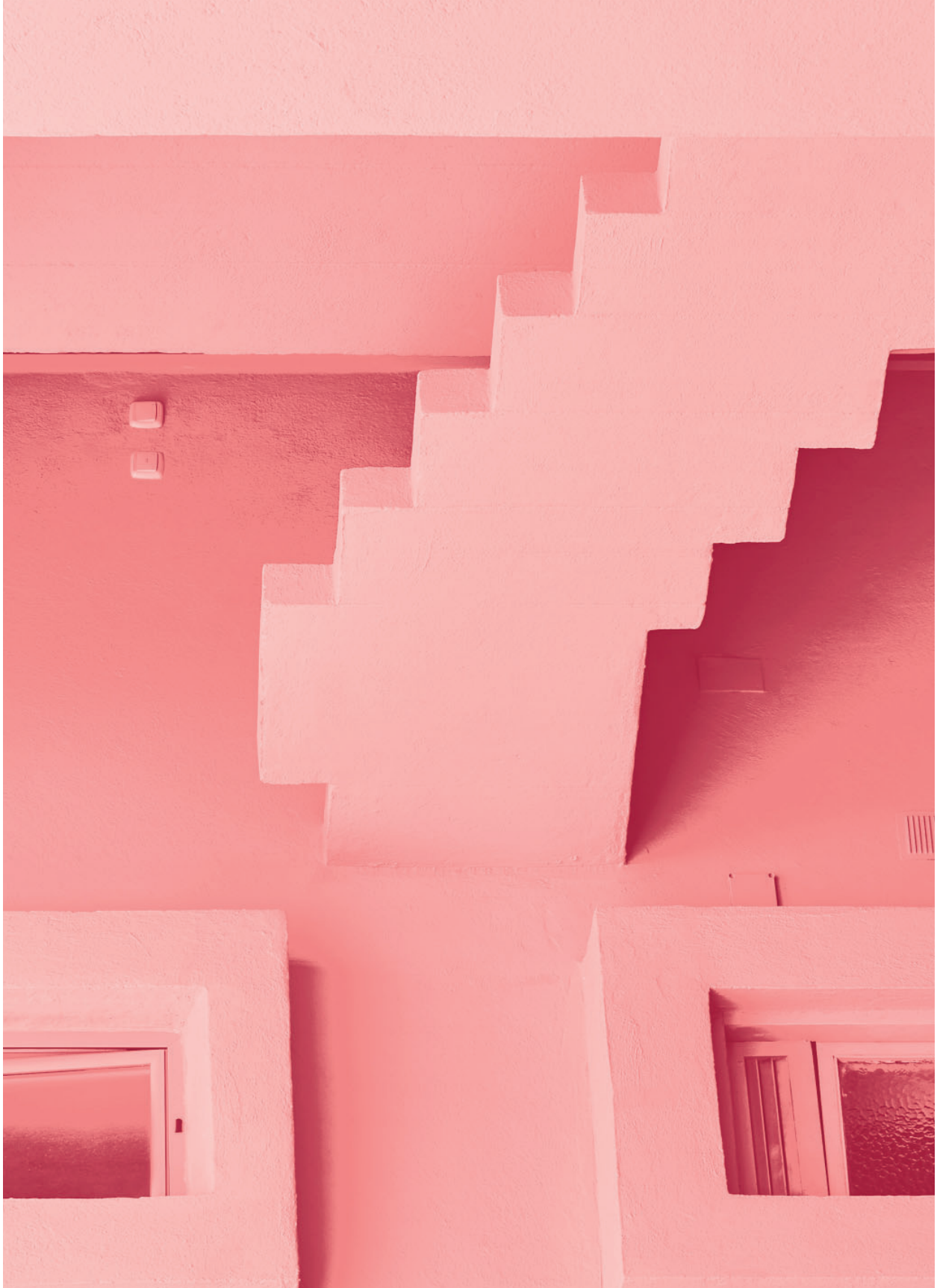
**Please note:** Nurse survey data included in this study was collected from May 15, 2019 to September 30, 2019, prior to the 2020 COVID-19 pandemic.





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# MESSAGE FROM LINDA SILAS



Linda Silas speaking at the 2019 CFNU convention

For over a decade, the Canadian Federation of Nurses Unions (CFNU) has been documenting the rising rates of nurse absenteeism and overtime in provinces across Canada. The CFNU's work suggests that a cycle of excessive overtime and unsustainable workloads, with widespread verbal and physical violence, have led to a decline in nurses' health, including nurses' mental health. With a growing nurse shortage evident in many parts of the country, and further nurse shortages on the horizon, this situation is likely to worsen.

Nurses face many of the same challenges as public safety personnel. Indeed, nurses are the last step on the public safety continuum, receiving patients in emergency rooms and caring for patients thereafter. Like public safety personnel, nurses are

sharing their stories of traumatic incidents but, despite these compelling stories, nurses are not being heard. The CFNU recognized that without national-level validated data about nurses' mental disorder symptoms, and the associated workplace stressors, interventions and supports would remain inadequate and incomplete.

In Manitoba, the Manitoba Nurses Union (MNU) responded to growing concerns about PTSD, burnout and critical incident stress among its nurse members by conducting both qualitative and quantitative studies with their membership between 2014 and 2015. The MNU report found that about a quarter of Manitoba nurses consistently experienced symptoms of PTSD. The surprising results of the MNU study led to the call for validated national data.

To address this gap in the research, the CFNU commissioned a team of researchers from the University of Regina, drawing on their expertise on PTSD and the workplace, to document the evidence and to help identify potential solutions. This report represents the results of the first anonymous Canada-wide assessment of occupational stress injuries (i.e. post-traumatic stress injuries) among nurses. The CFNU undertook this research, in

80% of those surveyed said the regular core health care staff was inadequate. Over 70% said their health care facility was regularly over capacity. Among the top ten sources of extreme stress were short staffing, unpredictable staffing and scheduling, lack of support from the nursing administrators, having to deal with violent and abusive patients, and being held accountable for things over which they have no control.

*“The data confirms that it is a pressure cooker out there for frontline nurses.”*

conjunction with the University of Regina, because there was no national-level data on occupational stress injuries among nurses. The University of Regina’s online survey asked questions about nurses’ exposure to traumatic experiences, critical incidents and extremely stressful experiences the prevalence of nurses’ mental disorder symptoms of PTSD, depression, anxiety, Panic Disorder, burnout and issues with alcohol. It also posed questions about what interventions worked and didn’t work, and offers recommendations for the long road ahead.

The data confirms that it is a pressure cooker out there for frontline nurses. Over

Higher patient populations mean workloads rise and the quality of care declines. Excessive and mandatory overtime are becoming standard operating procedure in order to cope with day-to-day scheduling issues. As the nurse staffing shortage deepens and patient acuity increases, escalating rates of violence are just one symptom of a stressful work environment.

Rather than engaging in long-term health human resources planning to address over-capacity issues, most governments across the country are calling for fiscal restraint, leading to further layoffs and an ever-deepening crisis of care. To provide quality care to Canadians, governments need to acknowledge the essential role played by frontline health care workers. When nurses work excessive overtime on a regular basis; when they are frustrated because they cannot possibly meet their professional standards of care due to excessive workloads and short staffing; when they are

emotionally and physically exhausted; when they are regularly exposed to violence, the mental health of the nursing workforce is badly eroded.

The erosion in the mental health of nurses – the high prevalence rates of nurses’ mental disorder symptoms of clinical levels of burn-out, PTSD and other mental disorders as documented in this report (much of which goes unreported and untreated) – has a direct impact on employers in terms of lost productivity, sick leave, and both short- and long-term disability. It also directly impacts patients and patient care. Ultimately, the entire health care system suffers.

On behalf of the CFNU and its member organizations, I would like to thank Dr. Stelnicki, Dr. Carleton, Carol Reichert and the CFNU Advisory Committee, as well as all the nurses who took the time to fill out this survey that will make a difference to nurses everywhere.

Sincerely,

Linda Silas  
President of the Canadian Federation of  
Nurses Unions

# RECOMMENDATIONS

## CFNU RECOMMENDATIONS FOR HEALTH CARE EMPLOYERS

### **Early intervention and support:**

- Increase the level of support that nurses receive from administrators and mental health professionals following a critical incident, ensure all nurses affected receive critical incident debriefing as soon as possible to reduce the impact of exposures to traumatic events, and ensure the early availability of ongoing mental health supports as needed.
- Ensure that the workplace has a recognized critical incident management system (e.g., CISM) in place.
- Establish and implement evidence-based return-to-work programs that recognize the potential long-term impact of psychological injuries and also encourage retention through recognizing and respecting the value of injured workers.

### **Training:**

- Increase access to mental health training for all nurses, focusing on reducing stress and stigma, and enhancing coping strategies for nurses.
- Provide mental health training focused on nurses' mental health regularly throughout nurses' careers from early- to mid- to late-career, rather than in a single-session format.
- To help build peer support capacity, provide both informal and formal training opportunities, including 'train the trainer' programs.
- Establish policies and protocols to require that mental health training programs' effectiveness be regularly reviewed and evaluated so they meet their stated objectives.

### **Education:**

- Provide ready access to validated mental health screening tools to help educate nurses about the early signs of mental health disorders (e.g., PTSD, Generalized Anxiety Disorder, Major Depressive Disorder, Panic Disorder), suicidal ideation and risky alcohol use so that nurses can recognize when they are at risk of developing mental health problems and be encouraged to seek early access to care.
- Offer education programs focused on stigma reduction and the early signs of mental health disorders throughout the organization, including managers and all employees, to encourage employers to implement mitigation strategies.

### **Proactive Strategies and Activities:**

- Undertake a psychosocial risk assessment of the work environment using validated tools (e.g., Copenhagen Psychosocial Questionnaire (COPSOQ)) to identify and reduce stress within the workplace.
- Given that nurses described workload and staffing issues as extremely stressful, put in place policies that address staffing shortages so as to ensure that staffing and the staff mix are matched to both the acuity level and volume of patients on a real-time, shift-by-shift basis.
- Given the frequency of exposure to physical assault and abuse, in conjunction with joint occupational health and safety committees, ensure workplace violence risk assessments are regularly performed throughout facilities, and workplace violence prevention programs are in place, along with appropriately trained and resourced security, procedures for reporting incidents and incident investigation, as well as for responding to recommendations.
- Reduce the administrative burden on nurses, including providing appropriate staffing, to reduce the requirement for non-nursing duties.



# RECOMMENDATIONS (continued)

## CFNU RECOMMENDATIONS FOR GOVERNMENTS

### Provincial governments:

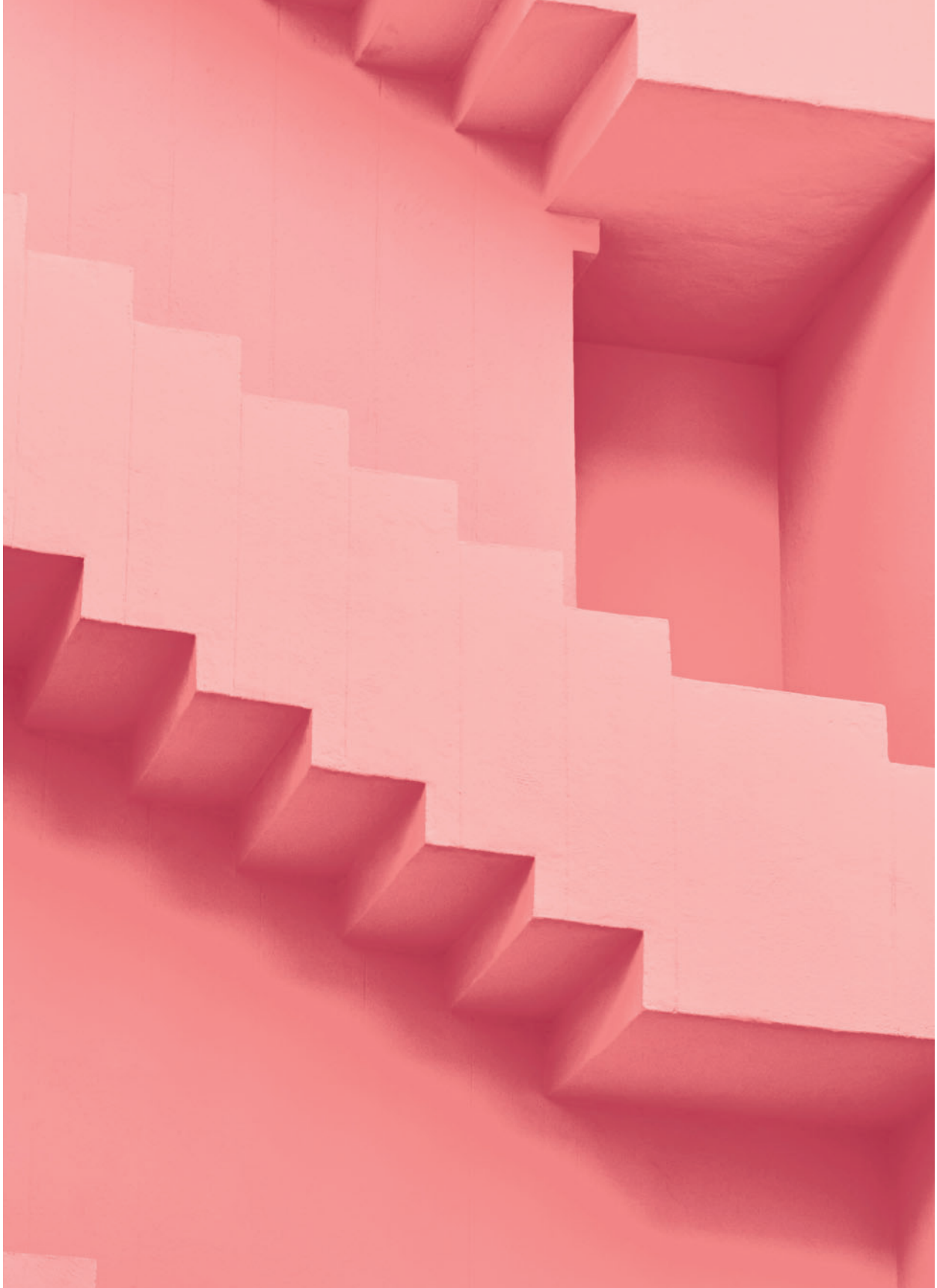
- Provide funding for the development of:
  - Evidence-based mental health training, resources and supports designed for nurses; ensure they are equally accessible across all nursing sectors.
  - Mental health screening tools focused on health care workplaces.
  - Specialized mental health training to reduce stigma and build organizational capacity with respect to mental health supports in health care.
  - Online resources, including interactive webinars, to offer accessible anytime/anywhere evidence-based education geared to nurses' shift work.
- Coordinate provincial knowledge sharing, bringing together experts on workplace mental health from diverse domains to share, develop and build on best practices and existing evidence-based workplace resources.

### Federal government:

- Through the Public Health Agency of Canada, convene a follow-up conference on a national PTSD strategy to help build on the national framework on workplace-related PTSD through knowledge-sharing and capacity-building, leveraging existing best practices and resources.
- Provide funding for national research on nurses, utilizing Statistics Canada sampling methods and clinical interviews, to produce more reliable assessments and to allow for comparisons with the general population.
- Provide funding for a Canadian Institutes of Health Research (CIHR) research program to build national research capacity to identify, among other things, ways to mitigate, manage and reduce occupational stress injuries in nursing workplaces, based on the unique needs of nurses and including factors such as gender, place of work, practice specialization (e.g., ER, ICU, Psychiatry), and their level of experience. Such research should use both quantitative and qualitative methods to ensure that nurses' needs and experiences are adequately

captured. As part of this research program, research is needed to determine what mental health training and supports are accessed by nurses, and which training and supports proved most effective in improving nurses' mental health outcomes.

- As recommended by the HESA Committee *Report on Violence Facing Health Care Workers in Canada*:
  - Work with the provinces and territories to address staffing shortages in health care settings by updating the Pan-Canadian Health Human Resources Strategy to reflect the health care needs of seniors, the well-being of health care providers and the shift towards community-based care.
  - Work with the provinces and territories and health care stakeholders to develop a pan-Canadian framework to prevent violence in health care settings, which would include promoting the adoption of best practices in violence prevention across the country.



# FOREWORD



R. Nicholas Carleton, PhD

Posttraumatic Stress Disorder (PTSD) is a significant mental health challenge that may arise following exposure to one or more potentially psychologically traumatic events (e.g., exposure to war as a combatant or civilian, threatened or actual physical assault, threatened or actual sexual violence, disasters, severe motor vehicle accidents). Fortunately, most people are unlikely to be exposed to more than a handful of such events in their lives, and most will recover without substantial intervention; however, there are members of our population who, as a function of their work and service to our communities, will be exposed to hundreds or even thousands of such events.

In 2016, the Prime Minister mandated the Minister of Public Safety and Emergency Preparedness to work with the provinces, territories and the Minister of Health to develop a national action

plan to better address PTSD. As part of the subsequent preparations to inform a plan, numerous critical knowledge gaps were identified, which galvanized researchers across Canada who began working to fill the gaps. I was very proud to lead a large interdisciplinary team in a national effort to better understand the size and scope of the PTSD challenge facing our public safety personnel (PSP; e.g., border services agents, correctional workers, firefighters, paramedics, police). The results gained national attention, highlighting the mental health challenges faced by PSP, which include PTSD and several other mental disorders (e.g., Major Depressive Disorder, Panic Disorder), all of which came to be collectively referred to as posttraumatic stress injuries (PTSI).

The public safety personnel study results raised concerns from numerous other professional communities about the



PTSI challenge that might be facing their members. The broad diversity of such concerns was highlighted at the National Conference on PTSD: Working Together to Inform Canada's Federal Framework on PTSD in Ottawa April 9-10, 2019. Indeed, soon after the PSP results were released, I was asked by my mother, a nurse practitioner, whether the same research project could be conducted to improve our understanding of the mental health challenges facing nurses.

Subsequently, I was asked to help facilitate a national study of mental health among nurses, and I readily agreed. The research project was led by Dr. Andrea Stelnicki, supported by the CFNU, and intentionally paralleled the methods and design used with our PSP. The results of the PSP study have helped to inform and support large-scale initiatives aimed at improving the

mental health of our PSP, and we hope the current results can similarly help nurses.

As someone who was raised by a nurse, I know that nursing is sometimes a challenging profession, and that there are many stressors in the health care workplace. I also know the importance of safeguarding nurses' mental health because, ultimately, the well-being of our health care providers and the care of our patients are integrally linked. Therefore, I am hopeful that the results from the nursing study will help to inform innovative solutions to support the mental health of our nursing community.

Sincerely,

Dr. R. Nicholas Carleton



# EXECUTIVE SUMMARY

Nurses respond to high-stress situations as a regular part of their work. Some high-stress situations occur repeatedly and can result in psychologically traumatic responses. Potentially psychologically traumatic events can have a cumulative effect, wearing down people's ability to cope. There is evidence that exposure to traumatic events may be linked to mental health disorders<sup>1</sup>. Nurses experience Posttraumatic Stress Disorder (PTSD), depression and anxiety at higher rates than the general population<sup>2-6</sup>. High workload, violence in the workplace and burnout are associated with increased mental disorder symptoms<sup>7,8</sup>.

The Canadian Federation of Nurses Unions (CFNU) commissioned the University of Regina to undertake this research because there was no national-level data on occupational stress injuries (or posttraumatic stress injuries [PTSI]) among nurses. No national data existed to estimate the prevalence of mental disorders among nurses or to assess potential precipitating factors for such disorders. The current study was designed to better understand probable rates of traumatic exposure, mental health disorders and burnout among a large pan-Canadian sample of nurses. The researchers also sought to obtain information about mental health training, training effectiveness and mental health help-seeking behaviours among nurses.

Data was collected using a web-based self-report survey. The survey was designed with input from the CFNU and informed by a previous survey of mental disorder prevalence among public safety personnel (PSP)<sup>1,9,10</sup>. The survey design allowed for comparisons across nurses and PSP, who are also regularly exposed to potentially psychologically traumatic events in their work. Survey participants were asked to complete a variety of mental health screening measures.

Nurses were also asked about the formal training they might have received to support mental health, and about its perceived effectiveness, as well as whether they had sought help for their mental health. A total of 7,358 Canadian regulated nurses (RNs, LPNs, RPNs, NPs) began the survey, and 43.6% of participants completed the survey in its entirety. Participants were primarily university-educated women working full time, with more than ten years on the job.

Nurses reported high prevalence rates of exposure to potentially psychologically traumatic events through directly experiencing, witnessing or learning about the event. Physical assaults were the most frequently reported type of exposure, followed by the death of an individual after extraordinary efforts were made to save their life, and the death of someone who reminded the nurse of family or friends.

Significant difficulties with several workplace stressors, including high workloads, having to deal with violent and abusive patients, and administrative issues, were also reported by nurses surveyed.

Many participants (23.0%) screened positive for current symptoms consistent with PTSD: a rate higher than found by interview-based diagnostic evaluations of the general population but similar to rates reported in the parallel study with PSP. Men screened positive for PTSD slightly more frequently than women. Only slight differences were observed related to the place of work. Nurses working in health centres/urgent care centres or in the long-term care sector screened positive for PTSD slightly more frequently than nurses working in other settings.

Most nurses (81.7%) reported experiencing critical incident stress (i.e., symptoms of burnout or compassion fatigue following overwork or prolonged stress) at least once during their careers. Nurses screened positive for Major Depressive Disorder (36.4%), Generalized Anxiety Disorder (26.1%) and Panic Disorder (20.3%) at rates higher than those for both the general population and the overall rates reported from the parallel PSP survey. Women screened positive for Generalized Anxiety Disorder and Panic Disorder at higher rates than men; however, screening rates for Major

Depressive Disorder were comparable across men and women. Nurses screened positive for Alcohol Use Disorder at lower rates than the general population and the overall rates reported from the parallel PSP survey. Nurses working in long-term care reported higher rates of Major Depressive Disorder (45.0%), Generalized Anxiety Disorder (28.0%), suicidal ideation (39.9% lifetime), suicide planning (22.3% lifetime) and suicide attempts (12.6% lifetime) than nurses working in other settings.

Many nurses (29.3%) reported clinically significant symptoms of burnout, and most (63.2%) reported at least some symptoms of burnout. Clinical levels of burnout were lowest for nurses surveyed who were in their first year of nursing and for nurses with more than 20 years on the job. Burnout has been found to be associated with negative mental health and poor work performance in nurses.

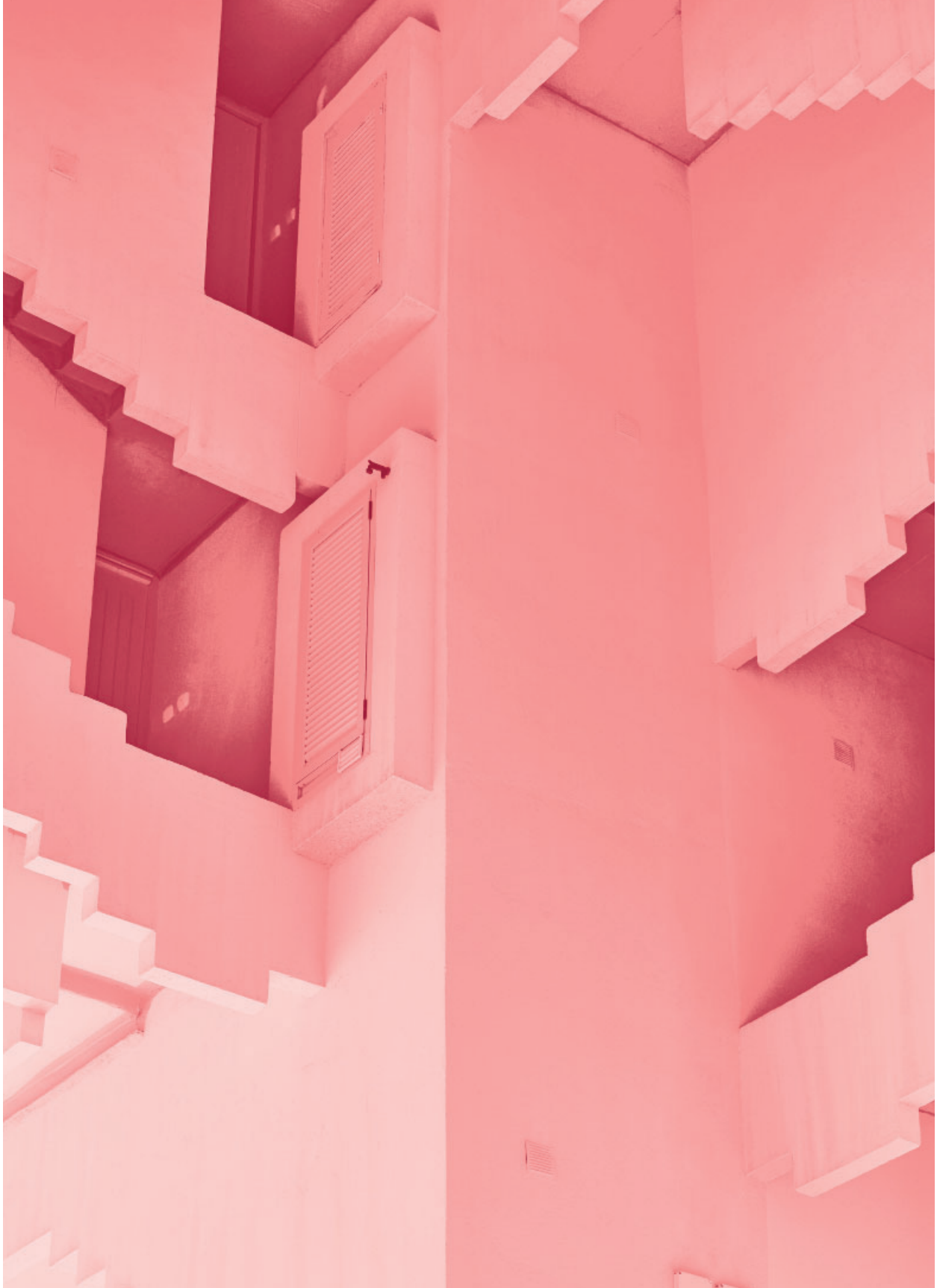
Surveyed nurses' lifetime rates of suicidal thoughts (suicidal ideation) (33.0%) were higher than for the general population and higher than for some PSP sectors, but comparable to correctional workers and paramedics. Past-year suicidal thoughts for the nurses in the study were higher than for the general population, but comparable to the overall rates reported in the PSP study. Notably, lifetime rates for both suicide planning and attempts were higher for participating nurses than

for the general population and higher than the overall rates reported from the parallel PSP survey; in contrast, past-year suicidal planning and attempts were consistent with the overall rates reported from the parallel PSP survey. Career length appears to be a potentially important factor because nurses who were early in their careers reported the highest rates of both lifetime and past-year suicidal thoughts.

The current study results highlight a significant need to direct more attention to the mental health and well-being of Canadian nurses. PTSD is receiving increasing attention nationally, but most of the attention has focused on traditionally male-dominated occupations (e.g., military, police). The current results emphasize that the cumulative stress experienced in health care workplaces can also be associated with diverse challenges related to anxiety and depression. Early recognition of stress, burnout and mental disorder symptoms may be crucial for engaging with proactive activities (e.g., regular evidence-based training, early provision of evidence-based care, changes to structural risk factors such as working short-staffed) to mitigate operational stress injuries (OSIs; i.e., any mental disorder or other mental health problem resulting from stressors experienced while serving in a professional capacity). Proper mental health training, early intervention programs and psychologically safe workplaces

might all help to reduce workplace stigma, encourage early access to evidence-based care and ultimately improve the mental health of nurses.





# INTRODUCTION

Nurses appear to experience rates of Posttraumatic Stress Disorder (PTSD), depression and anxiety at higher rates than the general population<sup>2-6</sup>, which may result, at least in part, from their experiences at work. Indeed, high workloads, workplace violence and burnout have been associated with increased mental disorder symptoms among nurses<sup>7,8</sup>. The high prevalence rates of PTSD found in some health care settings are consistent with rates found in large samples of public safety personnel (PSP; e.g., correctional workers, firefighters, paramedics and police officers) who are also regularly exposed to potentially psychologically traumatic events, significant workplace stress and workplace violence and have high rates of burnout.

A large-scale survey that focused on the mental health of Canadian PSP was conducted between 2016 and 2017<sup>9</sup> after a federal government mandate to develop a national action plan to better address PTSD in Canada. Nearly half of the PSP sample screened positive for one or more mental health disorders<sup>9</sup>, much higher than the rates within the general population<sup>9</sup>. The authors speculated the difference was due, at least in part, to PSP experiencing exceptionally frequent and cumulative exposures to potentially psychologically traumatic events<sup>1,9</sup>. In Canada, mental health problems resulting from cumulative exposures to traumatic events at work

are increasingly referred to as operational stress injuries (OSIs).

To date, there had not been any similar nationally distributed survey using standardized measures to estimate the prevalence of PTSD and other OSIs among nurses. The current study was designed to better estimate and understand rates of exposures to potentially psychologically traumatic events, symptoms of mental disorders and symptoms of burnout among a large pan-Canadian sample of nurses assessed, using measures and methods similar to the previous work conducted with Canadian PSP<sup>1,10,14</sup>. Nurse participants were also asked about their mental health training and its perceived effectiveness, as well as their mental health help-seeking behaviours. One of the aims of the study is to provide evidence that may play a crucial role in informing and identifying appropriate programs and measures needed to better manage OSIs among nurses.

## What we know about nurses' mental health: an overview of the literature

There have been two Canadian surveys that provide a basis for investigating mental health and associated factors among Canadian nurses. In 2005, Statistics Canada, Health Canada and the Canadian Institute for Health Information conducted



the National Survey of the Work and Health of Nurses<sup>11</sup>. The survey included nearly 19,000 nurses in Canada and highlighted work stress (e.g., job strain, low support from supervisors and high workload), shift work and working in long-term care facilities as factors significantly associated with poor general health and poor mental health. Almost 30% of nurses surveyed reported experiencing physical assault by a patient within the previous year, and 44% reported receiving emotional abuse by a patient<sup>11</sup>. Nurses were more likely to have experienced symptoms of depression during the previous year than the general population<sup>11</sup>; however, the 2005 survey only assessed depression and did not include questions about other mental disorder symptoms (e.g., PTSD).

In response to a growing awareness of PTSD symptoms among nurses, the Manitoba Nurses Union conducted both qualitative and quantitative studies with their member base between 2014 and 2015<sup>12</sup>. The report found that a quarter of Manitoba nurses may be consistently experiencing symptoms of PTSD. The report also provided more evidence that workplace stressors (e.g., the death of a child, workplace violence, and heavy patient caseloads) may contribute to PTSD symptoms among nurses<sup>12,13</sup>. The Manitoba Nurses Union proposed several recommendations to improve practices to support mental health among nurses, and

legislative changes to support nurses in the province.

Previous research on PTSD prevalence among nurses has produced conflicting results. PTSD prevalence among nurses has been reported as much higher than for the lifetime prevalence in the Canadian general population (9.2%)<sup>6</sup>; for example, 20-22% of nurses working in hospitals had symptoms of PTSD, and 12-18% met the diagnostic criteria for PTSD<sup>3,4</sup>. However, other researchers have suggested the PTSD rate among nurses may be consistent with the general population<sup>15</sup>.

There are indications of mental health stigma among nurses, such that post-traumatic stress disorder symptoms or diagnoses may be underreported due to fear of retribution from superiors or fears of job loss<sup>16,17</sup>.

Repeated exposure to potentially psychologically traumatic events appears to be a risk factor for the development of PTSD and related mental disorders<sup>1</sup>. A sample of Manitoba nurses reported the top five work-related stressors as: (1) the death of a child, particularly when the child died from physical abuse; (2) violence at work; (3) treating patients that resemble family or friends; (4) death or injury of a patient after undertaking extraordinary efforts to save a life; and (5) heavy patient caseloads<sup>12,13</sup>. Nurses have also identified several other

stressors: physical and emotional abuse, practice issues, conflict, and death of patients have all been identified as frequent types of traumatic events experienced by nurses<sup>18</sup>. Violence has been identified as a specific potential factor for PTSD among a sample of Manitoba's nurses, with 52% of participants reporting physical assault and 76% reporting verbal abuse from patients while at work<sup>12</sup>. Emergency room nurses were more likely to report experiencing aggressive behaviour from patients than nurses from other departments (e.g., internal medicine, surgery, pediatrics and obstetrics/gynecology)<sup>19</sup>.

Nurses with PTSD symptoms have generally reported more comorbid symptoms of anxiety, depression and burnout than nurses without PTSD symptoms<sup>20</sup>. Symptoms of Generalized Anxiety Disorder (GAD) have been reported as the most common clinically significant symptom, followed by symptoms of Major Depressive Disorder (MDD). Mental health nurses reported higher prevalence rates, with 52.7% screening positive for MDD and 48.2% screening positive for GAD<sup>5</sup>.

Nurses with symptoms of depression report high rates of comorbidity with suicidal behaviour<sup>21</sup>, but research shows conflicting results. Nurses are more likely to die by suicide than the general population, according to a systematic review that included international studies<sup>22</sup>. However, other estimates of past-year

deaths by suicide among nursing samples range from 7.6 in Australia to 10.4 per 100,000 people in Norway<sup>23,24</sup>, which is consistent with Canadian suicide rates for the general population (11.5 deaths per 100,000)<sup>25</sup>. The evidence does suggest nurses have higher rates of suicide than other occupational groups, including physicians and teachers<sup>22,26</sup>. The elevated suicide risk is present for both male and female nurses<sup>27,28</sup>.

Nursing work environments may be a contributing risk factor for suicide among nurses, possibly because nurses have easier access to lethal knowledge and means (e.g., medication, dosing)<sup>27,29</sup>. Most nurses (98%) report symptoms consistent with a high to moderate risk of suicide<sup>30</sup>, but fewer than 10% report having accessed mental health services<sup>30</sup>. Why nurses are failing to access mental health services remains in question. Guidelines on how to support nurses regarding suicidal ideation, self-harm and the deaths of their colleagues by suicide remain under-researched<sup>31</sup>.

A study of Alberta nurses found similar or slightly elevated rates of alcohol and substance use disorders relative to the general Alberta population<sup>16</sup>. The 12-month prevalence rate for Alcohol Use Disorder among nurses has been estimated at 5-6%<sup>16,32</sup> compared to past-year prevalence rates for the general Canadian population estimated at 3.2%. Substance use disorders among

nurses are associated with an increased risk of negative health consequences for both nurses and patients<sup>36</sup>, particularly when nurses report the use of alcohol or other substances while at work<sup>17</sup>.

The results of a large-scale pan-Canadian study with PSP identified risk factors that increased the probability of positive screens for mental disorders included being a woman, older, having more years of service and being single, separated, divorced or widowed.<sup>9</sup> Many of the potential risk factors identified among PSP also exist for nurses.

Research suggests that women experience PTSD more frequently and for a longer duration than men<sup>38</sup>. More than 90% of nurses in Canada are women<sup>11</sup>. Nurses aged 35 to 44 are more likely to develop symptoms of depressive disorders than older nurses (i.e., 55 years and older)<sup>11</sup>. In a review of the literature no significant differences in depressive disorder symptom rates were found between types of nurses or different work settings among Canadian nurses<sup>11</sup>, but nurses who were married appeared to be less likely to develop symptoms of MDD and GAD than nurses who were single, divorced or widowed.<sup>5</sup>

## Burnout

Research consistently shows that workplace stress and burnout are significantly

associated with PTSD symptoms in the nursing profession<sup>12,39</sup>. Most nurses (98%) who meet the screening criteria for PTSD also report clinically significant symptoms of burnout<sup>4</sup>. Nurses often report experiencing high levels of work-related exhaustion, chronic stress and interpersonal strain resulting in symptoms of burnout<sup>7,8,39</sup>. Nurses appear to be at a greater risk of burnout compared to other medical professionals (e.g., physicians), with 30 to 40% of participating nurses reporting emotional exhaustion due to their employment<sup>40,41</sup>.

Symptoms of burnout appear to be related to a range of factors, including perceived support from management, management responsiveness, workplace demands, employment benefits, overtime, interpersonal difficulties and relationships with doctors<sup>7,42</sup>. Over half (54%) of Canadian nurses in one sample reported having to arrive early or stay late to finish their work, and 62% reported working through their breaks<sup>11</sup>. Nurses have frequently reported a higher workload than is possible for one person, and 45% have indicated not being given enough time to complete their job expectations<sup>11</sup>.

Burnout among nurses has been associated with several potential problems. Workplace stress and dissatisfaction lead many nurses to consider leaving their occupation<sup>40</sup>. Patient care appears inversely associated with burnout among nurses: nurses report being unable

to properly care for their patients and experience high levels of job burnout, and patients report lower satisfaction with the care received<sup>42,44</sup>. There is also a relationship between mental health problems and burnout among nurses, with higher levels of burnout significantly associated with higher levels of anxiety, stress and depression symptoms<sup>45,46</sup>.

## Training and support for mental health

Mental health training programs for nurses have largely focused on working with patients who are experiencing mental health problems and reducing associated stigma.<sup>47,48</sup> However, almost no research has assessed the impact of mental health training on nurses, despite nurses reporting the need for training on how to cope with stress and burnout<sup>49</sup>.

Participating in critical incident debriefings and having routine structured debriefing meetings may help facilitate resilience among nurses and decrease the risk of PTSD<sup>15</sup>. A study with Canadian emergency department nurses found that 67% of participants reported inadequate support following a traumatic event at work, and 20% reported considering leaving the profession because of the event<sup>39</sup>. Only 18% of nurses in the Canadian emergency department study reported attending a critical incident stress debriefing, and no

participants reported seeking outside help for their distress<sup>39</sup>.

In a PSP sample, participation in any mental health training was associated with lower rates of screening positive for PTSD, MDD and GAD, but not for Panic Disorder or AUD<sup>14</sup>. Additional research is needed to better understand if, how and when nurses access mental health training and supports, as well as what types of supports are accessed.

# METHODOLOGY

## Participants, procedure and analyses

Data were collected using a web-based self-report survey made available in both English and French. The survey was based on a set of validated measures used in a previous survey of PSP, but collaboratively redesigned by the research team and the CFNU executive team to ensure relevant nursing variables were included. The University of Regina Institutional Research Ethics Board approved this study (File #2019-052).

The survey was promoted and distributed by the CFNU to each of its member unions through emails, social media posts and a video from the CFNU president, encouraging participation. To encourage pan-Canadian participation, limited outreach was made to non-CFNU member nurses' unions in B.C. and Quebec, as well as to other unions that represented health care workers (including some nurses) and nursing associations and colleges. The survey was available between May 15, 2019, and September 30, 2019. Participants were provided a randomly generated unique code upon entering the survey to facilitate repeated entry into the survey and multiple survey sessions.

The full sample consisted of 7,358 Canadian nurses, with 43.6% of participants completing all the survey questions.

Frequency analyses were conducted for the total group and sub-groups based on gender, years of practice and practice setting. Sample sizes varied depending on the number of participants who progressed far enough through the survey and completed the variables of interest. Total estimates of positive screens for each mental disorder, suicidal behaviours and burnout levels were calculated using the algorithms and mean scores described in Appendix B.

# MEASURES

## Demographic information

Nurse participants completed a demographic survey related to individual characteristics (e.g., age, gender, marital status, province of residence, work location, education) and provided information specific to their nursing career (e.g., employment status, license, type of organization and length of nursing career).

## Mental health screening

The survey included several well-validated measures as screening tools for Post-traumatic Stress Disorder (PTSD), Major Depressive Disorder (MDD), Generalized Anxiety Disorder (GAD), Panic Disorder (PD) and Alcohol Use Disorder (AUD), along with questions about lifetime and past-year suicidal behaviour (see “Discussion” for information about diagnostic criteria). The measures provide screening information to identify patients who may require further clinical attention; however, none of the screening tools are intended to provide definitive diagnostic information. See Appendix B for a full list of validated measures with detailed descriptions.

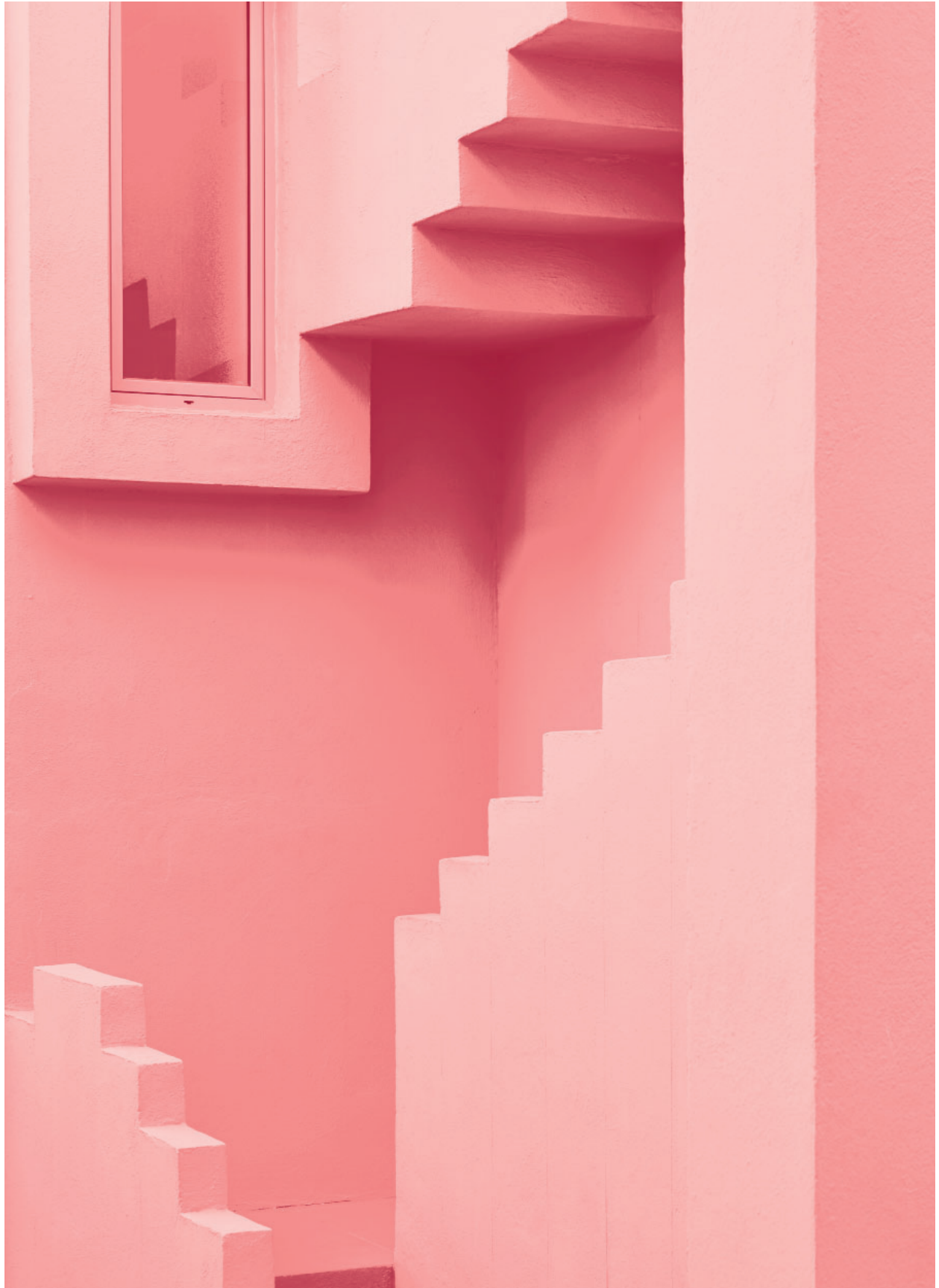
## Stress and burnout

Measures of burnout and critical incident stress were included in the survey. A measure of stress was included that measured nursing-specific sources and frequency of stress perceived by participants. Additional information is provided in Appendix B.

## Seeking help, training and effectiveness

Participants were asked questions regarding any formal training received to support their own mental health and the mental health of their patients. Following a positive response, participants were then asked to specify what training they had received and whether the training was perceived as helpful. Participants were also asked whether they sought support for a mental health problem during the past 12 months, and if not, participants were asked to indicate why they did not seek help. See Appendix B for more detailed information.





# RESULTS: DEMOGRAPHIC INFORMATION

## Individual characteristics

Sex	
Male	4.8%
Female	92.4%
No response/Rather not say	0.4%

Marital status	
Single	23%
Married or common-law	68.8%
Divorced or separated	4.0%
Widowed	0.8%
Other	1.0%
No response/Rather not say	0.2%

Province of residence	
Alberta	18.4%
British Columbia	16.3%
Manitoba	7.5%
New Brunswick	5.3%
Newfoundland and Labrador	6.6%
Northwest Territories	0.3%
Nova Scotia	8.1%
Nunavut	0.3%
Ontario	18.5%
Prince Edward Island	0.6%
Quebec	2.7%
Saskatchewan	14.1%
Yukon	0.3%

Urban/rural work location	
Urban	67.1%
Rural	28.8%
First Nations or Inuit community	1.2%
Other (e.g., multiple locations, regional position)	1.3%
No response/Rather not say	0.6%

Age	Avg.
Current age	42 y/o
Age when started in nursing	25 y/o

Totals in some categories may not equal 100% because of missing responses and/or rounding errors.

## Participant demographic information — nursing variables

Employment status	
Full-time	69.7%
Part-time or casual	21.3%
On sick leave or other leave	6.0%
Retired	1.5%
Student, in school or in training	0.3%
Unemployed or laid off	0.2%
Other (e.g., more than one job)	1.0%

Job setting	
Home or community care	6.6%
Long-term residential care	9.2%
Acute care hospital	65.0%
• Psychiatric	4.7%
• Emergency department	12.3%
• Intensive care unit (ICU)	6.9%
• Pediatric	3.3%
• Other (e.g., surgical, palliative, labour/delivery, oncology or more than one unit)	37.1%
Health centre, urgent care centre or health clinic	4.1%
Public health/community health centre	5.1%
Doctor's office	0.5%
Correctional facility	1.0%
Other	8.4%

Length of nursing career	
Under 1 year	2.7%
1 to under 5 years	18.2%
5 to under 10 years	19.5%
10 to under 20 years	25.6%
20 years or more	33.9%

Nursing license	
Registered nurse (RN)	81.2%
Registered psychiatric nurse (RPN)	5.1%
Licensed practical nurse (LPN)	10.2%
Nurse practitioner (NP)	1.5%
Other (e.g., management, administration, educator)	1.8%

## Provincial distribution of nurses by license and location

Province of residence	RN	RPN <sup>a</sup>	LPN <sup>b</sup>	NP	Other
Alberta	19.4%	29.2%	9.1%	-	14.1%
British Columbia	15.9%	23.2%	22.5%	-	-
Manitoba	7.0%	8.4%	10.9%	13.3%	-
New Brunswick	6.2%	-	-	-	9.4%
Newfoundland & Labrador	7.5%	4.9%	-	11.4%	-
Northwest Territories	0.4%	-	-	-	-
Nova Scotia	7.4%	-	16.7%	21.9%	-
Nunavut	0.2%	-	-	-	-
Ontario	18.2%	10.5%	29.0%	15.2%	18.8%
Prince Edward Island	0.6%	-	-	-	-
Quebec	2.4%	-	1.8%	-	23.4%
Saskatchewan	14.6%	17.8%	10.1%	17.1%	9.4%
Yukon	0.2%	-	-	-	-

Participants were primarily women (92.0%), married or in a common-law relationship (68.8%), with a university education (55.9%). The average age of participants was 41.54 years. Most participants were registered nurses (81.2%), and most were working as a nurse either full time (69.7%) or on a casual or part-time basis (21.3%). Participating nurses were from across Canada, with much of the sample residing in Ontario, Alberta, British Columbia and Saskatchewan. Most participants reported having worked as a nurse for between 10 and 20 years (25.6%) or for more than 20 years (33.9%). Acute care hospitals were the most common work setting (65.0%).

<sup>a</sup> Registered psychiatric nurses (RPN) are currently regulated only in the four Western provinces (Manitoba, Saskatchewan, Alberta, British Columbia) and in Yukon.

<sup>b</sup> Licensed practical nurses (LPNs) are called registered practical nurses in Ontario; accordingly, to support clarity and consistency for the current report, Registered Practical Nurses will be referred to as LPNs. Note respondents from Quebec also indicated they were RPNs (these may be nurses working in Ontario but residing in Quebec).

“-” indicates data that is not presented because of insufficient sample size.

# RESULTS: MENTAL HEALTH SCREENING

## Comparison of mental disorder symptoms reports from nurses and public safety personnel

### Top-3 most frequent trauma exposures

Nurses	
Physical assault	92.7%
Death of an individual after extraordinary efforts were made to save their life	88.9%
Death of someone who reminded you of friends or family	86.0%

Selected among a list of 20 possible events

Public Safety Personnel <sup>a</sup>	
Sudden violent death	93.8%
Sudden accidental death	93.7%
Serious transport accident	93.2%

Selected among a list of 16 possible events

### Frequency of positive screenings

Mental disorder	Nurses	PSP <sup>a</sup>
PTSD	23.0%	23.2%
Major Depressive Disorder	36.4%	26.4%
Generalized Anxiety Disorder	26.1%	18.6%
Panic Disorder	20.3%	8.9%
Alcohol Use Disorder	3.2%	5.9%

### Suicidal ideation, planning and behaviour

	Nurses		PSP <sup>a</sup>	
	Lifetime	Past year	Lifetime	Past year
Suicidal ideation	33.0%	10.5%	27.8%	10.1%
Suicidal plans	17.0%	4.6%	13.3%	4.1%
Suicidal attempts	8.0%	0.7%	4.6%	0.3%

<sup>a</sup> See Carleton et al. <sup>1,9,10</sup>

One in three nurses struggles with symptoms of major depressive disorder. One in four screens positive for Generalized Anxiety Disorder.

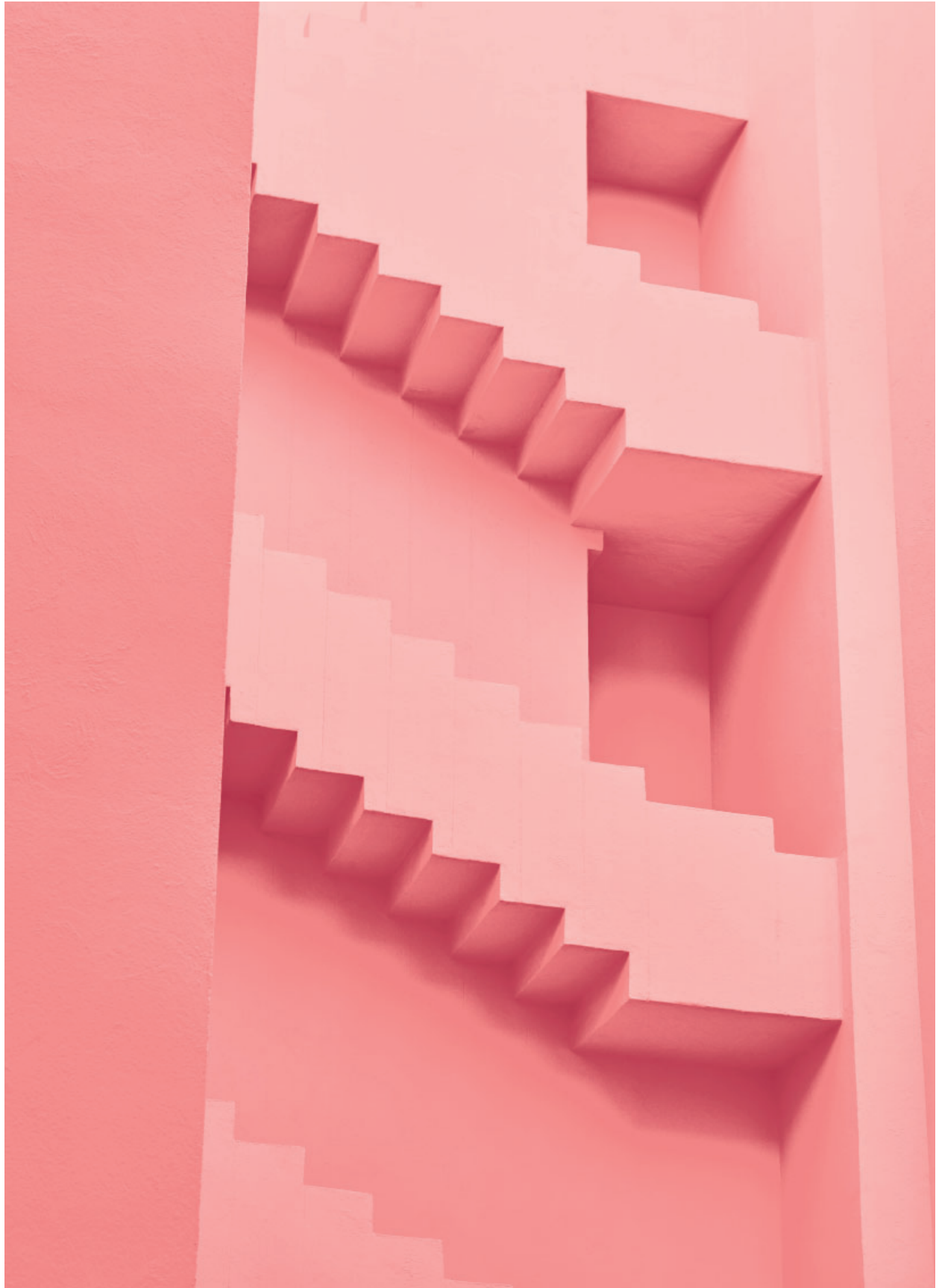
Physical assault was the most frequent type of potentially psychologically traumatic event exposure reported by the current sample of nurses (92.7%). The death of an individual after extraordinary efforts were made to save their life was the second most frequent exposure (88.9%). The third most frequent exposure was to the death of someone who reminded the nurse of friends or family (86.0%). Direct comparisons to reported frequency of potentially psychologically traumatic events cannot be made to other populations because of the addition of four nursing-specific events, which were among the events reported as most common and most distressing by participants in the current study. Further statistical comparisons were not made as part of the current study results. Frequency of positive screens for PTSD were generally consistent between nurses and PSP overall; however,

nurses screened positively more often than PSP overall for MDD, GAD and PD<sup>9</sup>. Nurses screened positively less often for AUD than PSP overall<sup>9</sup>. Nurses reported slightly higher rates of lifetime suicidal ideation, but past-year suicidal ideation was similar across nurses and PSP<sup>10</sup>. Nurses reported higher lifetime and past-year rates for both planned and attempted suicide than PSP.

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Statistical comparisons across groups were not made as part of the current study. The reader is directed to the author's note at the end of the document.





## Gender comparison of event exposures and mental disorder symptoms among nurses

### Trauma exposures

The following table provides the average number of exposures to unique potentially psychologically traumatic events.

	Female	Male
Average number of exposures	13.13	14.10

Not all exposures and experiences are traumatic. All traumatic exposures and experiences in this document are considered potentially psychologically traumatic events.

### Frequency of positive screenings

Mental disorder	Female	Male
PTSD	22.9%	25.7%
Major Depressive Disorder	36.5%	36.1%
Generalized Anxiety Disorder	26.4%	20.2%
Panic Disorder	20.5%	16.7%
Alcohol Use Disorder	3.2%	-
Clinical levels of burnout	29.6%	23.1%
Critical incident stress	81.6%	82.4%

### Suicidal ideation, planning and behaviour

	Female		Male	
	Lifetime	Past year	Lifetime	Past year
Suicidal ideation	32.8%	10.2%	37.7%	15.5%
Suicidal plans	16.7%	4.5%	21.7%	6.7%
Suicidal attempts	7.9%	0.6%	8.7%	-

"-" indicates data not presented because of insufficient sample size.

Gender differences were observed in several of the measured variables. Men reported higher rates of positive screens for PTSD, lifetime and past-year suicidal ideation, suicidal plans, suicidal attempts and critical incident stress, compared to

women. Women reported higher rates of positive screens for anxiety disorders (e.g., GAD, PD) and clinical levels of burnout. Rates of positive screens for MDD were consistent across gender.

## Comparison of event exposure and mental disorder symptoms in nurses by years of working in nursing

### Trauma exposures

The following table provides the average number of exposures to unique potentially psychologically traumatic events.

	< 1	1 to < 5	5 to <10	10 to <20	20 +
Average number of exposures	11.57	13.05	13.42	13.36	13.09

### Frequency of positive screenings

Mental disorder	< 1	1 to < 5	5 to <10	10 to <20	20 +
PTSD	17.8%	21.6%	21.7%	24.4%	23.9%
Major Depressive Disorder	34.5%	35.7%	34.8%	40.8%	34.7%
Generalized Anxiety Disorder	28.7%	32.1%	28.4%	29.1%	19.7%
Panic Disorder	22.2%	19.8%	22.3%	24.8%	16.6%
Alcohol Use Disorder	-	3.3%	2.6%	2.3%	3.7%
Clinical levels of burnout	19.4%	30.4%	34.2%	32.5%	24.5%
Critical incident stress	39.1%	74.9%	84.3%	85.7%	83.5%

## Suicidal ideation, planning and behaviour

	< 1	1 to < 5	5 to <10	10 to <20	20 +
<b>Lifetime</b>					
Suicidal ideation	39.5%	34.7%	33.6%	37.2%	28.4%
Suicidal planning	20.9%	19.1%	16.3%	18.4%	15.2%
Suicidal attempts	10.5%	8.1%	8.7%	8.3%	7.1%
<b>Past year</b>					
Suicidal ideation	18.6%	14.2%	11.2%	11.0%	7.5%
Suicidal planning	8.1%	6.2%	5.4%	4.4%	3.4%
Suicidal attempts	-	1.2%	0.8%	-	0.5%

“-” indicates data not presented because of insufficient sample size.

Participants who were more than ten years into their nursing career reported the highest rates of positive screens for PTSD, MDD and PD. Participants who had been on the job for more than 20 years reported the highest rates of AUD. Early-career nurses (i.e., 1-5 years of practice) reported the highest rates of positive screens for GAD. Suicidal ideation (lifetime and past-year prevalence) and suicidal planning (lifetime and past-year) was more common in nurses with less work experience. Exposure to potentially psychologically

traumatic events was generally associated with participants who reported more years of work in nursing; however, participants with 20+ years of experience reported slightly fewer unique exposures to potentially psychologically traumatic events and slightly fewer positive screens for mental disorders, except AUD. The same pattern was evident for frequency of participants reporting clinical levels of burnout. Frequency of critical incident stress was also associated with participants reporting more years of work in nursing.

## Event exposure and mental disorder symptoms in nurses by place of work

### Trauma exposures

The following table provides the average number of exposures to unique potentially psychologically traumatic events.

	Home care	Long-term care	Public health	Health centre or clinic	Hospital
Avg. number of exposures	12.96	11.51	12.92	14.08	13.39

### Frequency of positive screenings

	Home care	Long-term care	Public health	Health centre or clinic	Hospital
PTSD	24.3%	26.2%	21.4%	26.3%	21.8%
Major Depressive Disorder	39.1%	45.0%	27.9%	32.4%	35.5%
Generalized Anxiety Disorder	27.4%	28.0%	24.9%	28.0%	25.8%
Panic Disorder	21.1%	22.9%	19.1%	22.6%	19.8%
Alcohol Use Disorder	-	-	-	-	3.1%
Clinical levels of burnout	29.8%	29.7%	25.3%	28.6%	30.1%
Critical incident stress	77.6%	72.5%	79.7%	76.4%	82.9%

“Health centre or clinic” includes urgent care centres.  
 “-” indicates data not presented because of insufficient sample size.

## Suicidal ideation, planning and behaviour

	Home care	Long-term care	Public health	Health centre or clinic	Hospital
	Lifetime				
Suicidal ideation	35.5%	39.9%	31.9%	37.2%	31.3%
Suicidal planning	17.7%	22.3%	18.1%	18.6%	15.5%
Suicidal attempts	10.6%	12.6%	7.9%	7.1%	4.4%
	Past year				
Suicidal ideation	10.6%	12.6%	7.4%	13.5%	10.3%
Suicidal planning	4.2%	5.9%	-	7.1%	4.4%
Suicidal attempts	-	-	-	-	0.7%

“Health centre or clinic” includes urgent care centres. “-” indicates data not presented because of insufficient sample size.

Participants working in a health centre setting, an urgent care centre, a health clinic, or an acute care hospital reported a higher average number of exposures to potentially

and long term care had the highest rates of positive screens for PTSD, GAD and PD. Participants working in long-term care had the highest positive screens for MDD and lifetime suicidal ideation, planning, and attempts, but reported the lowest average exposure to unique potentially psychologically traumatic events. Participants in acute care hospitals reported the highest rates of clinical levels of burnout and most participants in this group (82.9%) reported experiencing critical incident stress during their career.

“Nurses working in long-term care had the highest rates of lifetime suicidal ideation, planning and attempts.”

psychologically traumatic events than participants working in other places of work. Participants working in health centre settings, urgent care centres, health clinics



# RESULTS: STRESS AND BURNOUT

## Difficulties with burnout

Most participating nurses (63.2%) reported at least some burnout symptoms, and many reported burnout symptoms that would be considered clinically significant and requiring attention (29.3%). Burnout severity is classified based on the Average Burnout Score from the Shirom-Melamed Burnout Measure (SMBM; Appendix B) : <2.0 = no burnout; 2.0-4.3 = some burnout; 4.4+ = clinical burnout

The ICD-11 defines burnout as “a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed.” Almost three-quarters (73.2%) of participating nurses reported feeling their institution/ organization is regularly over capacity, and

83.4% indicated they perceived the regular core health staff (e.g., doctors, nurse practitioners, nurses, aides, personal support workers) to be insufficient or inappropriate in meeting the needs of patients. Perceptions of inadequate workplace resources and workload stressors identified in the Expanded Nursing Stress Scale (ENSS) may be related to the high rates of clinical burnout reported by participants. Less than 10% of participating nurses reported experiencing no symptoms of burnout.

Burnout symptom severity	
No symptoms of burnout	7.4%
Some symptoms of burnout	63.2%
Clinical symptoms of burnout	29.3%

29.3% of participants are reporting burnout symptoms that are both clinically significant and require medical attention.

The following table indicates the percentage of participants who answered “extremely stressful” to the sources of stress provided.

Source of stress	Extremely stressful
Not enough staff to adequately cover the unit	49.8%
Unpredictable staffing and scheduling	45.9%
Lack of support by nursing administrators	35.0%
Not enough time to complete all of my nursing tasks	35.0%
Too many non-nursing tasks required, such as clerical work	32.7%
Having to deal with violent patients	32.0%
Having to deal with abusive patients	29.7%
Having to work through breaks	29.6%
Watching patients suffer	28.4%
Being held accountable for things over which they have no control	28.2%

Participants completed the ENSS to measure sources and frequency of stress common in the nursing work setting<sup>50</sup>. The top ten sources of stress rated as “extremely stressful” for participants concerned their workload (e.g., unpredictable and insufficient staffing, inadequate time for

nursing tasks, non-nursing responsibilities and working through breaks), patients (e.g., having to deal with violent and abusive patients, watching a patient suffer) and administrative issues (e.g., lack of support by administrators and being held accountable for things outside of their control).

## Staffing and workload

	Yes	No	Unsure
Is your institution regularly over capacity?	73.2%	25.5%	—
Is the regular core health care staff sufficient and appropriate to meet the needs of clients, residents or patients?	13.2%	83.4%	2.4%

# RESULTS: SEEKING HELP AND TRAINING

## Mental health training

Has received formal mental health training or education to support:	Yes	No
The mental health of others	55.4%	44.6%
Their own mental health	32.2%	67.8%

Mental health training received	
Critical incident stress management	17.8%
Critical incident stress debriefing	23.7%
Mental Health First Aid	35.4%
Peer support	31.9%
Union occupational health and safety training	35.6%
Personal resiliency training	20.1%
Other	28.2%

More participants reported receiving mental health training or education that was designed to support the mental health of others, as opposed to their own mental health. The most frequently reported type of training was union occupational health and safety training and Mental Health First Aid; however, only 35% of participants reported completing such training. Most participants reported that formal mental health training

increased their knowledge about mental health and helped them to respond to patients with mental health problems. Participants were less likely to report that the training was helpful for improving their own mental health or the mental health of team members, or for reducing mental health stigma. Very few participants reported the training was helpful for reducing OSIs.

## Effectiveness of training

Has found the training received helpful for:	Yes	Maybe	No
Improving their own mental health	29.5%	32.4%	38.2%
Improving the mental health of their team members	25.4%	40.4%	34.2%
Reducing stigma	36.1%	31.3%	32.5%
Preventing operational stress injuries	17.3%	37.3%	45.3%
Increasing their own knowledge of mental health	58.7%	22.6%	18.7%
Helping them respond to patients with mental health problems	53.3%	29.0%	17.7%

## Sources of help sought

The following table indicates the percentage of participants who have seen or talked to individuals listed below during the past 12 months to discuss problems with their emotions, mental health, or use of alcohol or drugs.

Sources of help	
Psychiatrist	8.6%
Family doctor, general practitioner or nurse practitioner	35.5%
Nurse (not a colleague)	5.4%
Psychologist	13.8%
Social worker, counsellor or psychotherapist	17.4%
Family member	50.1%
Friend	55.8%
Co-worker, supervisor or boss	32.5%
Other	4.0%
Did not seek help from any of the sources of help	25.6%

Over half of participants reported talking to a family member or a friend about their mental health during the past year. Fewer participants reported seeking help from a mental health professional (e.g., psychiatrist, psychologist, social worker, counsellor, psychotherapist), which may suggest that nursing participants prefer informal sources

of social and mental health support. About a quarter of participants reported not seeking mental health support from any of the listed sources. The current data does not clarify whether participants chose not to seek help when they needed help or if participants did not need help for their mental health.

## Reasons for not seeking help

Participants who chose not to seek help, despite indicating they did not receive enough help, most frequently reported a preference to manage their mental health challenges on their own. Time- and job-related factors (e.g., too busy, workload, hours of work) were identified as other reasons for not seeking help. Financial barriers (e.g., couldn't afford to pay, not covered by insurance) or stigma (e.g., afraid of what others would think) were not frequently endorsed reasons for not

seeking help. For participants who reported they preferred to manage themselves, most indicated they preferred to rely on family and friends (57.9%). Other participants who preferred to manage themselves indicated they were uncomfortable talking about their problems (15.8%), felt that they would be treated differently if people thought they had these problems (14.4%), relied on faith and spirituality (13.8%), didn't think others knew how to help (13.5%) or didn't feel ready to seek help (24.2%).

Reasons for not seeking help	
Preferred to manage themselves	50.2%
Didn't know how or where to get this kind of help	10.7%
Hasn't gotten around to it (e.g., too busy)	24.8%
Their job interfered (e.g., workload, hours of work or no cooperation from supervisor)	22.2%
Help was not readily available	17.1%
Didn't have confidence in the health care system or social services	18.5%
Couldn't afford to pay	16.2%
Insurance did not cover	12.0%
Were afraid of what others would think	15.5%

# DISCUSSION

Nurses have reported regularly facing high-stress situations as part of their daily work activities. Repeated exposure to high-stress situations can have a cumulative effect and can be considered potentially psychologically traumatic. Repeated exposure to potentially psychologically traumatic events has been associated with mental health disorders<sup>1</sup>. Consequently, the literature suggests that nurses experience mental disorders (e.g., PTSD, MDD, GAD) at higher rates than the general population<sup>2-6</sup>. At present, information regarding Canadian nurses' mental health and associated factors remains scarce.

The current study was designed to help address the research gap and to better understand probable rates of traumatic exposure, mental health disorders and burnout among a large pan-Canadian sample of nurses. The researchers also sought to obtain information about mental health training, training effectiveness and mental health help-seeking behaviours among nurses.

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Please note that statistical comparisons with PSP were not made as part of the current study.

## Exposures to potentially psychologically traumatic events

Participants in the current sample reported high frequencies of exposures to potentially psychologically traumatic events, either by directly experiencing the event, witnessing the event or learning about the event. Physical assault was the most frequently reported type of exposure event (92.7%). Nearly half of the sample (46.4%) reported exposure to physical assault 11 or more times. The death of an individual after extraordinary efforts were made to save their life was the second most frequent exposure (88.9%), with half (50.1%) reporting exposure at least once and more than a third (40.0%) reporting exposure 11 or more times. The third most frequent exposure was to the death of someone who reminded

the nurse of friends or family (86.0%). Most nurses (71.5%) reported experiencing the death of someone who reminded them of friends or family at least once, and 18.6% reported exposure 11 or more times. In addition to reporting on the most frequent traumatic event exposures, participants reported the three most distressing potentially psychologically traumatic event exposures as physical assault (12.2%), the death of a child (10.9%) and the death of an individual after extraordinary efforts were made to save their life (10.8%). On average, nurses were exposed to 13.18 different types of potentially psychologically traumatic events. However, the current data does not specify how the participant experienced each event



(e.g., directly experienced, witnessed or learned about the event).

When comparing nurses in the current sample to the overall rates reported from the parallel PSP<sup>1</sup> survey, the data suggests some consistencies in rates of exposures to potentially psychologically traumatic events. Nurses reported experiencing similar rates of exposure to physical assault and life-threatening natural disasters as the overall rates reported from the parallel PSP<sup>1</sup> survey. Further direct comparisons to reported frequency of unique potentially psychologically traumatic events cannot be made because the current study included four nursing-specific potentially psychologically traumatic event exposures.

The most frequent potentially psychologically traumatic event exposures and the events selected as the worst potentially psychologically traumatic events for nurses were consistent with responses from the 2015 Manitoba Nurses Union survey<sup>12</sup>. Specifically, the three most distressing exposures identified by the current nurse sample (i.e., physical assault, the death of a child and the death of an individual after extraordinary efforts were made to save their life) were also identified in Manitoba Nurses Union survey<sup>12</sup> as three of the top five stressors experienced at work.

Over half (52%) of the Manitoba Nurses Union survey participants reported being

physically assaulted, 17% reported dealing with an individual who had a weapon, and 76% reported being verbally abused at work<sup>12</sup>. Exposure to physical assault, 11 times or more, was reported by nearly half (46.4%) of the nurses in the current sample, suggesting that physical assault is a very frequently experienced potentially psychologically traumatic event.

## Mental disorder screens

### Posttraumatic Stress Disorder (PTSD)

PTSD is characterized by an individual being exposed to one or more potentially psychologically traumatic events that are followed by experiencing symptoms from four symptom clusters for at least one month: one intrusion symptom (e.g., recurrent distressing memories), one avoidance symptom (e.g., efforts made to avoid reminders of the trauma), two symptoms of negative cognition or mood (e.g., a persistent negative emotional state) and at least two hyperarousal symptoms (e.g., irritability, anger or hypervigilance)<sup>38</sup>. In the current nurse sample, the average score was 23.7. Based on the above criteria, many participants (23.0%) screened positive for current symptoms consistent with PTSD. Men screened positive for PTSD more often than women. Participants who were more than ten years into their nursing career and participants who work in health

or urgent care centres reported high rates of positive screens for PTSD. There were also participants who self-reported having been diagnosed with PTSD (4.3%) by a mental health professional or doctor. The results suggest nurses are experiencing higher rates of PTSD than the diagnosed rate for the general Canadian population<sup>6</sup>. Positive PTSD screens for nurses in the current sample were similar to those found for general PSP groups<sup>9</sup>.

### Major Depressive Disorder (MDD)

MDD is characterized by an individual reporting at least five symptoms of depression (e.g., insomnia, weight loss or gain, fatigue, feeling worthless) and at least one symptom of depressed mood, or loss of interest or pleasure, all for at least two weeks<sup>38</sup>. In the current nurse sample, the average score was 8.46, and 36.4% screened positive for MDD. Almost one-third (31.3%) of participants surveyed reported mild symptoms, 18.0% reported moderate symptoms, 10.8% reported moderately severe symptoms, and 7.6% reported severe symptoms of depression. No gender differences were observed in rates of positive screens for MDD. In relation to career length, participants who were more than ten years into their nursing career reported the highest rates of positive screens for MDD. Participants working in long-term care had the highest positive screens for MDD compared to other work settings. A self-reported diagnosis of MDD was indicated by 7.1% of participants.

The results suggest nurses are experiencing higher rates of MDD than the diagnosed rate for the general Canadian population (11.3% lifetime, 4.7% past-year<sup>34</sup>) and higher than the 9% prevalence for nurses surveyed in 2005<sup>11</sup>. Positive MDD screens for nurses were also higher than the overall rates reported from the parallel 2016-2017 PSP survey (26.4%)<sup>9</sup>.

### Generalized Anxiety Disorder (GAD)

GAD is characterized by excessive anxiety and worry, with difficulties controlling worry and at least three physical symptoms (e.g., restlessness, becoming easily fatigued, difficulty concentrating, irritability)<sup>38</sup>. In the current nurse sample, participants had an average score of 6.81, and 26.1% screened positive for GAD<sup>55</sup>. Most participants reported mild anxiety symptoms (73.9%), 14.4% reported moderate symptoms, and 11.7% reported severe symptoms of anxiety. Self-reported diagnosis of GAD was indicated by 10.3% of nurses. Women reported higher rates of positive screens for GAD than men. Early-career nurses (i.e., 1-5 years of practice) reported the highest rates of positive screens for GAD. Participants working in health or urgent care centres and clinics, as well as in long-term care, had the highest rates of positive screens for GAD.

The current results suggest nurses are experiencing higher rates of GAD than the diagnosed rate for the general Canadian

population (8.7% lifetime<sup>56</sup>). Among regulated nurses, LPN participants screened positive for GAD most frequently (33.3%), followed by RPNs (29.8%). Positive GAD screens for nurses were also higher than the overall rates reported from the parallel 2016-2017 PSP survey (18.6%)<sup>9</sup>.

### Panic Disorder (PD)

PD is characterized by experiencing a panic attack, followed by one month or more of worrying about additional panic attacks or the consequences, or a significant maladaptive change in behaviour in order to avoid having panic attacks (e.g., avoidance of exercise or unfamiliar situations)<sup>38</sup>. In the current sample, nurses average score was 3.76<sup>57</sup>, and 20.3% of nurses screened positive for PD, which means nurses had a higher score than the diagnosed rate for the Canadian general population (1.6% lifetime<sup>58</sup>). Women had higher rates of positive screens for PD than men and participants who were more than ten years into their nursing career reported the highest rates of positive screens for PD. Positive screens for PD were highest in participants working in long-term care. A previous diagnosis of PD was self-reported by 1.7% of respondents. Positive PD screens for nurses were also higher than the overall rates reported from the parallel 2016-2017 PSP survey (8.9%)<sup>9</sup>.

### Alcohol Use Disorder (AUD)

AUD is characterized by an individual reporting or displaying a pattern of symptoms resulting from alcohol use (e.g., impaired control, social impairment, risky use) that leads to impairment in daily life or to noticeable distress<sup>38</sup>. In the current study, the average score was 4.71, suggesting that, overall, the participating nurses in the sample did not report concerns with hazardous or harmful drinking behaviours. Only 3.2% of participating nurses screened positive for harmful drinking behaviours in the current sample, which is lower than a recent pan-Canadian sample of PSP (5.9%)<sup>9</sup>. Results are consistent with other research that indicated 3.9% of nursing participants were engaging in potentially problematic alcohol use<sup>60</sup>.

### Suicidal behaviour: lifetime and past-year prevalence

In the current study, 33.0% of nurses reported having seriously contemplated suicide within their lifetime, and 10.5% within the past 12 months. Nurses also reported making plans to die by suicide within their lifetime (17.0%) or within the past 12 months (4.6%). Several participants reported having attempted to die by suicide within their lifetime (8.0%) or within the past 12 months (0.7%).

Lifetime and past-year prevalence rates of suicidal ideation for nurses in the current sample were higher than the overall rates reported from the parallel 2016-2017 PSP survey (27.8%); nurses also reported higher lifetime and past-year rates for both planned and attempted suicide than the PSP sample<sup>10</sup>.

Men reported higher rates of positive screens for lifetime and past-year suicidal ideation, suicidal plans and suicidal attempts than women. Suicidal ideation (lifetime and past-year prevalence) and

planning (lifetime and past year) was more common in early-career nurses (< 5 years). Participants working in long-term care reported the highest lifetime suicidal ideation, planning and attempts. In the Canadian general population, 11.8% of people report lifetime suicidal ideation, and 2.5% report past-year suicidal ideation<sup>61</sup>; 4.0% of people report lifetime suicidal planning. About 3% (3.1%) of people report an attempt to die by suicide in their lifetime<sup>61</sup>; however, estimating attempts to die by suicide is extremely difficult because many attempts are not reported or do not require a hospital stay<sup>62</sup>.

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See Appendix B for a description of scales used for screening

## Burnout, critical incident stress and related institutional factors

Prior to completing the SMBM<sup>65,66</sup>, participants in the current study were asked questions about resources within their institution/organization. Most participants (73.2%) reported perceptions that their institution/organization is regularly over capacity, and most (83.4%) described the regular core health staff (e.g., doctors, nurse practitioners, nurses, aides or personal support workers) as insufficient or inappropriate to meet patient needs. Many (29.3%) nursing participants report current clinically significant symptoms of burnout, and most (63.2%) report at least some symptoms of burnout. The proportion of nurses reporting symptoms of burnout

appears to be higher than previous research assessing lifetime symptoms of burnout (71%)<sup>12</sup>. Few participants (7.4%) report no symptoms of burnout. The results may be related, in part, to nurses' perceptions of inadequate workplace resources (e.g., not enough staff to meet the needs of patients). A variety of factors appear to be related to symptoms of burnout, including perceived support and management responsiveness to how nurses experience the work environment, workplace demands, employment benefits, overtime, interpersonal difficulties, and relations with doctors and other staff<sup>7,42</sup>.

Previous research has indicated nurses may be at greater risk for clinically significant symptoms of burnout than other medical professionals, with 30 to 40% of nurses in previous samples reporting emotional exhaustion due to their employment<sup>40,41</sup>. Participants in acute care hospitals and those who are women reported the highest rates of clinical levels of burnout.

Over half (53.0%) of nurse participants surveyed by the Manitoba Nurses Union between 2014 and 2015 reported experiencing critical incident stress (i.e., symptoms of burnout or compassion fatigue following overwork or prolonged stress) at one point in their career<sup>12</sup>; in contrast, most (81.7%) of the current study of nurses reported experiencing critical incident stress during their career. Slightly more men than women reported experiencing critical incident stress. Frequency of critical incident stress was also associated with participants reporting more years of work in nursing; however, participants with 20+ years of service reported less critical incident stress than those with 10-20 years of service. Participants in acute care hospitals reported the highest levels of experiencing critical incident stress during their career (82.9%). Most (86.0%) nurses noted that workplace critical incident stress is common or very common. However, nurses reported that debriefing sessions never (9.8%) or seldom (20.8%) occur after

a potentially psychologically traumatic event or critical incident at work.

Workload was identified as an area of extreme stress for nursing participants. Specifically, unpredictable (45.9%) and insufficient staffing (49.8%), inadequate time for nursing tasks (35.0%), non-nursing responsibilities (32.7%), violent (32.0%) and abusive (29.7%) patients and working through breaks (29.6%) were identified as particularly stressful for the current participants. Nurses identified perceived lack of support by administrators as an area of extreme stress, which was consistent with participant responses in the Manitoba Nurses Union survey<sup>12</sup>. Past research results identify workloads, unsupportive administration, patients' relatives, shift work, staffing and the lack of availability of physicians as common sources of stress<sup>74,75</sup>.

The Manitoba Nurses Union reported that 37% of nurses working on psychiatric units, 31% of long-term care nurses and 30% of emergency room nurses experience physical violence at least once per week<sup>12</sup>. Violence was perceived by participants to be the most important contributing factor to the development of PTSD in the Manitoba Nurses Union sample, although longitudinal analyses were not completed<sup>12</sup>. Even perceiving a threat of violence can contribute to mental health problems for nurses<sup>15,76</sup>. Accordingly, violence prevention has been a strategic priority for many nursing

organizations, including the International Council of Nurses<sup>77</sup>, the CFNU and the Manitoba Nurses Union<sup>78</sup>, as well as many other health care unions and organizations across Canada<sup>79</sup>.

## Mental health training, effectiveness, and help-seeking behaviours

In the current study, more participating nurses reported receiving mental health training or education to support the mental health of other people than to support their own mental health, which is consistent with previous research<sup>49</sup>. The most frequently reported type of training was union occupational health and safety training and Mental Health First Aid; however, only 35% of participants reported completing such training. Critical incident stress management, critical incident stress debriefing, peer support and personal resiliency training were less commonly reported. Other programs that participants reported taking included Road to Mental Readiness, Applied Suicide Intervention Skills Training, Non-Violent Crisis Intervention, and courses during their postsecondary studies. Mental health training has facilitated nursing skills and confidence for working with patients diagnosed with mental health problems<sup>47,48</sup>.

Nevertheless, little research has assessed the impact of mental health training on nurses, despite nurses reporting needs

for training in how to cope with stress and burnout<sup>49</sup>. Participants in the current study echoed previous research results by indicating that the mental health training increased their knowledge and allowed them to better respond to patients with mental health problems; however, participants did not find training effective at reducing stigma. The study did not assess when the participating nurses received the mental health training. Accordingly, there is no way to use the current data to assess the durability of such training.

The current sample of nurses indicated that the mental health training they have received was not helpful for addressing their own mental health or for reducing OSIs; however, much of the training that nurses reported focused on skills to help patients rather than skills to help with personal stress. In the previous PSP study, participation in any mental health training was associated with lower rates of screening positive for PTSD, MDD, GAD, but not for PD or AUD<sup>14</sup>. Additional research

is needed to better understand if, how and when nurses access mental health training and supports, as well as the nature of these resources.

Consistent with previous PSP research<sup>14</sup>, most participants reported talking to a family member or friend about their mental health. Relatively few participants reported seeking help from a mental health professional (e.g., psychiatrist, psychologist, social worker, counsellor, psychotherapist), which suggests that nurses prefer informal sources of social and mental health support. Many participants reported not seeking mental health support from any of the listed sources of help (25.6%).

The current data does not clarify whether participants chose not to seek help when

they needed help or if participants did not need help for their mental health. Reasons identified by the participants who chose not to seek help included wanting to manage their symptoms on their own, time- and job-related factors, financial barriers and stigma. Previous research has indicated that nurses may have significant concerns about seeking mental health services resulting in coworkers and supervisors treating the nurse differently, harming their career, or the nurse being perceived as weak<sup>81</sup>. Additionally, getting time off work for treatment is also identified as a common barrier to treatment<sup>81</sup>. Reducing stigma through mental health training and streamlining access to care might be effective strategies for helping to reduce barriers to seeking mental health treatment.





# SURVEY LIMITATIONS

The current study uses data provided by a large national diverse sample of Canadian nurses; however, several caveats limit the current results and provide directions for future research. First, invitations to participate were largely focused on unionized nurses who were represented by the CFNU. The CFNU represents almost 200,000 nurses and nursing students across eight provinces. Outreach attempts were made to other unions that represent nurses, associations and colleges, but there is no way to identify how many potential participants were ultimately invited. The large sample reflects approximately 4% of CFNU nurses for whom emails are available but is not necessarily representative of the entire Canadian nursing workforce. Survey fatigue may have been a factor since many nurses' unions undertake regular surveys of their membership. A similar response rate was achieved in the National Survey of the Work and Health of Nurses (5%)<sup>11</sup>. The current sample includes larger proportions of RNs relative to the general nursing population and a smaller proportion of LPNs relative to the general nursing population<sup>82</sup>. The current sample includes larger proportions of nurses from Nova Scotia, Saskatchewan and Alberta relative to the general nursing population and smaller proportions of nurses from Newfoundland, Ontario and Quebec<sup>82</sup>. Nurses practicing in rural areas were also overrepresented relative to national statistics<sup>82</sup>.

Second, participation in the current study was anonymous, voluntary and self-selected. The recruitment materials described the study as focusing on stress in nursing, which may have attracted participants who were experiencing clinically significant stress symptoms. Recruitment methods may partially explain differences in prevalence rates between the current sample and the general population<sup>83</sup>; however, nurses who were experiencing the most severe symptoms may have been on leave, missed the invitation or been too symptomatic to respond to a lengthy survey. Stigmatizing attitudes about mental health may also have prevented some individuals from accessing the survey, despite assurances of anonymity. Participants were able to begin, leave and return to the survey at their leisure, to ease survey response burden; as such, there is no way to know the average length of survey completion time or to understand why some (54.6%) participants chose not to complete the entire survey. Survey length was reported by some participants as a potential factor in non-completion.

Third, the screening measures for mental disorders used in the current study are valid and reliable for use in clinical settings; nevertheless, diagnoses can only be made using clinical interviews with supporting collateral information. Participants reported on their current symptoms as assessed by the screening measures, with time periods

ranging from seven days to the past year. Accordingly, the current results necessarily excluded lifetime prevalence rates except for suicidal behaviours. Further, only a relatively small number of potential mental disorders were screened for in the current study. The frequency of positive mental disorder screens lends support to the need for additional research using Statistics Canada sampling methods and clinical interviews to make more reliable assessments and to allow for comparisons with the general population. Clinical interviews assessing lifetime prevalence would also help to discern whether symptoms developed prior to, or over the course of, participants' nursing careers.

Despite the limitations, the survey demographics indicate the sample was generally proportionally consistent with the age and gender of Canadian nurses. The survey was the first national attempt to understand the impact of stress in the workplace on nurses. The selected measures allow for comparisons with other large occupational studies designed to estimate mental disorders in specific occupational samples such as PSP<sup>9</sup>. Further research should statistically evaluate differences between prevalence rates obtained from the current study and PSP populations. The current results provide potentially important information to support researchers investigating possible ways to mitigate and manage OSIs in nursing workplaces.

# CONCLUSIONS AND IMPLICATIONS

The current study represents the first large-scale pan-Canadian survey of mental health disorders and related factors among nurses. The results provide a better understanding of the prevalence rates of mental disorders in Canadian nurses. Nurses reported high frequencies of exposures to potentially psychologically traumatic events. The results indicate that many nurses screened positive for clinically significant clusters of symptoms consistent with PTSD, MDD, GAD and PD, all of which appeared higher than the diagnostic prevalence rates for the general population. When compared to results from a recent study with Canadian PSP<sup>9</sup>, participating nurses appeared to screen positively for PTSD at comparable rates, but screened positive more frequently for MDD, GAD and PD. A large portion of the current sample of nurses (63.2%) reported symptoms of burnout, and many (29.3%) reported clinically significant symptoms of burnout, which can result in negative mental health, poor work performance and inadequate patient care<sup>42,44</sup>. Further analyses and research may reveal specific factors that explain differences in mental disorder symptoms, burnout and stress across gender, work settings and years of service.

Steps are already being taken to make changes for nurses experiencing OSIs. In Ontario in 2013, the Ministry of Labour convened a Roundtable on Traumatic Mental Stress, which included at risk

occupations, bringing together nurses with PSP and transit drivers. The Public Services Health and Safety Association of Ontario (PSHSA) has been tasked with developing a PTSD toolkit for health care workers, that will include information about PTSD, crisis numbers, PTSD self-assessments and links to seek help from mental health professionals. The PSHSA could refine and modify the toolkit based on the needs identified in the current study. The Public Health Agency of Canada has completed a Federal Framework on PTSD that includes specific focus for high-risk occupations, including nurses. More work is needed to build on existing capacity and best practices, and to share knowledge and resources across provinces. Given the importance of quality health care to all Canadians, the federal government can take a leadership role in making this happen.

Future efforts to support the mental health of nurses must involve mental health disorders other than PTSD, as the results indicate higher prevalence rates for MDD and anxiety-related disorders (e.g., GAD, PD). The current study results provide evidence that Canadian nurses may need additional resources and attention to better support their mental health and well-being, as well as additional research to inform novel evidence-based solutions.

Beyond identifying, assessing and treating the mental health symptoms of nurses, there are proactive steps that can be taken as part of efforts to reduce mental health disorders. Governments and employers can work to address the extreme stresses that nurses are routinely experiencing in their workplaces, such as inadequate and unpredictable staffing, excessive workloads, unchecked overtime and routine violence, that are potentially contributing to high rates of mental health disorder symptoms and clinically significant levels of burnout. As noted in the recommendations of the federal Standing Committee on Health, which released its report entitled *Violence Facing Health Care Workers in Canada* in June 2019, short staffing and routine violence must be strategically addressed through a coordinated approach in the recognition that patient care and patient health outcomes are linked to the health and safety of our nurses.



# REFERENCES

1. Carleton, R. N., Afifi, T. O., Taillieu, T., Turner, S., Krakauer, R., Anderson, G. S., ... McCreary, D. R. (2019b). Exposures to potentially traumatic events among public safety personnel in Canada. *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement*, 51(1), 37-52. doi:10.1037/cbs0000115
2. Janda, R., & Jandová, E. (2015). Symptoms of Posttraumatic Stress Disorder, anxiety and depression among Czech critical care and general surgical and medical ward nurses. *Journal of Research in Nursing*, 20(4), 298-309. doi:10.1177/1744987115584211
3. Laposka, J. M., & Alden, L. E. (2003). Post-traumatic Stress Disorder in the emergency room: Exploration of a cognitive model. *Behaviour Research and Therapy*, 41(1), 49-65. doi:10.1016/S0005-7967(01)00123-1
4. Mealer, M., Burnham, E. L., Goode, C. J., Rothbaum, B., & Moss, M. (2009). The prevalence and impact of post-traumatic stress disorder and burnout syndrome in nurses. *Depression and Anxiety*, 26(12), 1118-1126. doi:10.1002/da.20631
5. Tsaras, K., Papathanasiou, I., Vus, V., Panagiotopoulou, A., Katsou, M., Kelesi, M., & Fradelos, E. (2018). Predicting factors of depression and anxiety in mental health nurses: A quantitative cross-sectional study. *Medical Archives*, 72(1), 62-67. doi:10.5455/medarh.2017.72.62-67
6. Van Ameringen, M., Mancini, C., Patterson, B., & Boyle, M. H. (2008). Post Traumatic stress disorder in Canada. *CNS Neuroscience & Therapeutics*, 14(3), 171-181. doi:10.1111/j.1755-5949.2008.00049.x
7. Khamisa, N., Peltzer, K., Ilic, D., & Oldenburg, B. (2016). Work-related stress, burnout, job satisfaction and general health of nurses: A follow up study. *International Journal of Nursing Practice*, 22(6), 538-545. doi:10.1111/ijn.12455
8. Maslach, C. H., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422. doi:10.1146/annurev.psych.52.1.397
9. Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., Duranceau, S., LeBouthillier, D. M., . . . Asmundson, G. J. G. (2018). Mental disorder symptoms among public safety personnel in Canada. *The Canadian Journal of Psychiatry*, 63(1), 54-64. doi:10.1177/0706743717723825
10. Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., LeBouthillier, D. M., Duranceau, S., ... Asmundson, G. J. G. (2018). Suicidal ideation, plans, and attempts among public safety personnel in Canada. *Canadian Psychology/Psychologie canadienne*, 59(3), 220-231. doi:10.1037/cap0000136
11. Statistics Canada, Health Canada & Canadian Institute for Health Information. (2006). Findings from the 2005 national survey of the work and health of nurses. Ottawa, ON: Statistics Canada. Retrieved from [https://secure.cihi.ca/free\\_products/NHSRep06\\_ENG.pdf](https://secure.cihi.ca/free_products/NHSRep06_ENG.pdf)
12. Manitoba Nurses Union. (2015). *Posttraumatic Stress Disorder (PTSD) in the nursing profession: Helping Manitoba's wounded healers*. Winnipeg, MB: MNU. Retrieved from <http://traumadoesntend.ca/wp-content/uploads/2015/04/75005-MNU-PTSD-BOOKLET-SCREEN.pdf>

13. Powell, P. (1996). *The prevalence of post-traumatic stress disorder among registered nurses working in Manitoba emergency and intensive care units: A replication study* (Master's thesis). Retrieved from [https://mspace.lib.umanitoba.ca/xmlui/bitstream/handle/1993/29667/Powell\\_The\\_prevalence.pdf](https://mspace.lib.umanitoba.ca/xmlui/bitstream/handle/1993/29667/Powell_The_prevalence.pdf)
14. Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., Vaughan, A. D., Anderson, G. S., . . . Camp, R. D. (2019a). Mental health training, attitudes toward support, and screening positive for mental disorders. *Cognitive Behaviour Therapy*, 1-19. doi:10.1080/16506073.2019.1575900
15. Jacobowitz, W. (2013). PTSD in psychiatric nurses and other mental health providers: A review of the literature. *Issues in Mental Health Nursing*, 34(11), 787-795. doi:10.3109/01612840.2013.824053
16. Kunyk, D. (2015). Substance use disorders among registered nurses: Prevalence, risks and perceptions in a disciplinary jurisdiction. *Journal of Nursing Management*, 23(1), 54-64. doi:10.1111/jonm.12081
17. Cares, A., Pace, E., Denious, J., & Crane, L. A. (2015). Substance use and mental illness among nurses: Workplace warning signs and barriers to seeking assistance. *Substance Abuse*, 36(1), 59-66. doi:10.1080/08897077.2014.933725
18. Michael, R., & Jenkins, H. J. (2001). Work-related trauma: the experiences of perioperative nurses. *Collegian*, 8(1), 19-25. doi:10.1016/S1322-7696(08)60398-4
19. Winstanley, S., & Whittington, R. (2004). Aggression towards health care staff in a UK general hospital: Variation among professions and departments. *Journal of Clinical Nursing*, 13(1), 3-10. doi:10.1111/j.1365-2702.2004.00807.x
20. Czaja, A. S., Moss, M., & Mealer, M. (2012). Symptoms of Posttraumatic Stress Disorder among pediatric acute care nurses. *Journal of Pediatric Nursing*, 27(4), 357-365. doi:10.1016/j.pedn.2011.04.024
21. Hawton, K., Simkin, S., Rue, J., Haw, C., Barbour, F., Clements, A., . . . Deeks, J. (2002). Suicide in female nurses in England and Wales. *Psychological Medicine*, 32(2), 239-250. doi:10.1017/S0033291701005165
22. Alderson, M., Parent-Rochelleau, X., & Mishara, B. (2015). Critical review on suicide among nurses. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 36(2), 91-101. doi:10.1027/0227-5910/a000305
23. Andersen, K., Hawgood, J., Klieve, H., Kølves, K., & De Leo, D. (2010). Suicide in selected occupations in Queensland: Evidence from the state suicide register. *Australian and New Zealand Journal of Psychiatry*, 44(3), 243-249. doi:10.3109/00048670903487142
24. Hem, E., Haldorsen, T., Gjerløw Aasland, O., Tyssen, R., Vaglum, P., & Ekeberg, Ø. (2005). Suicide rates according to education with a particular focus on physicians in Norway 1960-2000. *Psychological Medicine*, 35(6), 873-880. doi:10.1017/S0033291704003344



25. Navaneelan, T. (2012). *Suicide rates: An overview*. Ottawa, ON: Statistics Canada. Retrieved from <https://www150.statcan.gc.ca/n1/pub/82-624-x/2012001/article/11696-eng.htm>
26. Office for National Statistics. (2017). *Suicide by occupation, England: 2011 to 2015*. Retrieved from <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/suicidebyoccupation/england2011to2015>
27. Kőlves, K., & De Leo, D. (2013). Suicide in medical doctors and nurses: An analysis of the Queensland suicide register. *The Journal of Nervous and Mental Disease*, 201(11), 987-990. doi:10.1097/NMD.0000000000000047
28. Milner, A. J., Maheen, H., Bismark, M. M., & Spittal, M. J. (2016). Suicide by health professionals: A retrospective mortality study in Australia, 2001-2012. *Medical Journal of Australia*, 205(6), 260-265. doi:10.5694/mja15.01044
29. Skegg, K., Firth, H., Gray, A., & Cox, B. (2010). Suicide by occupation: Does access to means increase the risk? *Australian and New Zealand Journal of Psychiatry*, 44(5), 429-434. doi:10.3109/00048670903487191
30. Davidson, J., Mendis, J., Stuck, A. R., DeMichele, G., & Zisook, S. (2018). Nurse suicide: Breaking the silence. *NAM Perspectives*, 8(1) doi:10.31478/201801a
31. Davidson, J., Zisook, S., Kirby, B., DeMichele, G., & Norcross, W. (2018). Suicide prevention: A healer education and referral program for nurses. *JONA: The Journal of Nursing Administration*, 48(2), 85-92. doi:10.1097/NNA.0000000000000582
32. Hasin, D. S., Stinson, F. S., Ogburn, E., & Grant, B. F. (2007). Prevalence, correlates, disability, and comorbidity of DSM-IV alcohol abuse and dependence in the United States: Results from the national epidemiologic survey on alcohol and related conditions. *Archives of General Psychiatry*, 64(7), 830-842. doi:10.1001/archpsyc.64.7.830
33. World Health Organization. (2018a). *Global status report on alcohol and health 2018*. Geneva: WHO. Retrieved from [https://www.who.int/substance\\_abuse/publications/global\\_alcohol\\_report/en/](https://www.who.int/substance_abuse/publications/global_alcohol_report/en/)
34. Pearson, C., Janz, T., & Ali, J. (2013). *Mental and substance use disorders in Canada* (Statistics Canada Catalogue no. 82-624-X). Ottawa, ON: Statistics Canada. Retrieved from <https://www150.statcan.gc.ca/n1/pub/82-624-x/2013001/article/11855-eng.htm>
35. Public Health Agency of Canada. (2016). *The chief public health officer's report on the state of public health in Canada 2015: Alcohol consumption in Canada*. Ottawa, ON: PHAC. Retrieved from: <https://www.canada.ca/content/dam/canada/health-canada/migration/healthy-canadians/publications/department-ministere/state-public-health-alcohol-2015-etat-sante-publique-alcool/alt/state-phac-alcohol-2015-etat-aspc-alcool-eng.pdf>
36. Bennett, J., & O'Donovan, D. (2001). Substance misuse by doctors, nurses and other healthcare workers. *Current Opinion in Psychiatry*, 14(3), 195-199. doi:10.1097/00001504-200105000-00006



37. Trinkoff, A., Zhou, Q., Storr, C., & Soeken, K. (2000). Workplace access, negative prescriptions, job strain, and substance use in registered nurses. *Nursing Research, 49*(2), 83-90. doi:10.1097/00006199-200003000-00004
38. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Arlington, VA: Author
39. Laposo, J. M., Alden, L. E., & Fullerton, L. M. (2003). Work stress and Posttraumatic Stress Disorder in ED nurses/personnel. *Journal of Emergency Nursing, 29*(1), 23-28. doi:10.1067/men.2003.7
40. Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J. A., Busse, R., Clarke, H., ... Shamian, J. (2001). Nurses' reports on hospital care in five countries. *Health Affairs, 20*(3), 43-53. doi:10.1377/hlthaff.20.3.43
41. Chou, L., Li, C., & Hu, S. C. (2014). Job stress and burnout in hospital employees: Comparisons of different medical professions in a regional hospital in Taiwan. *BMJ Open, 4*(2), e004185. doi:10.1136/bmjopen-2013-004185
42. McHugh, M. D., Kutney-Lee, A., Cimiotti, J. P., Sloane, D. M., & Aiken, L. H. (2011). Nurses' widespread job dissatisfaction, burnout, and frustration with health benefits signal problems for patient care. *Health Affairs, 30*(2), 202-210. doi:10.1377/hlthaff.2010.0100
43. Cañadas-De la Fuente, G. A., Ortega, E., Ramirez-Baena, L., De la Fuente-Solana, E. I., Vargas, C., & Gómez-Urquiza, J. L. (2018). Gender, marital status, and children as risk factors for burnout in nurses: A meta-analytic study. *International Journal of Environmental Research and Public Health, 15*(10), 2102. doi:10.3390/ijerph15102102
44. White, E. M., Aiken, L. H., & McHugh, M. D. (2019). Registered nurse burnout, job dissatisfaction, and missed care in nursing homes. *Journal of the American Geriatrics Society, 67*(10), 2065-2071. doi:10.1111/jgs.16051
45. Duan-Porter, W., Hatch, D., Pendergast, J. F., Freude, G., Rose, U., Burr, H., . . . Potter, G. (2018). 12-month trajectories of depressive symptoms among nurses – contribution of personality, job characteristics, coping, and burnout. *Journal of Affective Disorders, 234*, 67-73. doi:10.1016/j.jad.2018.02.090
46. Mousavi, S. V., Ramezani, M., Salehi, I., Hossein Khazadeh, A. A., & Sheikholeslami, F. (2017). The relationship between burnout dimensions and psychological symptoms (depression, anxiety and stress) among nurses. *Journal of Holistic Nursing and Midwifery, 27*(2), 37-43. doi:10.18869/acadpub.hnmj.27.2.37
47. Hemingway, S., Rogers, M., & Elsom, S. (2014). Measuring the influence of a mental health training module on the therapeutic optimism of advanced nurse practitioner students in the United Kingdom. *Journal of the American Association of Nurse Practitioners, 26*(3), 155-162. doi:10.1002/2327-6924.12028
48. Payne, F., Harvey, K., Jessopp, L., Plummer, S., Tylee, A., & Gournay, K. (2002). Knowledge, confidence and attitudes towards mental health of nurses working in NHS direct and the effects of training. *Journal of Advanced Nursing, 40*(5), 549-559. doi:10.1046/j.1365-2648.2002.02413.x

49. Ford, K., Middleton, J., Palmer, B., & Farrington, A. (1997). Primary health care workers: Training needs in mental health. *British Journal of Nursing*, 6(21), 1244-1250. doi:10.12968/bjon.1997.6.21.1244
50. French, S. E., Lenton, R., Walters, V., & Eyles, J. (2000). An empirical evaluation of an expanded nursing stress scale. *Journal of Nursing Measurement*, 8(2), 161-178. doi:10.1891/1061-3749.8.2.161
51. Weathers, F. W., Blake, D. D., Schnurr, P. P., Kaloupek, D. G., Marx, B. P. & Keane, T. M. (2013). The life events checklist for DSM-5 (LEC-5). Retrieved from [www.ptsd.va.gov](http://www.ptsd.va.gov)
52. Weathers, F. W., Litz, B. T., Keane, T., Palmieri, P. A., Marx, B. P. & Schnurr, P. P. (2013). The PTSD checklist for DSM-5 (PCL-5). Retrieved from <https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp>
53. Kroenke, K., Spitzer, R., & Williams, J. (2001). The PHQ-9 - validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(9), 606-613. doi:10.1046/j.1525-1497.2001.016009606.x
54. Skinner, K., & Scott, R. D. (1993). Depression among female registered nurses. *Nursing Management*, 24(8), 42. doi:10.1097/00006247-199308000-00011
55. Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing Generalized Anxiety Disorder: The GAD-7. *Archives of Internal Medicine*, 166(10), 1092-1097. doi:10.1001/archinte.166.10.1092
56. Pelletier, L., O'Donnell, S., McRae, L., & Grenier, J. (2017). The burden of Generalized Anxiety Disorder in Canada. *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice*, 37(2), 54-62. doi: 10.24095/hpcdp.37.2.04
57. Shear, M. K., Brown, T. A., Barlow, D., Money, R., Sholomskas, D., Woods, S., . . . Papp, L. (1997). Multicenter collaborative Panic Disorder severity scale. *American Journal of Psychiatry*, 154(11), 1571-1575. doi:10.1176/ajp.154.11.1571
58. Langlois, K. A., Samokhvalov, A. V., Rehm, J., Spence, S. T., & Connor Gorber, S. (2011). *Health state descriptions for Canadians: Mental illnesses*. Ottawa, ON: Statistics Canada. Retrieved from <https://www150.statcan.gc.ca/n1/pub/82-619-m/82-619-m2012004-eng.htm>
59. Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monterio, M. G. (2001). *The Alcohol Use Disorders identification test: Guidelines for use in primary care (2nd edition)*. Geneva: World Health Organization
60. Kenna, G. A., & Wood, M. D. (2004). Alcohol use by healthcare professionals. *Drug and Alcohol Dependence*, 75(1), 107-116. doi:10.1016/j.drugalcdep.2004.01.008
61. Public Health Agency of Canada. (2019). *Suicide in Canada: Key statistics*. Retrieved from <https://www.canada.ca/en/public-health/services/publications/healthy-living/suicide-canada-key-statistics-infographic.html>
62. Langlois, S., & Morrison, P. (2002). Suicide deaths and suicide attempts. *Health Reports*, 13(2), 9-22

63. World Health Organization. (2018b). *Preventing suicide: A community engagement toolkit*. Geneva: World Health Organization. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/272860/9789241513791-eng.pdf>
64. Canadian Mental Health Association. (2019). Preventing suicide. Retrieved from <https://cmha.ca/mental-health/understanding-mental-illness/preventing-suicide>
65. Melamed, S., Kushnir, T., & Shirom, A. (1992). Burnout and risk factors for cardiovascular diseases. *Behavioral Medicine, 18*(2), 53-60. doi:10.1080/08964289.1992.9935172
66. Melamed, S., Ugarten, U., Shirom, A., Kahana, L., Lerman, Y., & Froom, P. (1999). Chronic burnout, somatic arousal and elevated salivary cortisol levels. *Journal of Psychosomatic Research, 46*(6), 591-598. doi:10.1016/S0022-3999(99)00007-0
67. Isoard-Gautheur, S., Ginoux, C., Gerber, M., & Sarrazin, P. (2019). The stress-burnout relationship: Examining the moderating effect of physical activity and intrinsic motivation for off-job physical activity. *Workplace Health & Safety, 67*(7), 350-360. doi:10.1177/2165079919829497
68. Jimmieson, N. L., Tucker, M. K., & Walsh, A. J. (2017). Interaction effects among multiple job demands: An examination of healthcare workers across different contexts. *Anxiety, Stress, & Coping, 30*(3), 317-332. doi:10.1080/10615806.2016.1229471
69. Norlund, S., Reuterwall, C., Hoog, J., Janlert, U., & Slunga Jarvholm, L. (2015). Work situation and self-perceived economic situation as predictors of change in burnout – a prospective general population-based cohort study. *BMC Public Health, 15*. doi:rg/10.1186/s12889-015-1681-x
70. Schilling, R., Colledge, F., Brand, S., Ludyga, S., & Gerber, M. (2019). Psychometric properties and convergent validity of the Shirom–Melamed burnout measure in two German-speaking samples of adult workers and police officers. *Frontiers in Psychiatry, 10*, 536. doi:10.3389/fpsyt.2019.00536
71. Bianchi, R., & Brisson, R. (2019). Burnout and depression: Causal attributions and construct overlap. *Journal of Health Psychology, 24*(11), 1574-1580. doi:10.1177/1359105317740415
72. Grau-Alberola, E., Gil-Monte, P., García-Jueas, J. A., & Figueiredo-Ferraz, H. (2010). Incidence of burnout in Spanish nursing professionals: A longitudinal study. *International Journal of Nursing Studies, 47*(8), 1013-1020. doi:10.1016/j.ijnurstu.2009.12.022
73. Glazer, S., & Gyurak, A. (2008). Sources of i.e. among nurses in five countries. *International Journal of Intercultural Relations, 32*(1), 49-66. doi:10.1016/j.ijintrel.2007.10.003
74. Foxall, M. J., Zimmerman, L., Standley, R., & Bene Captain, B. (1990). A comparison of frequency and sources of nursing job stress perceived by intensive care, hospice and medical surgical nurses. *Journal of Advanced Nursing, 15*(5), 577-584. doi:10.1111/j.1365-2648.1990.tb01857.x

75. Happell, B., Dwyer, T., Reid Searl, K., Burke, K. J., Caperchione, C. M., & Gaskin, C. J. (2013). Nurses and stress: Recognizing causes and seeking solutions. *Journal of Nursing Management, 21*(4), 638-647. doi:10.1111/jonm.12037
76. International Council of Nurses. (2009). *Nursing matters – violence: A worldwide epidemic*. Retrieved from [http://www.icn.ch/images/stories/documents/publications/fact\\_sheets/19k\\_FS-Violence.pdf](http://www.icn.ch/images/stories/documents/publications/fact_sheets/19k_FS-Violence.pdf)
77. International Council of Nurses. (2019). Healthcare under attack! International Council of Nurses condemns violence against healthcare workers. Retrieved from <https://www.icn.ch/news/healthcare-under-attack-international-council-nurses-condemns-violence-against-healthcare>
78. Manitoba Nurses Union. (n.d.). Reducing workplace violence. Retrieved from <https://manitobanurses.ca/reducing-workplace-violence>
79. Canadian Federation of Nurses Unions. (n.d.). Workplace violence. Retrieved from <https://nursesunions.ca/campaigns/violence/>
80. Carleton, R. N., Korol, S., Mason, J. E., Hozempa, K., Anderson, G. S., Jones, N. A., . . . Bailey, S. (2018). A longitudinal assessment of the road to mental readiness training among municipal police. *Cognitive Behaviour Therapy, 47*(6), 508-528. doi:10.1080/16506073.2018.1475504
81. Hernandez, S. H., Morgan, B., & Parshall, M. (2016). Resilience, stress, stigma, and barriers to mental healthcare in U.S. air force nursing personnel. *Nursing Research, 65*(6), 481-486. doi:10.1097/NNR.0000000000000182
82. Canadian Institute for Health Information. (2019). *Nursing in Canada, 2018*. Retrieved from <https://www.cihi.ca/en/nursing-in-canada-2018>
83. Bethlehem, J. (2010). Selection bias in web surveys. *International Statistical Review, 78*(2), 161-188. doi:10.1111/j.1751-5823.2010.00112.x
84. Manea, L., Gilbody, S., & Mcmillan, D. (2015). A diagnostic meta-analysis of the patient health questionnaire-9 (PHQ-9) algorithm scoring method as a screen for depression. *General Hospital Psychiatry, 37*(1), 67-75. doi:10.1016/j.genhosppsych.2014.09.009
85. Swinson, R. P. (2006). The GAD-7 scale was accurate for diagnosing generalised anxiety disorder. *Evidence-Based Medicine, 11*(6), 184. doi:10.1136/ebm.11.6.184
86. Gerber, M., Colledge, F., Mücke, M., Schilling, R., Brand, S., & Ludyga, S. (2018). Psychometric properties of the Shirom-Melamed burnout measure (SMBM) among adolescents: Results from three cross-sectional studies. *BMC Psychiatry, 18*(1), 1-13. doi:10.1186/s12888-018-1676-0
87. Lundgren-Nilsson, Å., Jonsdottir, I., Pallant, J., & Ahlborg, G. (2012). Internal construct validity of the Shirom-Melamed burnout questionnaire (SMBQ). *BMC Public Health, 12*(1), 1. doi:10.1186/1471-2458-12-1

# APPENDIX A: LIST OF ACRONYMS

AUD	Alcohol Use Disorder
AUDIT	Alcohol Use Disorder Identification Test
ENSS	Expanded Nursing Stress Scale
GAD	Generalized Anxiety Disorder
GAD-7	Generalized Anxiety Disorder 7-item Scale
LEC-5	Life Events Checklist-5
LPN	Licensed practical nurse
MDD	Major Depressive Disorder
NP	Nurse practitioner
OSI	Operational stress injury
PCL-5	PTSD Checklist-5
PD	Panic Disorder
PDSS-SR	Panic Disorder Severity Scale – Self Report
PHQ-9	Patient Health Questionnaire 9-item Scale
PSP	Public safety personnel
PTSD	Posttraumatic Stress Disorder
PTSI	Posttraumatic stress injuries
RN	Registered nurse
RPN	Registered psychiatric nurse
SMBM	Shirom-Melamed Burnout Measure

# APPENDIX B: MEASURES USED

## Trauma exposure

Lifetime exposure to potentially psychologically traumatic events was measured using the Life Events Checklist 5 (LEC-5)<sup>51</sup>. An exposure was recorded if participants indicated they had been directly exposed to, witnessed or learned about a specific type of event. Changes to the wording of some items were made to reflect experience with the population. “Natural disaster” was revised to “a life-threatening natural disaster;” and “transportation accident” was revised to “a serious transportation accident.” In addition to the traumatic events listed in the LEC-5, four events that may be traumatic specifically in the nursing context<sup>12</sup> were included: (1) the death of a child; (2) the death of an individual after extraordinary efforts were made to save their life; (3) the death of someone who reminded you of friends or family; and (4) exposure to life-threatening epidemic (e.g., SARS, Ebola). Participants who selected “any other very stressful event or experience” were asked to provide details.

## Mental disorder screens

### Posttraumatic Stress Disorder (PTSD)

PTSD symptom severity over the past month was assessed using the PTSD Checklist for DSM-5<sup>52</sup>. Participants were asked to select a trauma after completing

the LEC-5 against which they rated the PCL-5 items. A positive screen required participants to meet minimum criteria for each DSM-5 PTSD cluster and exceed the minimum clinical cut-off of >32 for their total score<sup>52</sup>.

### Major Depressive Disorder (MDD)

Depression symptoms over the past 14 days were assessed using the 9-item Patient Health Questionnaire<sup>53</sup>. A positive screen required a total PHQ-9 score greater than 9<sup>84</sup>. Participants were also asked to self-report if they had been diagnosed with MDD at any point in their lifetime.

### Generalized Anxiety Disorder (GAD)

GAD symptoms over the past 14 days were assessed using the 7-item GAD scale (GAD-7)<sup>55</sup>. A total score above 10 indicated a positive screen<sup>85</sup>. Participants also self-reported if they had ever been diagnosed with GAD.

### Panic Disorder (PD)

The PD Symptoms Severity Scale – Self-Report (PDSS-SR)<sup>57</sup> assessed PD symptoms over the past seven days. A positive screen required a total PDSS-SR score above 7<sup>57</sup>. Participants also self-reported any lifetime diagnosis of PD.

## Alcohol Use (AUDIT)

Alcohol use over the past year was assessed using the Alcohol Use Disorders Identification Test (AUDIT)<sup>59</sup>. A total score above 15 indicated a positive screen for AUD and would indicate a need for further intervention and monitoring by a clinician<sup>59</sup>.

## Suicidal Behaviour

Lifetime and past-year suicidal behaviour was assessed using a series of yes/no questions. To assess for suicidal ideation, participants were asked, “Have you ever seriously contemplated suicide?” For suicidal plans, participants were asked, “Have you ever made a plan to attempt suicide?” For suicide attempts, participants were asked, “Have you ever attempted suicide?” Following each of these questions, they were asked to indicate if each behaviour has happened in the past 12 months as an indicator of 12-month prevalence.

## Stress and burnout

As part of the section of the survey on burnout, participants were asked to report if their institution is regularly over capacity and if the regular core health care staff (e.g., number and mix of doctors, nurse practitioners, nurses, health care aides or personal support workers) is sufficient

and appropriate in meeting the needs of patients, in their own opinion. Participants then completed the Shirom-Melamed Burnout Measure<sup>65,66</sup>. Participants were explicitly told to rate the items in the context of their work environment. Severity scores were calculated for the SMBM scores based on previously derived cut-off scores<sup>86,87</sup>, with scores below 2 indicating “no burnout” and scores above 4.4 suggesting “clinical levels of burnout.”

Critical incident stress was defined as conditions such as burnout (e.g., frustration, loss of interest, decreased productivity, and fatigue caused by overwork and prolonged stress) and compassion fatigue (e.g., exhaustion, irritability and loss of hope), consistent with the definition used in the 2015 Manitoba Nurses Union study<sup>12</sup>. Participants were provided with this definition and asked, “How common is critical incident stress among nurses in your workplace?” Participants were also asked to indicate whether or not they had personally experienced critical incident stress at some point during their nursing career.

The Expanded Nursing Stress Scale (ENSS)<sup>50</sup> was used to measure sources and frequency of stress perceived by the participants. Participants rated 57 items that commonly occur in nursing work settings from “never stressful” to



“extremely stressful.” The ENSS has nine subscales: 1) death and dying; 2) conflict with physicians; 3) inadequate preparation; 4) problems with peers; 5) problems with supervisors; 6) workload; 7) uncertainty concerning treatment; 8) patients and their families; and 9) discrimination. Higher scores indicate more perceived stress.

## Mental health training, effectiveness and help-seeking behaviours

Participants were asked questions regarding any formal training received to support their own mental health and the mental health of their patients. Following positive responses, participants were asked to specify what training they had received and whether the training was perceived to be helpful in: improving their own mental health; improving the mental health of team members; reducing stigma; preventing OSIs; increasing knowledge about mental health; and in helping to respond to patients with mental health problems.

Participants were also asked if they have sought any support for mental health over the past 12 months, and if not, they were asked to indicate why they did not seek sources of help. Sources of support included psychiatrist; family doctor, general practitioner or nurse practitioner; psy-

chologist; nurse (not a colleague); social worker, counsellor or psychotherapist; family member; friend; co-worker, supervisor or boss. Participants were also able to choose “none” if they had not talked to any of the above people about problems with their emotions, mental health, or use of alcohol or drugs. For participants who did not seek help, they were asked to state why they chose not to seek help. Response options included: preferred to manage self; didn’t know how or where to get help; haven’t gotten around to it; job interfered; help was not readily available; lack of confidence in the health care system or social services; couldn’t afford to pay; no insurance coverage; afraid of what others might think of you.



# AUTHOR'S NOTE

The content contained within this report has not been independently peer-reviewed. Statistical differences between groups are not reported in the current document. The authors have submitted several manuscripts to academic publications for peer review that will accompany and expand upon the information contained in this report. Results may slightly differ between the academic publications and the current report due to small variations in statistical analyses and sample sizes used. In the event of such discrepancy, the peer-reviewed publication(s) should be considered the final and correct version(s) of results. The titles of the academic publications are as follows:

Stelnicki, A. M., & Carleton, R. N. (in press). Mental disorder symptoms among nurses in Canada. *Canadian Journal of Nursing Research*.

Stelnicki, A. M., Jamshidi, L., Angehrn, A., & Carleton, R. N. (in press). Suicidal behaviours among nurses in Canada. *Canadian Journal of Nursing Research*.

Stelnicki, A. M., Jamshidi, L., Ricciardelli, R., & Carleton, R. N. (under review). Exposures to potentially psychologically traumatic events among nurses in Canada. *Canadian Journal of Nursing Research*.

Stelnicki, A. M., Jamshidi, L., Angehrn, A., Hadjistavropoulos, H., & Carleton, R. N. (manuscript in preparation). Associations between burnout and mental disorder symptoms among nurses in Canada.





# ABOUT THE AUTHORS

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Andrea Stelnicki, PhD, is a postdoctoral fellow at the University of Regina. Her research interests broadly focus on two areas: evidence-based treatment for public safety personnel, and supporting the mental health of public safety and military-connected families. Dr. Stelnicki is currently heading several projects evaluating programs for public safety personnel, including the evaluations of a program to support mental health in public safety personnel and peer support programs from various public safety agencies. She is interested in better understanding how mental disorders affect family functioning and well-being, and is a co-investigator on a project evaluating an intervention for spouses and children of public safety members.

Dr. Stelnicki is also a registered psychologist in Alberta and keeps a small private practice focused on assessment and intervention for children, adolescents and their families.

## Nicholas Carleton



R. Nicholas Carleton, PhD, is a Professor of Clinical Psychology, a registered doctoral clinical psychologist in Saskatchewan, and is currently serving as the Scientific Director for the Canadian Institute for Public Safety Research and Treatment. He has published more than 140 peer-reviewed articles, book chapters and encyclopaedia

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## Carol Reichert



Carol Reichert, MA, is a policy and research specialist at the Canadian Federation of Nurses Unions (CFNU). Carol prepares backgrounders, policy documents, briefs, submissions, abstracts, presentations and research articles. She also coordinates, manages and contributes to CFNU research projects. In addition, she is responsible for the ongoing work of CFNU's three networks: research, occupational health and safety and professional practice.





# AFTERWORD



Ivy Lynn Bourgeault, PhD, FCAHS, Chair in Gender, Diversity and the Professions, University of Ottawa

The findings of this important study should come as no surprise, though it may surprise some.

There are two elements of nursing work that put them at risk for the type of occupational injuries discussed in this report. The first is the content of nursing work – what they do. Nurses have trained to take up the tasks of dealing with the sickest and most critically wounded of our society. They see things that make the rest of us turn away – a natural instinct to protect our psychological health and well-being.

Instead, nurses face this work directly, intensely and professionally.

It may be these well-honed skills to keep calm in the face of crisis that leads them to understate their own level of psychological distress. Nurses who, day in day out, work on explicit and visible injuries may be less likely to notice and more likely to downplay their own psychological injuries precisely because of the kind of work they do. There isn't much we can do about this – it is what nurses do and are trained to do. This leads us to the second element of nursing work: their context. Here is where we can, and indeed should, assist. It is the lack of attention paid to the context of nursing work that is most problematic. Why is it that as a society we have accepted to understaff this important human resource – the cornerstone of our health systems – to the point of illness, crisis and loss? Why is it that we have kept silent on the level of violence they experience?

I have been known to say, “gender always matters,” and this is surely an example of where the predominant gender of nurses matters.

Areas where women work are more likely to suffer from neglect where retention is concerned. This is particularly notable in the early career of nurses (and of other women in the workforce), where they experience the most work-life imbalance. Here

we turn a blind eye again – focusing instead on creating more nurses, rather than trying to understand what is causing them to leave and changing the contextual circumstances which is compelling them

to do so. This is such a waste of skills and a poor return on the investment of their time and our public money into the development of this critical workforce. I can't imagine we would acquiesce in this manner if this were a predominantly gendered male domain of work.

Neglect is also a key theme in why it is that a one-point-in-time commissioned study was undertaken on this important topic, rather than having a robust longitudinal monitoring and surveillance system in order to keep track of the health of our

“Gender always matters.”

health workforce, of which nurses numerically form the largest complement. Not only do we not regularly collect nationally comparable data on the health of our health workforce, a key performance measure of any health system, we fail to engage in any long-term health workforce planning in nursing in Canada, which would help to ameliorate the chronic understaffing context of nursing work. Our continued neglect of the nursing and larger health workforce and the increasingly challenging context within which they work is unsustainable and inexcusable.

# MESSAGE DE LINDA SILAS



Linda Silas, president of the Canadian Federation of Nurses Unions

Depuis plus d'une décennie, la Fédération canadienne des syndicats d'infirmières et d'infirmiers (FCSII) documente les taux à la hausse d'absentéisme et d'heures supplémentaires des infirmières et infirmiers dans les provinces à travers le Canada. Le travail de la FCSII suggère qu'un cycle d'heures supplémentaires excessives et des charges de travail insoutenables, accompagnés de violence verbale et physique, ont mené à un déclin de la santé des infirmières et infirmiers, y compris de la santé mentale de ces derniers. Faisant face à une pénurie croissante d'infirmières et d'infirmiers dans plusieurs régions du pays, et avec une pénurie encore plus grande à l'horizon, cette situation s'aggraverait probablement.

Les infirmières et infirmiers font face à nombre de défis semblables à ceux vécus par le personnel de la sécurité publique.

En effet, les infirmières et infirmiers constituent la dernière étape du continuum de la sécurité publique, accueillant les patients à l'urgence et prenant soin de ces derniers par la suite. Comme le personnel de la sécurité publique, les infirmières et infirmiers partagent leurs histoires d'incidents traumatisants, mais malgré ces histoires captivantes, on ne les écoute pas. La FCSII a reconnu que sans données validées à l'échelle nationale au sujet des symptômes de la maladie mentale chez les infirmières et infirmiers, et des facteurs stressants en milieu de travail qui y sont associés, les interventions et le soutien demeureraient inadéquats et incomplets.

Au Manitoba, le Syndicat des infirmières et des infirmiers du Manitoba (SIIM) a réagi aux préoccupations croissantes au sujet du TSPT, de l'épuisement professionnel et

du stress dû à un incident critique chez les infirmières et infirmiers membres en menant des études qualitatives et quantitatives avec leurs membres entre 2014 et 2015. Le rapport du SIIM a conclu qu'environ un quart des infirmières et infirmiers du Manitoba étaient régulièrement victimes de symptômes liés au TSPT. Les conclusions surprenantes de l'étude du SIIM ont mené à exiger des données nationales validées.

au sujet de l'exposition des infirmières et infirmiers aux expériences traumatisantes, aux incidents critiques et aux expériences extrêmement stressantes. Le rapport consigne les taux de trouble de stress post-traumatique (TSPT), de dépression, d'anxiété, de trouble panique, d'idées suicidaires, d'épuisement professionnel et de problèmes avec l'alcool des participants à l'étude. Il pose également des questions au sujet des interventions ayant fonctionné et de celles n'ayant pas fonctionné, et émet des recommandations pour le long chemin à parcourir.

*“Les données confirment que pour les infirmières et infirmiers de première ligne, la situation est explosive.”*

Pour pallier cette lacune dans la recherche, la FCSII a mandaté une équipe de chercheurs de l'Université de Regina, mettant à profit son expertise en matière de TSPT en milieu de travail, pour documenter les données probantes et aider à déterminer des solutions potentielles. Ce rapport présente les conclusions de la première évaluation anonyme sur les traumatismes liés au stress en milieu de travail à l'échelle du Canada (c.-à-d. les blessures de stress post-traumatique) chez les infirmières et infirmiers. La FCSII a entrepris cette recherche, en collaboration avec l'Université de Regina, parce qu'il n'existait aucune donnée nationale sur les blessures liées au stress en milieu de travail chez les infirmières et infirmiers. L'étude en ligne de l'Université de Regina posait des questions

Les données confirment que pour les infirmières et infirmiers de première ligne, la situation est explosive. Plus de 80 % des personnes sondées ont mentionné que le personnel de base régulier en soins de santé était inadéquat. Plus de 70 % ont précisé que leur établissement de soins de santé était régulièrement en surcapacité. Parmi les dix sources les plus importantes de stress extrême, notons : le manque de personnel, la dotation en personnel et les horaires imprévisibles, le manque de soutien de la part des administrateurs en soins infirmiers, la gestion de patients violents et abusifs, et être tenus responsables pour ces choses sur lesquelles ils n'ont aucun contrôle.

Des populations plus élevées de patients sont synonymes d'une augmentation des charges de travail et d'un déclin de la qualité des soins. Les heures supplémentaires excessives et obligatoires sont de plus en plus une procédure opérationnelle normalisée afin de s'adapter aux problèmes quotidiens d'horaire. À mesure que la pénurie de personnel infirmier s'aggrave et que l'acuité des besoins du patient augmente, l'escalade des taux de violence ne constitue que l'un des symptômes d'un environnement de travail stressant.

Plutôt que de se pencher sur la planification à long terme des ressources humaines dans le domaine de la santé afin d'aborder les problèmes de surcapacité, la plupart des gouvernements à travers le pays imposent des compressions budgétaires, menant à d'autres mises à pied et à une crise des soins de santé qui prend de plus en plus d'ampleur. Dans le but d'offrir des soins de qualité aux Canadiens, les gouvernements doivent reconnaître le rôle essentiel que jouent les travailleurs de la santé de première ligne. Lorsque les infirmières travaillent régulièrement des heures supplémentaires de manière excessive; lorsqu'elles sont frustrées parce qu'elles ne peuvent pas atteindre leurs standards professionnels de soins en raison des charges de travail excessives et de la pénurie de personnel; lorsqu'elles sont épuisées psychologiquement et physiquement; lorsqu'elles sont régulièrement exposées à la violence,

la santé mentale de la main-d'œuvre infirmière est mise en péril.

La dégradation de la santé mentale des infirmières et infirmiers – le taux élevé de cas d'épuisement professionnel de niveau clinique, les symptômes du TSPT et d'autres troubles de santé mentale comme le documente ce rapport (cas qui restent pour la plupart non déclarés et non traités) – a un impact direct sur les employeurs en termes de perte de productivité, de congés de maladie et d'invalidité de courte et longue durée. Elle touche aussi directement les patients et les soins apportés aux patients. Enfin, tout le système de soins de santé en souffre.

Au nom de la FCSII et de ses organismes membres, je tiens à remercier la Dre Stelnicki, le Dr Carleton, Carol Reichert et le comité consultatif de la FCSII ainsi que les infirmières et infirmiers qui ont pris le temps de remplir ce sondage qui fera une différence pour les infirmières et infirmiers de partout.

Sincères salutations,

Linda Silas,  
Présidente de la FCSII



# RECOMMANDATIONS

## Recommandations de la FCSII pour les employés en soins de santé

### **Intervention et soutien précoces :**

- Accroître le niveau de soutien que les infirmières et infirmiers reçoivent des administrateurs et des professionnels de la santé mentale à la suite d'un incident critique, s'assurer que toutes les infirmières et tous les infirmiers touchés obtiennent un débriefage lié à l'incident critique aussitôt que possible afin de réduire l'impact des expositions aux événements traumatisants, et s'assurer, au besoin, de la disponibilité précoce de soutien continu en santé mentale.
- S'assurer que le lieu de travail a en place un système de gestion reconnu des incidents critiques (p. ex., la GSIC).
- Établir et mettre en œuvre des programmes de retour au travail, fondés sur des données probantes et qui reconnaissent l'impact à long terme potentiel des blessures psychologiques, et encourager également la rétention en reconnaissant et en respectant la valeur des travailleurs blessés.

### **Formation :**

- Accroître l'accès à la formation en santé mentale pour toutes les infirmières et tous les infirmiers, en mettant l'accent sur la réduction du

stress et de la stigmatisation, et en améliorant les stratégies d'adaptation pour les infirmières et les infirmiers.

- Offrir régulièrement tout au cours de la carrière des infirmières et infirmiers, du début de leur carrière, en mi-carrière et à la fin de leur carrière, plutôt qu'une seule séance, de la formation en santé mentale axée sur la santé mentale des infirmières et infirmiers.
- Pour aider à développer la capacité de soutien des pairs, offrir des opportunités de formation informelle et formelle, notamment des programmes « Former le formateur ».
- Élaborer des politiques et des protocoles afin d'exiger que l'efficacité des programmes de formation en santé mentale soit révisée et évaluée régulièrement afin de répondre aux objectifs fixés.

### **Éducation :**

- Offrir un accès facile à des outils validés de dépistage de la santé mentale afin d'aider à éduquer les infirmières et les infirmiers quant aux premiers signes des troubles de santé mentale (p. ex., TSPT, trouble d'anxiété généralisée, trouble dépressif majeur, trouble panique), aux idées suicidaires



et à la consommation risquée d'alcool, afin que les infirmières et les infirmiers puissent reconnaître lorsqu'ils sont à risque de développer des problèmes de santé mentale et les encourager à accéder rapidement aux soins.

- Offrir des programmes d'éducation axés sur la réduction de la stigmatisation et sur les premiers signes des troubles de santé mentale au sein de l'organisation, y compris les gestionnaires et tous les employés, afin d'encourager les employeurs à mettre en œuvre des stratégies d'atténuation.

#### **Stratégies et activités proactives :**

- Entreprendre une évaluation du risque psychosocial du milieu de travail à l'aide des outils validés (p. ex., questionnaire psychosocial de Copenhague (COPSOQ)) pour déterminer et réduire le stress en milieu de travail.
- Étant donné que les infirmières et les infirmiers ont décrit leur charge de travail et les problèmes de dotation en personnel comme extrêmement stressants, mettre en place des politiques qui abordent le manque de personnel afin d'assurer que le personnel et la combinaison de

personnel correspondent à la fois au niveau d'acuité des patients et à leur volume en temps réel et en fonction des quarts de travail.

- Compte tenu de la fréquence d'exposition aux agressions et abus physiques, en conjonction avec les comités mixtes de la sécurité et de la santé au travail, s'assurer que des évaluations du risque de violence en milieu de travail sont effectuées régulièrement au sein des installations, et que des programmes de prévention de la violence en milieu de travail sont en place, accompagnés d'un personnel de sécurité, dûment formé et possédant les ressources nécessaires ainsi que de procédures pour signaler et enquêter les incidents tout en respectant les recommandations.
- Réduire le fardeau administratif des infirmières et infirmiers, y compris offrir le personnel approprié, afin de réduire le fait d'avoir à accomplir des tâches n'étant pas liées aux soins infirmiers.

# RECOMMANDATIONS (suite)

## Recommandations de la FCSII pour les gouvernements

### Gouvernements provinciaux:

- Offrir du financement pour le développement de :
  - Formations, ressources et soutien en santé mentale, fondés sur des données probantes et qui sont conçus pour les infirmières et infirmiers; s'assurer qu'ils sont accessibles à tous dans tous les secteurs des soins infirmiers.
  - D'outils de dépistage en santé mentale axés sur les milieux de travail en soins de santé.
  - Formations spécialisées en santé mentale afin de réduire la stigmatisation et de développer la capacité organisationnelle en termes de soutien en santé mentale dans le domaine des soins de santé.
  - Ressources en ligne, notamment des webinaires interactifs, afin d'offrir de l'éducation fondée sur des données probantes et accessible en tout temps et partout, qui est adaptée aux quarts de travail des infirmières et infirmiers.
- Coordonner le partage des connaissances à l'échelle provinciale, rassembler des experts en santé mentale en milieu de travail provenant de différents domaines pour partager,

élaborer et se fonder sur les pratiques exemplaires et les ressources en milieu de travail fondées sur les données probantes existantes.

### Gouvernement fédéral:

- Par le biais de l'Agence de la santé publique du Canada, convoquer une conférence de suivi pour une stratégie nationale pour le TSPT afin d'aider à se fonder sur le cadre national pour le TSPT lié au milieu de travail par le biais du partage des connaissances et du renforcement des capacités en s'appuyant sur les pratiques exemplaires et les ressources existantes.
- Fournir du financement pour la recherche nationale sur les infirmières et infirmiers en se servant des méthodes d'échantillonnage de Statistique Canada et d'entretiens cliniques afin de produire des évaluations plus fiables et de permettre de comparer avec la population générale.
- Offrir du financement pour un programme de recherche des Instituts de recherche en santé du Canada

(IRSC) afin de développer la capacité de recherche à l'échelle nationale pour déterminer, entre autres, des façons d'atténuer, de gérer et de réduire les blessures de stress opérationnel en milieux de travail infirmiers en fonction des besoins uniques des infirmières et des infirmiers, et d'inclure des facteurs comme le sexe, le lieu de travail, la pratique spécialisée (p. ex., salle d'urgence, USI, psychiatrie) et leur niveau d'expérience. Une recherche de ce genre devrait avoir recours à la fois à des méthodes quantitatives et qualitatives pour s'assurer que les besoins et les expériences des infirmières et infirmiers sont représentés adéquatement. Dans le cadre de ce programme, des recherches sont nécessaires afin de déterminer quelle formation et quel genre de soutien en santé mentale les infirmières et infirmiers accèdent-ils, et quelle formation et quel soutien se sont avérés être efficaces pour améliorer les résultats en santé mentale des infirmières et infirmiers.

- Tel que recommandé dans *le rapport du Comité HESA sur la Violence subie par les travailleurs de la santé au Canada* :
  - Travailler avec les provinces et les territoires afin de combler les pénuries de main-d'œuvre en soins de santé en mettant à jour la Stratégie pancanadienne relative aux ressources humaines en santé de manière à ce qu'elle reflète les besoins en matière de soins de santé des aînés, le bien-être des travailleurs de la santé et la transition vers les soins communautaires.
  - Travailler avec les provinces, les territoires et les intervenants en soins de santé pour élaborer un cadre pancanadien pour prévenir la violence dans les milieux de soins de santé, ce qui inclurait la promotion de l'adoption de pratiques exemplaires en matière de prévention de la violence à travers le Canada.

# AVANT-PROPOS



Dr R. Nicholas Carleton

Le trouble de stress post-traumatique (TSPT) constitue un important défi de santé mentale qui peut survenir à la suite d'une exposition à un ou à plus d'un événement potentiellement traumatique psychologiquement (p. ex. : l'exposition à la guerre en tant que combattant ou civil, menaces ou agression physique réelle, menaces ou violence sexuelle réelle, désastres, graves accidents de voiture). Heureusement, la plupart des personnes ne seront probablement pas exposées à plus que quelques-uns de ce genre d'événements au cours de leur vie, et la plupart d'entre elles s'en remettront sans avoir recours à une intervention substantielle. Il existe cependant des membres de notre population qui, dans le cadre de leur travail et de leurs services au sein de nos communautés, seront exposés à des centaines voire de milliers d'événements de ce genre.

En 2016, le premier ministre a mandaté le ministre de la Sécurité publique et de la Protection civile de collaborer avec les provinces, les territoires et le ministre de la Santé pour élaborer un plan d'action national afin de mieux aborder les enjeux liés au TSPT. Dans le cadre des préparatifs subséquents en vue d'élaborer un plan, de nombreuses lacunes majeures en matière de connaissances ont été identifiées, ce qui a poussé les chercheurs de partout au Canada à commencer à travailler pour combler ces lacunes. C'est avec une grande fierté que j'ai dirigé une importante équipe interdisciplinaire dans un effort national pour mieux comprendre l'ampleur et la portée des défis liés au TSPT auxquels fait face notre personnel de la sécurité publique (c.-à-d., les agents des services frontaliers, les intervenants correctionnels, les pompiers, les ambulanciers paramédicaux, les policiers). Les conclusions ont retenu l'attention à l'échelle

nationale, mettant en lumière les défis de santé mentale auxquels est confronté le personnel de la sécurité publique, ce qui inclut le TSPT et plusieurs autres troubles de santé mentale (p. ex. : trouble dépressif majeur, trouble panique), et auxquels on se réfère collectivement comme les blessures de stress post-traumatique (BSPT).

L'étude sur le personnel de la sécurité publique et ses conclusions ont soulevé des préoccupations de la part de nombreuses autres communautés de professionnels quant aux défis liés au TSPT auxquels leurs membres pourraient faire face. La vaste diversité de telles préoccupations a été mise en lumière lors de La Conférence nationale sur l'ESPT : Travailler ensemble pour façonner le cadre fédéral sur l'ESPT qui a eu lieu à Ottawa les 9 et 10 avril 2019. En effet, peu après la publication des conclusions de l'étude sur le personnel de la sécurité publique, ma mère, une infirmière praticienne, m'a demandé si le même projet de recherche pouvait être mené pour améliorer notre compréhension des défis liés à la santé mentale auxquels font face les infirmières et infirmiers.

Par la suite, on m'a demandé d'aider à faciliter une étude nationale sur la santé mentale chez les infirmières et infirmiers, et j'ai volontiers accepté. Le projet de recherche était dirigé par la Dre Andrea Stelnicki, appuyé par la FCSII, et mettait

en parallèle de façon intentionnelle les méthodes et le concept utilisés pour notre étude sur le personnel de la sécurité publique. Les conclusions de cette étude ont permis d'orienter et de soutenir des initiatives à grande échelle visant à améliorer la santé mentale de notre personnel de la sécurité publique, et nous espérons que les conclusions actuelles pourront aider de manière semblable les infirmières et infirmiers.

Ayant été élevé par une infirmière, je sais très bien que les soins infirmiers sont parfois une profession difficile, et qu'il existe de nombreux facteurs stressants dans le milieu des soins de santé. Je suis également conscient de l'importance de préserver la santé mentale des infirmières et infirmiers parce que, en fin de compte, le bien-être de nos fournisseurs de soins de santé et les soins apportés à nos patients sont intégralement reliés. Par conséquent, j'espère que les conclusions de l'étude sur les soins infirmiers contribueront à étayer des solutions novatrices pour soutenir la santé mentale au sein de notre communauté d'infirmières et d'infirmiers.

Bien à vous,

Dr R. Nicholas Carleton



# RÉSUMÉ

Les infirmières et infirmiers réagissent aux situations de stress élevé comme faisant souvent partie de leur travail. Certaines de ces situations surviennent de façon répétée et peuvent entraîner des réponses traumatisantes psychologiquement. Les événements potentiellement traumatiques psychologiquement peuvent avoir un effet cumulatif, minant la capacité des personnes à faire face à ces événements. Il existe des données probantes que l'exposition aux événements traumatisants peut être liée à des troubles de santé mentale<sup>1</sup>. Les infirmières et infirmiers font face à des taux plus élevés que la population générale de troubles de stress post-traumatique (TSPT), de dépression et d'anxiété<sup>2-6</sup>. De lourdes charges de travail, la violence en milieu de travail et l'épuisement professionnel sont associés à des symptômes accrus de troubles de santé mentale<sup>7,8</sup>.

La Fédération canadienne des syndicats d'infirmières et d'infirmiers (FCSII) a mandaté l'Université de Regina pour entreprendre cette recherche parce qu'il n'existait aucune donnée nationale sur les traumatismes liés au stress en milieu de travail (ou blessures de stress post-traumatique (BSPT)) chez les infirmières et infirmiers. Aucune donnée nationale n'existait pour estimer la prévalence des troubles de santé mentale chez les infirmières et infirmiers ni pour évaluer les facteurs potentiels précipitants pour

de tels troubles. La présente étude a été conçue pour mieux comprendre le taux probable d'exposition traumatisante, de troubles de santé mentale et d'épuisement professionnel au sein d'un vaste échantillon pancanadien d'infirmières et d'infirmiers. Les chercheurs ont également cherché à obtenir de l'information au sujet de la formation en santé mentale, de l'efficacité de cette formation et des comportements de recherche d'aide en santé mentale chez les infirmières et infirmiers.

Les données ont été recueillies à l'aide d'une étude par autodéclaration en ligne. Cette dernière était conçue avec des données de la FCSII et basée sur une étude précédente sur la prévalence des troubles de santé mentale chez le personnel de la sécurité publique<sup>1,9,10</sup>. La conception de l'étude permettait de comparer le personnel infirmier au personnel de la sécurité publique qui sont également régulièrement exposés à des événements potentiellement traumatiques psychologiquement dans leur travail. On demandait aux participants à l'étude de compléter une variété de mesures de dépistage en santé mentale.

On demandait également aux infirmières et infirmiers de commenter la formation officielle qu'ils avaient peut-être reçue pour appuyer la santé mentale, et comment ils percevaient son efficacité. De plus, on voulait savoir s'ils avaient cherché de l'aide pour leurs défis en santé mentale.



Un total de 7 358 infirmières et infirmiers réglementés canadiens (inf., inf. aux. aut., IP) ont commencé l'étude, et 43,6 % des participants ont complété l'étude dans sa totalité. Les participants se composaient principalement de femmes travaillant à temps plein, ayant fait des études universitaires et possédant plus de dix ans d'expérience de travail.

Les infirmières et infirmiers ont signalé des taux élevés de prévalence d'exposition à des événements potentiellement traumatiques psychologiquement dont ils ont été directement victimes, témoins ou dont ils ont entendu parler. Les agressions physiques étaient le type d'exposition le plus fréquemment signalé, suivi par le décès d'un individu après que des efforts extraordinaires aient été déployés pour lui sauver la vie et le décès d'une personne qui rappelait à l'infirmière un membre de sa famille ou un ami. Les difficultés importantes avec plusieurs facteurs stressants en milieu de travail, notamment les charges de travail élevées, le fait d'avoir à traiter avec des patients violents et abusifs et les problèmes administratifs ont également été signalés par les infirmières sondées.

On a décelé chez de nombreux participants (22,6 %) des symptômes actuels correspondants au TSPT : un taux plus élevé que celui révélé par les évaluations de diagnostics basées sur les entrevues de la population générale, mais semblable

aux taux signalés dans l'étude parallèle portant sur le personnel de la sécurité publique. Les hommes ont obtenu un résultat positif au TSPT légèrement plus fréquemment que les femmes. Seulement de petites différences ont été observées relativement au lieu de travail. Les infirmières et infirmiers travaillant dans les centres de santé/les centres de soins d'urgence ou le secteur des soins de longue durée ont obtenu un résultat positif au TSPT légèrement plus fréquemment que les infirmières/infirmiers travaillant dans d'autres milieux.

La majorité des infirmières et infirmiers (81,7 %) a signalé être victimes de stress à la suite d'un incident critique (c.-à-d. des symptômes d'épuisement professionnel ou d'usure de compassion à la suite d'une surcharge de travail ou de stress prolongé) au moins une fois au cours de leur carrière. Les infirmières et infirmiers ont obtenu des résultats positifs à des troubles dépressifs majeurs (36,3 %), des troubles d'anxiété généralisée (26,1 %) et des troubles panique (20,4 %) dans une proportion plus élevée que celle de la population générale et que les taux globaux signalés dans l'étude parallèle portant sur le personnel de la sécurité publique. Les femmes ont obtenu des résultats positifs à des troubles d'anxiété généralisée et des troubles panique dans des proportions plus élevées que les hommes, cependant les taux de dépistage pour les troubles

dépressifs majeurs étaient comparables tant chez les hommes que chez les femmes. On a décelé chez les infirmières et infirmiers des troubles de l'usage de l'alcool dans une proportion plus faible qu'au sein de la population générale et que les taux globaux signalés dans l'étude parallèle portant sur le personnel de la sécurité publique. Les infirmières et infirmiers travaillant en soins de longue durée ont indiqué présenter des taux plus élevés de troubles dépressifs majeurs (44,6 %), de troubles d'anxiété généralisée (28,5 %), d'idées suicidaires (39,9 % au cours de leur vie), de planification de leur suicide (22,3 %) et de tentatives de suicide (12,6 %) que les infirmières et infirmiers travaillant dans d'autres milieux.

De nombreuses infirmières (29,2 %) ont signalé faire face à d'importants symptômes cliniques d'épuisement professionnel, et la majorité (63,3 %) a indiqué présenter au moins quelques symptômes d'épuisement professionnel. Les taux d'épuisement professionnel étaient les plus bas chez les infirmières et infirmiers sondés qui en étaient à leur première année en soins infirmiers et chez les infirmières et infirmiers ayant plus de vingt ans d'expérience de travail. Il a été suggéré que l'épuisement professionnel était associé à des problèmes de santé mentale et un piètre rendement au travail chez les infirmières et infirmiers.

Les taux d'idées suicidaires au cours de la vie des infirmières et infirmiers sondés (33,1 %) étaient plus élevés qu'au sein de la population générale et aussi plus élevés que dans certains secteurs de travail du personnel de la sécurité publique, mais comparables à ceux des intervenants correctionnels et des ambulanciers paramédicaux. Les pensées suicidaires des infirmières et infirmiers de l'étude au cours de la dernière année étaient plus élevées qu'au sein de la population générale, mais comparables aux taux globaux signalés dans l'étude du personnel de la sécurité publique. Les taux de planification et de tentatives de suicide au cours de la vie étaient notamment plus élevés pour les infirmières et infirmiers participants qu'au sein de la population générale et plus élevés que les taux globaux déclarés dans l'étude parallèle sur le personnel de la sécurité publique. En revanche, les taux de planification et de tentatives de suicide au cours de l'année dernière concordaient avec les taux globaux rapportés dans l'étude parallèle sur le personnel de la sécurité publique. La longueur de la carrière semblait être un facteur potentiellement important parce que les infirmières et infirmiers en début de carrière ont signalé les taux les plus élevés d'idées suicidaires au cours de la vie et au cours de la dernière année.

Les conclusions de l'étude actuelle mettent en lumière un important besoin pour

orienter davantage l'attention vers la santé mentale et le bien-être des infirmières et infirmiers canadiens. On accorde de plus en plus d'attention à l'échelle nationale au TSPT, mais la plus grande partie de cette attention s'est concentrée sur les professions traditionnellement occupées par les hommes (p. ex. : armée, police). Les conclusions actuelles soulignent que le stress cumulatif auquel font face les milieux de travail en soins de santé peut également être associé à différents problèmes liés à l'anxiété et à la dépression. La détection précoce des symptômes du stress, de l'épuisement professionnel et des troubles de santé mentale peut être cruciale pour organiser des activités proactives (p. ex. : une formation régulière fondée sur des données probantes, la prestation précoce de soins fondés sur des données probantes, des changements aux facteurs structureaux de risque comme travailler en manque de personnel) afin d'atténuer les blessures de stress opérationnel (BSO, soit tout trouble de santé mentale ou d'autres problèmes de santé mentale découlant de facteurs stressants subis à titre de professionnels). La formation sur la santé mentale, les programmes d'interventions précoces et les lieux de travail sécuritaires au plan psychologique pourraient tous aider à réduire la stigmatisation en milieu de travail, à encourager l'accès anticipé à des soins fondés sur des données probantes et en fin de compte, à améliorer la santé mentale des infirmières et infirmiers.





CANADIAN FEDERATION  
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LA FÉDÉRATION CANADIENNE  
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ET INFIRMIERS