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Post-traumatic Stress Disorder and the Mental Health of Military Personnel and Veterans

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Jean-Rodrigue Paré

International Affairs, Trade and Finance Division
Parliamentary Information and Research Service

***Post-traumatic Stress Disorder and
the Mental Health of Military Personnel
and Veterans***
(Background Paper)

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CONTENTS

1	INTRODUCTION.....	1
1.1	The Human Cost of Military Operations.....	1
1.2	The Social and Public Issue.....	1
2	WHAT IS POST-TRAUMATIC STRESS DISORDER?.....	2
2.1	Nature of the Disorder and Diagnosis.....	2
2.2	From “Shell Shock” to Post-traumatic Stress Disorder.....	3
2.3	Post-traumatic Stress Disorder Today.....	4
2.4	The Prevalence of Post-traumatic Stress Disorder in Veterans.....	4
2.4.1	United States.....	4
2.4.2	Australia.....	5
2.4.3	United Kingdom.....	5
3	OPERATIONAL STRESS INJURIES IN CANADIAN SOLDIERS AND VETERANS.....	5
3.1	From Soldier to Veteran: The Division of Responsibilities.....	5
3.2	Operational Stress in Military Personnel.....	6
3.3	Post-operational Stress in Veterans.....	7
3.4	The Risk Associated with Operational Stress Injuries: From Absenteeism to Suicide.....	8
4	LOOKING TO THE FUTURE.....	8
4.1	Scope of the Problem.....	8
4.2	The Current Capacity of Veterans Affairs Canada.....	9
4.3	Monitoring of Veterans.....	9
5	CONCLUSION.....	10

POST-TRAUMATIC STRESS DISORDER AND THE MENTAL HEALTH OF MILITARY PERSONNEL AND VETERANS

1 INTRODUCTION

1.1 THE HUMAN COST OF MILITARY OPERATIONS

On 7 July 2011, after nine and a half years in Afghanistan, Canada officially terminated its combat military operations in that country. Approximately 1,000 members of the Canadian Forces (CF) will nevertheless remain there until 2014 to provide training support for Afghan security forces.

A total of approximately 30,000 Canadian service personnel were deployed to Afghanistan, which in terms of strength exceeds Canadian participation in the Korean War between 1950 and 1953, thereby making the deployment in Afghanistan the largest Canadian military operation since the Second World War. One hundred and fifty-seven soldiers and four civilians died, and by the end of 2010, a total of 1,859 soldiers had been wounded.¹

Canada's participation in the conflict in Afghanistan was at the centre of political debate over the redefinition of Canada's role in the world after the events of 11 September 2001. The debate absorbed both houses of Parliament and received sustained media coverage. The human face of the Afghanistan mission frequently showed itself in the tragic experiences of some representatives of this new generation of soldiers, who sometimes paid with their mental health for their service in the war.

The potential psychological after-effects of involvement in military operations are usually described by the medical term "post-traumatic stress disorder" (PTSD), or the military and police term "operational stress injury." These after-effects are more difficult to anticipate than physical injuries because they are less visible, reluctantly reported by those who suffer from them, and because the symptoms may only appear years after the traumatic event. Our understanding of the condition is therefore imperfect, and there are no certainties, except for the distress of those affected.

1.2 THE SOCIAL AND PUBLIC ISSUE

The proportion of serving members suffering from PTSD tends initially to be close to that of the general population, but it becomes significantly higher as exposure to combat or atrocities increases.

The proportion of veterans who suffer from PTSD is higher than for serving members. The highest proportion – 42.5% – is found among veterans receiving services from Veterans Affairs Canada (VAC) since the coming into force of its New Veterans Charter on 1 April 2006.

Given that, with the end of combat operations in Afghanistan, a total of between 25,000 and 35,000 soldiers will be released from the CF over the next five years, at least 2,750 of them can be expected to suffer from a severe form of PTSD and at least 6,500 will suffer from a mental health problem diagnosed by a health professional.

To meet the anticipated needs of the thousands of service personnel who will become veterans over the coming years, the services introduced over the past 10 years will need to be made available on an even broader scale.

This is the context within which this paper addresses the following three main points. They concern:

- what can be affirmed with scientific certitude about the diagnosis of PTSD itself;
- what we know about the prevalence of PTSD and other mental health problems in members of the CF and veterans; and
- what can be concluded with respect to future challenges.

2 WHAT IS POST-TRAUMATIC STRESS DISORDER?

2.1 NATURE OF THE DISORDER AND DIAGNOSIS

The diagnosis of PTSD is becoming well established in the psychiatric community, leading to the standardization of diagnostic criteria.

In North America today, a diagnosis of PTSD is normally based on the criteria established by the American Psychiatric Association in its *Diagnostic and Statistical Manual of Mental Disorders* (DSM).² PTSD results from a traumatic event and manifests itself through symptoms of severe anxiety which persist for at least one month and interfere with the ability to complete everyday activities. The diagnosis is based on the following symptoms:

- intrusive recollections (e.g., distressing dreams, flashbacks, hallucinations);
- avoidance and emotional numbness (e.g., avoidance of circumstances that remind the individual of the traumatic event, feeling detached from others); and
- increased arousal (e.g., difficulty sleeping, hyper-vigilance, irritability).³

If the symptoms last less than three months, the disorder is specified as “acute”; if they persist for a longer period, they are termed “chronic.” In about half of cases, symptoms disappear in three months or less. One feature of the disorder that makes its consequences difficult to predict for both health professionals and policy makers is the fact that “there may be a delay of months, or even years, before symptoms appear.”⁴ If at least six months pass between the traumatic event and the onset of symptoms, the condition is diagnosed as “PTSD with delayed onset.”

While Canadian practitioners and researchers generally adhere to the American Psychiatric Association's diagnostic criteria for PTSD, other countries rely on the definition from the World Health Organization's *International Classification System of Diseases*:

a delayed or protracted response to a stressful event or situation (of either brief or long duration) of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone.⁵

2.2 FROM "SHELL SHOCK" TO POST-TRAUMATIC STRESS DISORDER

During the First World War, the term "shell shock" was understood as a brain injury brought on by exposure to artillery barrages. When it was discovered that similar symptoms could be found in military personnel who were not exposed to barrages, physiological explanations were gradually abandoned for the general diagnosis of "war neurosis." In the first edition of the DSM in 1952, "war neurosis" became "gross stress reaction."

During the Second World War, the U.S. government instructed recruiting offices to screen out all those who were psychologically at risk. As a result, 1 million men were declared unfit for service. Even with that tight screening, about 10% of American troops in Europe were declared "psychiatric casualties."⁶ In 1944, Americans reintroduced a program that had been used shortly after the First World War for treating psychiatric casualties on site, and the psychiatric casualty rate declined to 3%. This treatment program, known as the Salmon Program, was deemed so successful that it was put in place right at the beginning of the Vietnam War, and it is credited for a relatively low rate of psychiatric casualties of 5% during the 1965–1967 period.

With the success of military treatment programs during the first years of the Vietnam War, "gross stress reaction" was not detected, and it was dropped from the second edition of the DSM (DSM-II) which appeared in 1968. Consequently, psychiatrists no longer had access to an official diagnosis. Nevertheless, they found themselves treating a high number of Vietnam veterans who seemed to suffer from a delayed onset of "war neurosis." And these veterans were also having more trouble receiving treatment and benefits for service-related psychiatric conditions.

Public awareness was roused in 1971 by the story of a Vietnam War hero, Dwight Johnson, who was shot while attempting to hold up a liquor store at gunpoint barely a year after receiving the Medal of Honour. The event prompted Dr. C. F. Shatan, who had studied psychiatry at McGill University in Montréal, to coin the term, "post-Vietnam syndrome." Veterans' groups, with the support of psychiatrists, launched research projects to gather evidence in the hope that a new version of the "gross stress reaction" diagnosis would appear in the planned third edition of the DSM (DSM-III).

At the 1977 annual meeting of the American Psychiatric Association, held in Toronto, a panel examined a proposed diagnosis of "catastrophic stress disorder" which would include the subcategory of "post-combat stress reaction." In January 1978, a working group preparing the DSM-III for publication changed the diagnosis to "post-traumatic stress disorder."⁷

2.3 POST-TRAUMATIC STRESS DISORDER TODAY

The term “post-traumatic stress disorder” was officially adopted by the American Psychiatric Association in 1980 for the third edition of its *Diagnostic and Statistical Manual for Mental Disorders* (DSM-III). Changes have been made to the diagnosis criteria in the fourth edition (DSM-IV), most notably to specify that PTSD can apply to civilian populations.

Although estimates vary, most researchers agree that over 90% of individuals diagnosed with PTSD have at least one other psychiatric disorder, including depression, anxiety, alcohol and/or drug abuse, and suicidal thoughts. The co-occurrence of PTSD and major depression is well documented: a pre-existing major depression increases two- to threefold the risk of developing PTSD after exposure to a traumatic event, and PTSD increases by the same proportion the risk of having a first occurrence of major depression.⁸ There is also a strong link between PTSD and other mental disorders, notably anxiety and alcohol abuse.

To reflect the connection between exposure to a traumatic event and various forms of mental disorders, the Canadian government uses the term “operational stress injury.” It is a broader term than “post-traumatic stress disorder” and is used by the Department of National Defence, Veterans Affairs Canada, and the Royal Canadian Mounted Police to refer to “any persistent form of psychological difficulty resulting from operational duties.”⁹

2.4 THE PREVALENCE OF POST-TRAUMATIC STRESS DISORDER IN VETERANS

Two main methods are used by researchers to measure the prevalence – which means the total percentage of both new and existing cases – of PTSD among veterans:¹⁰

- measurement of the presence of symptoms in the individual *at the time of data collection* (i.e., “current prevalence”); and
- measurement of the prevalence of symptoms *at any point in a person’s life* (i.e., “lifetime prevalence”).

Lifetime prevalence tends to be two to four times higher than current prevalence. According to the DSM-IV, the lifetime prevalence of PTSD in the general population varies between 1% and 14%.

Various countries have shown an interest in the prevalence of PTSD among their veterans. For comparison purposes, we will give the figures for three other countries before reviewing the situation in Canada.¹¹

2.4.1 UNITED STATES

Studies of American veterans from all conflicts since the Vietnam War report a lifetime prevalence of PTSD that varies between 6% and 31%, with current prevalence varying from 2% to 17%.¹²

The only major U.S. study on the war in Afghanistan covers the years 2001–2004, and reports a current prevalence of 11.5% when the presence of symptoms of any kind is taken into account, or 6.2% if “serious” symptoms alone are factored in.¹³

PTSD was diagnosed for 27% of American veterans who made use of government health services.¹⁴

By applying the same research criteria to civilian populations, U.S. studies demonstrate that the prevalence, both current and lifetime, is two to four times higher among veterans who were deployed in combat situations than for the general population.

2.4.2 AUSTRALIA

Australian studies of Vietnam War veterans report a lifetime prevalence of PTSD of 21%. For the approximately 1,800 Australian soldiers who took part in the Gulf War, current prevalence remained at 5.4% more than 10 years after the end of the conflict.

No public data are available about the conflict in Afghanistan.¹⁵

2.4.3 UNITED KINGDOM

British studies tend to demonstrate a lower current prevalence level that varies between 2.5% and 6%.

No data exists publicly about the conflict in Afghanistan.

3 OPERATIONAL STRESS INJURIES IN CANADIAN SOLDIERS AND VETERANS

In Canada, health care available to veterans is organized in a way that makes a clear distinction between soldiers in service and veterans. In fact, because the military environment and services provided by the CF differ from the civilian life of veterans and the services provided by VAC, the findings of studies for one of these groups do not lend themselves to extrapolation to the other. Generally speaking, the prevalence of mental health disorders appears to be much higher among veterans than among serving members.

3.1 FROM SOLDIER TO VETERAN: THE DIVISION OF RESPONSIBILITIES

When a soldier is injured in service and the injury, whether physical or mental, leads to permanent disability, VAC pays an award in one or more instalments, the amount of which varies with the severity of the disability. The maximum amount for a 100% disability is \$285,000, but approximately 15% of disabled soldiers or veterans are considered to have a disability of less than 5% (\$14,250). The award may be paid to a member who is still in service or to a veteran. In most cases, the disability does not prevent the person from continuing a career within the CF.

If the disability is serious, however, the person must be released from the CF on medical grounds. A decision concerning the necessity of a release is made only once the injury can be described as having “stabilized.” As long as the person is a member of the military, the CF is responsible for health care and rehabilitation. Once the decision has been made to release the member for medical reasons, two or three years usually go by before the person is permanently no longer a member of the CF. Once this time period has elapsed, and not before, VAC may begin to provide rehabilitation programs and medical services.

3.2 OPERATIONAL STRESS IN MILITARY PERSONNEL

The only major scientific study on PTSD in Canadian soldiers was based on a special sampling developed by Statistics Canada as part of the 2001 census, and focussed on 8,441 active service personnel.¹⁶ For a specific diagnosis of PTSD, the study reports a current prevalence of 2.3%. If the whole range of psychiatric disorders is included, which is to say everything that the Government of Canada calls “operational stress injuries,” current prevalence rises to 14.9%, of which 6.9% is for major depression alone.

Military personnel are recruited on the basis of physical and mental health criteria that make this population one that is at a lower risk than the general population. On the other hand, soldiers are exposed to many more trauma risks than the general population. These two factors cancel each other out and the end result is that the prevalence of psychiatric disorders among service personnel tends to be comparable to that of the general population.

The rates increase if only those soldiers who have taken part in combat operations or witnessed atrocities are included. The 2.3% prevalence of PTSD doubles for the former group, and quadruples for the latter to almost 10%. For major depression, prevalence increases to 9.7% for people involved in combat operations, and to 12.5% for those who witnessed atrocities.

The study shows that approximately 20% of Canadian personnel in military service in 2001 who were involved in combat operations during their career experienced consequences from an operational stress injury in the year 2001 alone (current prevalence). If only PTSD and major depression are considered, current prevalence is just under 15%.

As lifetime prevalence tends to be two to four times higher than current prevalence, these data would indicate that at least 30% of soldiers involved in combat operations risk suffering from PTSD or major depression during their lifetime.

As the study that provided these data was conducted before Canada's involvement in the conflict in Afghanistan, the results do not lend themselves to strict extrapolation. They are also in marked contrast with estimates provided in June 2011 by the Department of National Defence:

The vast majority of soldiers that deploy do not develop PTSD. Post deployment screening that occurs three to six months after deployment has shown that approximately five-per-cent (5%) of personnel report symptoms of PTSD, depression or both.¹⁷

It is nevertheless not possible to compare these official estimates with other existing studies, because the data gathered by the department have not been released to the public.

3.3 POST-OPERATIONAL STRESS IN VETERANS

When a member is released from the CF, that member becomes a “veteran,” and responsibility for health care to address service-related injuries or illnesses shifts to VAC, as do any related financial benefits. If Second World War and Korean War veterans are excluded, there were 592,000 veterans still alive in June 2010. Of these, 313,000 were former members of the Regular Force and 279,000 were former members of the Reserve Force; 91% of these veterans were not receiving any services from VAC.

In January 2011, VAC and the Department of National Defence published a major report on the physical and mental health and living conditions of Regular Force veterans released between 1 January 1998 and 31 December 2007.¹⁸ This is the first study to focus on all veterans rather than exclusively on those receiving VAC services.

For the chronic symptoms of PTSD diagnosed by a health professional, the figures for current prevalence are as follows:

- for all veterans of the Regular Force released between 1998 and 2007: 11%
- for veterans receiving disability benefits whose application was approved before 2006 (*Pension Act*): 24.5%
- for veterans receiving disability benefits whose application was approved after 2006 (*New Veterans Charter*): 42.5%

If the most prevalent psychiatric disorders that the Government of Canada includes under the term “operational stress injuries” (PTSD, depression, anxiety, mania, dysthymia and bipolar disorder) are taken into account, the figures for current prevalence are the following:

- for all veterans of the Regular Force released between 1998 and 2007: 23.6%
- for veterans receiving disability benefits whose application was approved before 2006 (*Pension Act*): 40.2%
- for veterans receiving disability benefits whose application was approved after 2006 (*New Veterans Charter*): 59.9%

These rates are well above those found not only in studies of active soldiers but also in studies of the general population. They indicate that veterans are at much greater risk than active service personnel. They also highlight a higher prevalence among veterans receiving VAC benefits or services than veterans in general.

3.4 THE RISK ASSOCIATED WITH OPERATIONAL STRESS INJURIES: FROM ABSENTEEISM TO SUICIDE

When the impacts of an operational stress injury are treated in a timely and appropriate manner, full remission may result in 30% to 50% of cases.¹⁹ When the symptoms become chronic, there is a significant increase in the risk of a spiral in the severity of symptoms: absenteeism, unemployment, interpersonal and family problems, alcoholism and drug addiction, trouble with the law, homelessness and suicide.²⁰ Moreover, as with mental health in general, there is often a feeling of shame that makes early intervention difficult and increases the risk of chronic symptoms.

A recent study provides more information about the reasons why veterans become homeless, shedding light on why they enter the spiral of risks mentioned above.²¹ The scope of the problem is not very well known yet because there are no procedures in place to monitor service personnel released from the CF, except for VAC clients.

The risk of suicide remains a major concern with respect to operational stress injuries. A recent study on the causes of death for former members of the CF provides initial estimates of numbers to indicate the extent of the problem.²² The following data are for those who enrolled in the Regular Force after 1972 and were released prior to 31 December 2007:

- Men (total of 96,786): 2,620 had died, 696 (26.6%) by suicide.
- Women (a total of 15,439): 204 had died, 29 (14%) by suicide.

The percentage of deaths attributable to suicide is at least 50% lower among those who remained with the CF.

These results may be a source of concern, because a similar study of 60,000 Australian veterans of the Vietnam War had shown a much lower rate of suicide, 6.8%.²³ In the United States, the incidence of suicide is much higher, at approximately 40 deaths by suicide for the 100,000 veterans still living. However, the data include only those who are clients of the U.S. Department of Veterans Affairs.

4 LOOKING TO THE FUTURE

4.1 SCOPE OF THE PROBLEM

With the end of the combat mission in Afghanistan, the first challenge to be met regarding the mental health of soldiers and veterans will be an assessment of the scope of the problem to ensure that appropriate services are put in place.

VAC expects that 34,189 soldiers or veterans will receive a disability award over the next five years.²⁴ Many of these beneficiaries will not have a serious disability and will continue their careers within the CF. It is also expected that between 25,000 and 35,000 members will be released from the CF over the next five years, and that between 6,000 and 10,000 will be released for medical reasons.

If we apply the rates from recent Canadian studies on current prevalence, in the year following their release, at least 6,500 (26%) of these new veterans will suffer from the consequences of an operational stress injury, and at least 2,750 (11%) will suffer from a severe form of PTSD. The rates for those who will suffer from these symptoms at some point in their life will be higher.

At the moment, approximately three quarters of the veterans taking part in VAC rehabilitation programs following their release for medical reasons are suffering from mental health problems.²⁵

4.2 THE CURRENT CAPACITY OF VETERANS AFFAIRS CANADA

At the moment, approximately 4,000 veterans are enrolled in medical and psychosocial VAC rehabilitation programs. Approximately half suffer from a service-related psychiatric disability and, as we mentioned earlier, over 70% have mental health needs.²⁶ Despite the considerable efforts made over the past 10 years, in particular the establishment of a network of specialized external clinics, as well as a group of affiliated professionals to whom veterans can be referred as required, the department is having trouble meeting the demand.

Under the most optimistic scenarios, these needs will double over the next five years. Furthermore, because health services are involved, coordination with provincial resources will be crucial to prepare health professionals to deal with this specific problem. VAC's capacity to meet the growing demand for services over the coming years will be a major challenge for the Government of Canada.

4.3 MONITORING OF VETERANS

Most members who are released by the CF for medical reasons are released against their will. They would have preferred to continue their career in the CF.²⁷ The transition to civilian life is therefore a painful step for many. The upheavals connected with the transition, and the loss of a structured occupational and social environment, constitute an additional risk from the mental health standpoint.

As long as they remain within the CF, persons at risk receive rigorous medical monitoring. Once they become veterans, only those who decide to request VAC assistance will be able to benefit from the services to which they are entitled.

Existing databases are useful for long-term studies, but they do not allow for the systematic monitoring of the state of health and occupational progress being made by those veterans who do not request VAC services. As isolation and reluctance to seek assistance are common among those suffering from operational stress injuries, it is possible that many veterans who need specialized services do not receive them. This increases health risks for them, because early intervention is the most important factor in healing. Moreover, the symptoms of operational stress injury may appear only several years after the event that gave rise to the trauma, which is often many years after the person left the CF.

The expected growth in mental health needs over the coming years will therefore require the Government of Canada to have at its disposal the information it needs to make the best decisions. In view of the government's responsibility for giving veterans access to the best possible health services, this is an important condition.

5 CONCLUSION

Post-traumatic stress disorder and operational stress injuries constitute a complex problem for which only limited scientific knowledge is available. There is nevertheless a gradual convergence on how to diagnose these conditions and consequently a clear improvement in the ability to pinpoint the extent of the problem. This makes it possible to discard not only disaster scenarios but also scenarios that deny the very existence of a problem.

With due regard to all the necessary precautions regarding scientific certainty, we would describe the following statements about military personnel as prudent and reasonable:

- Since the fact that military personnel are in better health than members of the general public is counterbalanced by the fact that service personnel experience greater exposure to traumatic events, the risk that military personnel will suffer mental health problems is comparable to the risk for the general population.
- This risk increases for soldiers deployed in combat zones. In the year following deployment, it can be expected that approximately 15% will suffer from an operational stress injury and that 5% will suffer from a severe form of PTSD.
- Approximately 30% of soldiers deployed in a combat zone will suffer symptoms of operational stress injury during their lifetime, and approximately 10% will suffer from a severe form of PTSD. Repeated exposure to combat operations will cause this percentage to increase.

For veterans, no matter what the reason for their release, the risk increases significantly:

- Each year, over 20% of all veterans can be expected to suffer from the symptoms of operational stress injury, which will take the form of severe PTSD for half of them.
- These percentages will be twice as high for veterans who are clients of VAC: each year, approximately 40% will suffer from an operational stress injury, which will take the form of severe PTSD in half of the cases.

Since approximately 30,000 Canadian soldiers were deployed to Afghanistan, and between 5,000 and 7,000 will be released each year over the next five years, demand for mental health services for veterans can be expected to increase significantly and test the capacity of the Government of Canada to assume its responsibility for providing the best possible health care to its veterans.

NOTES

1. National Defence, [Canadian Forces' Casualty Statistics \(Afghanistan\)](#), 12 January 2011.
2. American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, 4th ed., Masson, 1996.
3. Ibid.
4. Ibid.
5. World Health Organization, *International Statistical Classification of Diseases and Related Health Problems*, 10th revision, Version for 2007, F43.1:

Typical features include episodes of repeated reliving of the trauma in intrusive memories (“flashbacks”), dreams or nightmares, occurring against the persisting background of a sense of “numbness” and emotional blunting, detachment from other people, unresponsiveness to surroundings, anhedonia, and avoidance of activities and situations reminiscent of the trauma. There is usually a state of autonomic hyperarousal with hypervigilance, an enhanced startle reaction, and insomnia. Anxiety and depression are commonly associated with the above symptoms and signs, and suicidal ideation is not infrequent. The onset follows the trauma with a latency period that may range from a few weeks to months. The course is fluctuating but recovery can be expected in the majority of cases. In a small proportion of cases the condition may follow a chronic course over many years, with eventual transition to an enduring personality change.
6. For an account of these developments since the First World War, see Wilbur J. Scott, “PTSD in DSM-II: A Case in the Politics of Diagnosis and Disease,” *Social Problems*, Vol. 37, No. 3, August 1990, pp. 294–310.
7. Ibid., p. 307.
8. Naomi Breslau et al., “A Second Look at Comorbidity in Victims of Trauma: The Posttraumatic Stress Disorder–Major Depression Connection,” *Biological Psychiatry*, Vol. 48, No. 9, November 2000, pp. 902–909.
9. Operational Stress Injury Social Support, [“The Official Definition of an OSI,”](#) *The invisible wounds*.
10. It is important to distinguish studies on the mental health of soldiers in service from those about the mental health of veterans. Because the military environment differs from the civilian life of veterans, the findings of studies of one group do not lend themselves to extrapolation to the other.
11. Studies in these three countries only address the specific diagnosis of post-traumatic stress disorder and therefore do not include all forms of what the Canadian government calls “operational stress injuries.”
12. Lisa K. Richardson et al., “Prevalence Estimates of Combat-Related PTSD: A Critical Review,” *Australian and New Zealand Journal of Psychiatry*, Vol. 44, No. 1, January 2010, pp. 4–19.
13. Ibid. The variation results from whether or not the level of symptom severity is included.
14. Erin Bagalman, *Suicide, PTSD, and Substance Use Among OEF/OIF Veterans Using VA Health Care: Facts and Figures*, Congressional Research Service Report for Congress, 18 July 2011.
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16. Jitender Sareen et al., "Combat and Peacekeeping Operations in Relation to Prevalence of Mental Disorders and Perceived Need for Mental Health Care: Findings from a Large Representative Sample of Military Personnel," *Archives of General Psychiatry*, Vol. 64, No. 7, 2007, pp. 843–852.
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19. House of Commons, Standing Committee on Veterans Affairs, [Evidence](#), 3rd Session, 40th Parliament, 25 November 2010, 1530 (Don Richardson, Consultant Psychiatrist, Parkwood Operational Stress Injury Clinic).
20. House of Commons, Standing Committee on Veterans Affairs, [Evidence](#), 3rd Session, 40th Parliament, 16 November 2010, 1530 (Janice Burke, Director, Mental Health, Department of Veterans Affairs).
21. Susan L. Ray and Cheryl Forchuk, *The Experience of Homelessness among Canadian Forces and Allied Forces Veterans*, 2011.
22. Statistics Canada, [Canadian Forces Cancer and Mortality Study: Causes of Death](#), Cat. no. 82-584-XWE, 31 May 2011.
23. Australia, Department of Veterans' Affairs, *The Third Australian Vietnam Veterans Mortality Study*, 2005, p. 73.
24. Veterans Affairs Canada, "[Regulatory Impact Analysis Statement](#)," *Regulations Amending the Canadian Forces Members and Veterans Re-establishment and Compensation Regulations*, 9 July 2011.
25. Veterans Affairs Canada, "Presentation to the Standing Committee on Veterans Affairs (SCVA) on the New Veterans Charter," 13 May 2010.
26. House of Commons, Standing Committee on Veterans Affairs, [Evidence](#), 3rd Session, 40th Parliament, 16 November 2010, 1640 (Janice Burke, Director, Mental Health, Department of Veterans Affairs).
27. See the many comments expressing this preference made during testimony given at the [meetings](#) of the House of Commons Standing Committee on Veterans Affairs in connection with the review of the New Veterans Charter in the spring of 2010.