



# Health and Well-Being of Canadian Armed Forces Veterans: Findings from the 2013 Life After Service Survey

Research Directorate, Veterans Affairs Canada, Charlottetown, PE:

Jim Thompson MD CCFP(EM) FCFP, Medical Advisor Linda Van Til DVM MSc, Epidemiologist Alain Poirier, Senior Statistics Officer Jill Sweet MSc, Statistician Kristofer McKinnon, Statistics Officer David Pedlar PhD, Director

Research, Personnel & Family Support, Director General Military Personnel Research & Analysis, Department of National Defence, Ottawa, ON:

Kerry Sudom PhD, Defence Scientist Sanela Dursun PhD, Director

E-mail: research-recherche@vac-acc.gc.ca

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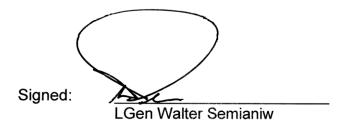
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# Foreword

#### Lieutenant-General Walter Semianiw, Assistant Deputy Minister, Policy, Communications and Commemoration, Veterans Affairs Canada

"When first introduced in 2010, the Life After Service Studies (LASS) program of research opened the door to a new focus of study – one that provided much-needed information about the physical, mental, and social well-being of Veterans of the Canadian Armed Forces. The results of LASS 2010, though already informing programs and policies, were just the beginning of this dedicated area of study. Veterans Affairs Canada is pleased to continue this important work with the Department of National Defence and Statistics Canada with LASS 2013. This latest study also included Reserve Force Veterans, providing new information about this group that represents approximately half of Canadians with military service. With each study we are learning more about the Canadian transition experience and working to provide more responsive support to the men and women who serve this nation."



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#### Major-General David Millar, Chief Military Personnel, Department of National Defence

"The transition from military to civilian life is an important time for Canadian Armed Forces (CAF) members. The Life After Service Studies (LASS) program of research, initiated as part of a partnership with Veterans Affairs Canada (VAC) and Statistics Canada in 2010, has provided useful information about the health and well-being of our Veterans, and of the factors that might aid successful adjustment to civilian life. The 2013 LASS was the first study to include Veterans of the Primary Reserves. With the recent deployment to Afghanistan and other commitments, the CAF has been using more Reservists to fill multiple roles both in Canada and on deployments, and this study provides new and important information about the well-being of this population in addition to Veterans of the Regular Force. It is important that the policies, practices and programs of both DND and VAC are developed in a complementary fashion, with the common goal of assisting in the transition of these soldiers, sailors, airmen and airwomen to civilian life. This collaborative research will ensure better-informed, better-synchronized policy across both Departments, to the benefit of the men and women who have served our country."

Signed:

Da

MGen David Millar

17 June 2014

# Health and Well-Being of Canadian Armed Forces Veterans: Findings from the 2013 Life After Service Survey

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# Health and Well-Being of Canadian Forces Veterans: Findings from the 2013 Life After Service Survey

# **Executive Summary**

#### Introduction

The first comprehensive survey of the health and well-being of Canadian Armed Forces (CAF) Veterans<sup>1</sup> was the 2010 *Survey on Transition to Civilian Life* (STCL 2010). STCL 2010 was one of two studies that together comprised the 2010 *Life After Service Studies* (LASS) program of research, the other being the 2010 LASS *Income Study*. LASS 2010 studied the health and well-being of former Regular Force personnel who had released from service during 1998-2007. Reserve Force Veterans were not included in the 2010 studies owing to limitations in the data available at the time. The CAF has increasingly drawn on Primary Reserve Force personnel to supplement the Regular Force since the 1990-91 first Gulf War including the missions in Bosnia and Afghanistan, so it is important to also study their health and well-being.

The 2013 program extended the 2010 studies by including Primary Reserve Force Veterans for the first time, and by including Regular Force Veterans who had released in 1998-2012. Two studies were conducted, as in 2010: the 2013 income study and the *Life After Service Survey* (LASS 2013). This report gives findings from the survey.

#### Methods

LASS 2013 was a computer-assisted telephone interview survey conducted by Statistics Canada for Veterans Affairs Canada (VAC) and the Department of National Defence (DND) in February-March 2013. The survey sampled former Primary Reserve Force personnel with Class A/B and C service<sup>2</sup> who released from service 01 January 2003 to 31 August 2012 and Regular Force personnel who released 01 January 1998 to 31 August 2012:

- 1. *Reserve Force Class A/B.* Veteran who was a Primary Reserve Force member with any Class B temporary full-time service in addition to Class A service, and no Regular Force service.
- 2. *Reserve Force Class C*: Veteran who was a Primary Reserve Force member with Class C service, and also had Class A and Class B service and no Regular Force service. Class C service is full-time service in support of deployed operations, domestically or internationally.
- 3. *Regular Force*. Veteran who was a member of the Regular Force. Some in this category also had service in the Primary Reserve Force.

The sample consisted of Primary Reserve Force Class A/B (514 sampled, 60% response rate, 93% share rate) and Class C Veterans (1,013 sampled, 70% response rate, 91% agreed to share data with VAC and DND), and Regular Force Veterans (2,611 sampled, 72% response rate, 89% share rate). The samples are considered representative of CAF Primary Reserve Force Class A/B and Class C and Regular Force Veterans living in the general Canadian population who were released during those time periods.

<sup>&</sup>lt;sup>1</sup> For this study, "Veteran" means a former CAF member with any length of service.

<sup>&</sup>lt;sup>2</sup> Former CAF personnel with only Class A service were not surveyed.

#### Importance of Age and Gender

Reserve Class A/B Veterans who released in 2003-12 were younger (average age 31 years, range 18-67) than Reserve Class C Veterans who released in 2003-12 (40 years, range 20-67). They in turn were younger than Regular Force Veterans who released in 1998-2012 (44 years, range 18-78). There were also differences in the proportions of women: 19% for Reserve Class A/B, 23% for Reserve Class C and 13% for Regular Force Veterans. These differences in age and gender are important to consider when comparing prevalences across the three Veteran groups. For example, physical health conditions are more prevalent with age, and mental health conditions are more prevalent in adult middle years.

#### Well-Being of Primary Reserve Force and Regular Force Veterans

The following table paints pictures of the health, disability, stress/satisfaction and determinants of health status of the three Veteran groups. Statistical analysis that accounts for confounding (differences in age, sex and other factors) is required to confirm differences and similarities, and to identify reasons for differences between the groups.

- *Class A/B Primary Reserve Veterans* were the youngest on average and in general had the best health and well-being. Very few were participating in VAC programs.
- *Class C Primary Reserve Veterans* looked more similar to Regular Force Veterans than Class A/B Veterans. Most were doing well, but they were older on average than Class A/B Veterans and were experiencing problems more often.
- *Regular Force Veterans* in LASS 2013 were very similar to the picture in STCL 2010: most Regular Force Veterans who released in 1998-2012 were doing well, but of the three groups they had the highest prevalences of health and well-being problems.

Characteristic or	Reserve Class A/B	Reserve Class C	Regular Force
Indicator <sup>3</sup>	Released 2003-2012	Released 2003-2012	Released 1998-2012
Mean Age	31 years, Range 18-67	40 years, Range 20-67	44 years, Range 18-78
Women (CI)	19% (15-22%)	23% (21-26%)	13% (12-15%)
Marital status	56% married or commonlaw 39% single or never married	72% married or commonlaw 22% single or never married	74% married or commonlaw 16% single or never married
	F* for widowed, separated or divorced	6% widowed, separated or divorced.	10% widowed, separated or divorced.
Educational	25% high school	26% high school	43% high school
attainment	39% post-secondary other	41% post-secondary other	36% post-secondary other
	than university degree	than university degree	than university degree
	35% university degree.	30% university degree.	17% university degree.
Unemployment rate (CI)	6% (4-9%)	5% (4-7%)	7% (6-8%)
Labour force	84% employed	80% employed	71% employed
participation, 2013	10% not in the workforce	13% not in the workforce	19% not in the workforce 4% unable to work
Main activity in	77% working at a job or	77% working at a job or	69% working at a job or
the past year	business	business	business
	14% in school or training	6% in school or training	5% in school or training
		5% disabled or on disability	6% disabled or on disability
		6% retired	12% retired
Low income (CI)	12% (9-15%)	8% (6-10%)	8% (6-9%)

<sup>&</sup>lt;sup>3</sup> See Appendix Table 1 for definitions.

Characteristic or	Reserve Class A/B	Reserve Class C	Regular Force
Indicator <sup>3</sup>	Released 2003-2012	Released 2003-2012	Released 1998-2012
Length of service	21% <2 years	F* <2 years	21% <2 years
J	66% 2-9 years	41% 2-9 years	20% 2-9 years
	10% 10-19 years	36% 10-19 years	12% 10-19 years
	F* > 20 years	22% > 20 years	48% > 20 years
Release type (CI)	76% (72-80%) voluntary	65% (61-68%) voluntary	52% (50-55%) voluntary
···· <b>/</b> ··(·/	16% (12-20%) involuntary <sup>4</sup>	10% (8-12%) involuntary	7% (5-8%) involuntary
	F* for other types, including	13% (11-15%) medical release	21% (19-23%) medical release
	medical release	8% (6-10%) service complete	16% (14-17%) service complete
		5% (4-7%) retirement age	5% (4-5%) retirement age
Rank at release	F* for senior officers and	17% officers	15% officers
	senior NCMs	20% senior NCMs	4% cadets
	7% junior officers	58% junior NCMs	25% senior NCMs
	33% junior non-commissioned	F* for number of cadets,	30% junior NCMs
	members (NCM)	privates and recruits	7% privates
	14% privates	'	18% recruits
	39% recruits.		
Enrolment era	16% 1990s and 77% 2000s,	Peak in the 1990s but spread	Broadly spread across all eras
	suggesting a high turnover rate	across all eras from the 1960s	from the 1950s
Release year	Little variation, ranged 6-12%	Slightly highest in 2011 (16%)	Ranged 4-10% by year across
•	in the release period (2003-		the release period 1998-2012,
	2012)		peak in 2008
Service	83% Army	80% Army	54% Army
Environment	13% Navy	13% Navy	16% Navy
	F* for Air Force	7% Air Force	30% Air Force
Last military	59% combat arms	44% combat arms	26% combat arms
occupation	15% administration, logistics or	27% administration, logistics or	24% administration, logistics or
•	security	security	security
	10% maritime	11% communications, 8%	8% communications
	F* for the other 5 groups	maritime	14% aviation
		F* for the other 4 groups	12% maritime
			11% engineering/technical
			5% medical
Adjustment to	74% (70-78%) easy	61% (58-64%) easy	56% (54-59%) easy
civilian life (CI)	11% (8-14%) difficult	24% (21-27%) difficult	27% (25-29%) difficult
Self-rated health	69% (65-73%) very	61% (58-64%) very	53% (50-55%) very
(CI)	good/excellent	good/excellent	good/excellent
	7% (5-10%) fair/poor	13% (11-15%) fair/poor	18% (16-20%) fair/poor
Self-rated mental	74% (70-77%) very	67% (64-70%) very	62% (59-64%) very
health (CI)	good/excellent	good/excellent	good/excellent
	6% (5-9%) fair/poor	11% (9-13%) fair/poor	16% (14-18%) fair/poor
1+ chronic	55% (50-60%)	68% (65-71%)	74% (72-76%)
physical health			
condition <sup>5</sup> (CI)			
1+ chronic mental	9% (7-12%)	17% (15-20%)	24% (22-26%)
health condition <sup>6</sup>			
(CI)			
Both physical and	F*	16% (14-18%)	22% (20-24%)
mental health		· · · · ·	
condition			
condition			l

<sup>&</sup>lt;sup>4</sup> "Involuntary Release" includes misconduct dismissal, misconduct service, illegally absent, fraudulent enrollment, unsatisfactory conduct, unsatisfactory performance, not advantageously employed, death and transfer out.

<sup>&</sup>lt;sup>5</sup> Physical health condition = any one of musculoskeletal condition (arthritis or back problem), cardiovascular condition (heart disease, effects of stroke or high blood pressure), gastrointestinal condition (ulcer or bowel disorder), respiratory condition (asthma or COPD chronic obstructive pulmonary disease), central nervous system condition (migraine, dementia or effects of traumatic brain injury), urinary incontinence, diabetes, cancer, obesity, hearing problem or chronic pain/discomfort. <sup>6</sup> Mood disorder (including depression), anxiety disorder, posttraumatic stress disorder (PTSD).

Characteristic or	Reserve Class A/B	Reserve Class C	Regular Force
Indicator <sup>3</sup>	Released 2003-2012	Released 2003-2012	Released 1998-2012
Chronic physical health conditions	17% (14-21%) Back problems 6% (4-8%) Arthritis	32% (29-35%) Back problems 16% (14-19%) Arthritis	35% (32-37%) Back problems 22% (21-24%) Arthritis
(CI)	7% (5-10%) Cardiovascular	14% (12-17%) Cardiovascular	19% (18-21%) Cardiovascular
	7% (5-10%) Gastrointestinal	9% (7-11%) Gastrointestinal	9% (7-10%) Gastrointestinal
	10% (7-13%) Migraine	7% (6-9%) Respiratory	7% (6-9%) Respiratory
	18% (15-22%) Obesity	11% (9-13%) Migraine	14% (13-16%) Migraine
	13% (10-16%) Chronic pain	3% (2-4%) Traumatic brain	3% (2-4%) Traumatic brain
	F* Others	injury (TBI) effects	injury (TBI) effects
		5% Diabetes	6% Diabetes
		24% (21-26%) Obesity	26% (24-28%) Obesity
		28% (25-31%) Chronic pain	2% (1-2%) Cancer
			3% Urinary incontinence
			34% (32-36%) Chronic pain
Chronic mental	F*	12% (10-14%) Mood disorder	17% (15-19%) Mood disorder
health conditions		8% (6-10%) Anxiety disorder	11% (10-13%) Anxiety disorder
		8% (6-9%) Posttraumatic	13% (12-15%) Posttraumatic
	70( (5.00()	stress disorder (PTSD)	stress disorder (PTSD)
Likely mental	7% (5-9%) mild	8% (6-10%) mild	9% (7-10%) mild
disorders	F* moderate and severe	F* moderate	5% (4-6%) moderate
(K10) (CI)	F*	6% (5-8%) severe	8% (6-9%) severe
Past-year suicidal ideation		5% (4-7%)	7% (6-8%)
SF-12 Health-	Physical 54.1 (53.5-54.8)	Physical 50.8 (50.1-51.4)	Physical 47.9 (47.4-48.5)
related quality of life (CI)	Mental 52.6 (51.8-53.3)	Mental 51.1 (50.4-51.8)	Mental 51.3 (50.8-51.8)
Reduction of	23% (19-27%)	40% (37-43%)	49% (47-52%)
activity in a major			
life domain (CI)			
Satisfied with life	94% (91-96%)	89% (87-91%)	86% (84-87%)
(CI) Satisfaction with	90% actisfied as year actisfied	750/ actisfied any any actisfied	750/ actisfied as year actisfied
main activity	80% satisfied or very satisfied	75% satisfied or very satisfied	75% satisfied or very satisfied
Stress on most	33% not at all/not very	29% not at all/not very	36% not at all/not very
days	17% quite a bit/extremely	26% quite a bit/extremely	23% quite a bit/extremely
Work stress past	29% not at all/not very	26% not at all/not very	33% not at all/not very
year	18% quite a bit/extremely	28% quite a bit/extremely	22% quite a bit/extremely
Daily smoking	10%	13%	17%
Heavy drinking	32%	28%	25%
Health insurance	83% prescription drugs	88% prescription drugs	92% prescription drugs
	75% dental insurance	78% dental insurance	87% dental insurance
Regular medical	68% eye glasses 76% (71-79%)	73% eye glasses 78% (76-81%)	84% eye glasses 81% (79-83%)
doctor (CI)	10/0 (11-13/0)		01/0 (79-03/0)
Home care paid by	F*	4% (3-5%)	7% (6-9%)
government	'	1,0 (0 0,0)	, , , ( , 0 , 0 , 0 , 0 , 0 , 0 , 0 , 0
Home care not	F*	9% (7-11%)	8% (7-9%)
paid by			
government			
Unmet need for	12% (9-15%)	16% (14-18%)	16% (14-18%)
health care past			
year (CI)			
			•

CI – 95% confidence interval. \*F - Sample size too small for reliable estimate. Proportions and prevalences not adjusted for differences in age, sex and other factors.

#### **Comparison to the General Canadian Population**

Each of the groups were compared to the Canadian general population by adjusting the prevalences for the general population to fit each of the age-gender structures of the Veteran groups and using 95% confidence interval comparisons to assess statistical significance.

All three Veteran groups had similar rates of unemployment and lower rates of low income compared to the Canadian general population.

<u>Class A/B Reserve Force Veterans</u> were similar to Canadians with the same age-gender structure in the general population. They had higher prevalences than the general population for being married or common law and having high school and post-secondary education, and lower prevalences of having quite a bit/extreme life stress and daily smoking. They had similar prevalences to the general population for most health and well-being indicators, but had slightly higher prevalences of back problems and gastrointestinal conditions.

<u>Class C Reserve Force Veterans</u> were more like Regular Force Veterans than Canadians in the general population. They had lower prevalences of excellent/very good self-rated mental health and higher prevalences of arthritis, back problems, gastrointestinal problems, obesity, hearing problems, pain or discomfort, mood disorders, anxiety disorders, and activity limitations (both types). They were less often satisfied with life than Canadians in the general population.

<u>Regular Force Veterans</u> were least like the general Canadian population after adjusting the general population prevalences to match the age-gender structure of the Regular Force Veterans. They had lower prevalences of excellent/very good self-rated health and self-rated mental health and higher prevalences of arthritis, back problems, gastrointestinal problems, cardiovascular disorders, migraine, obesity, hearing problems, pain or discomfort, mood disorders, anxiety disorders, and activity limitations. They less often had a strong sense of community belonging and were less often satisfied with life than Canadians in the general population, but less often had quite a bit or extreme life stress.

#### Regular Force Veterans Released in 1998-2007: 2010 and 2013 Surveys

Both LASS surveys in 2013 and 2010 gave similar health and well-being pictures for Regular Force Veterans who released in 1998-2007. The mean age was 44 in 2010 and 47 in 2013, consistent with the 3-year span between surveys. The proportions of women (12%) and VAC clients (34%) were the same in both studies. Prevalences were not significantly different for most chronic health conditions (prevalences within 1-2% between the two surveys), anxiety disorders (10% in 2013 vs. 11% in 2010), PTSD (11% vs. 13%) and past-year suicidal ideation (6% in both). Prevalences of most other health and well-being indicators appeared to be approximately similar. In both studies, age and sex-adjusted statistical comparisons to the Canadian general population showed that Regular Force Veterans had poorer well-being in several areas.

#### Regular Force Veterans Released in 2008-2012 versus 1998-2007

Regular Force Veterans who released in 2008-2012 had similar notable prevalences of health conditions and disability compared to Regular Force Veterans who released in 1998-2007. The mean age of those released in 2008-12 was 39 years, younger than those who released in 1998-2007 (47 in LASS 2013). They had similar proportions of women (13% in LASS 2013). They were slightly more often single/never married (27% vs. 10%) in keeping with their younger

age. They had a similar prevalence of difficult adjustment to civilian life (29% vs. 26%). Fewer had musculoskeletal conditions (39% vs. 46%), attributable in part to their younger average age. Considering their younger average age they had notable prevalences of poor self-rated health, poor self-rated mental health, physical and mental health conditions and disability assessed as both reduction of activities in major life domains and as needing help with basic and instrumental activities of daily living.

### Veterans Receiving Services from VAC (VAC Clients)

Just over a third of Regular Force Veterans were receiving services from VAC (35%) while a smaller proportion of Reserve Class C Veterans were VAC clients (17%). Very few Reserve Class A/B Veterans were VAC clients (3%<sup>7</sup>), consistent with their younger average age and lower prevalence rates of chronic health conditions. Of Class C and Regular Force Veterans, almost all who were VAC clients had one or more chronic physical health condition (95% and 92%) and half had a mental health condition (50% and 47%) almost always complicated by a comorbid chronic physical condition (49% and 44% had co-occurring mental and physical health conditions). Both Regular Force and Reserve Class C Veterans who were VAC clients had high prevalences of chronic health conditions, as described below. Less than 10% of non-clients had comorbidity of physical and mental health conditions, demonstrating that while Veterans with more complex health conditions are largely reached by VAC programs, some are not.

In general, Reserve Class C and Regular Force VAC clients were similar. Compared to nonclients, VAC clients:

- Were older on average: 48 vs. 39 years for Reserve Class C and 48 vs. 41 years for Regular Force Veterans.
- More often had difficult adjustment to civilian life: 56% vs. 18% for Reserve Class C and 47% vs. 17% for Regular Force.
- More often were unemployed: 15% vs. 6% for Reserve Class C and 11% vs. 7% for Regular Force Veterans.
- Were not more likely to have low income: 5% vs. 9% for Regular Force Veterans.
- Were more likely to have 20 or more years of service:
- 39% vs. 18% for Reserve Class C and 64% vs. 39% for Regular Force Veterans.
- Much more often had service career-limiting employment limitations (medical release): 52% vs. 4% Reserve Class C and 49% vs 5% Regular Force.
- Much more often had chronic physical health conditions:
  - 95% vs. 63% Reserve Class C and 92% vs 63% Regular Force
- Much more often had mental health conditions:
  - 50% vs. 10% Reserve Class C and 47% vs 11% Regular Force.
- Much more often had co-occurring (comorbid) physical and mental health conditions: 49% vs. 9% for Reserve Class C and 44% vs. 9% for Regular Force.
- Were experiencing lower physical and mental health-related quality of life using the SF-12 Short Form Health Survey:
  - Physical component score 39 vs. 53 for Reserve Class C and 39 vs. 53 for Regular Force Veterans.

<sup>&</sup>lt;sup>7</sup> Based on data linkage of the whole sampling frame, not the survey sample: too few Class A/B respondents in the survey sample (< 30) were VAC clients to calculate a reliable estimate.

- Mental component score 45 vs. 52 for Reserve Class C and 47 vs. 54 for Regular Force Veterans.
- Much more often had disability measured as activity limitations:
  - Reduction in activity in a major life domain: 93% vs. 29% for Reserve Class C and 88% vs. 28% for Regular Force Veterans.
  - Needing assistance with at least one basic or instrumental activity of daily living:
     47% vs. 6% for Reserve Class C and 46% vs. 6% for Regular Force Veterans.
- More often had markers of stress, difficulty coping and satisfaction with life:
  - Most days extremely/quite a bit stressful: 42% vs. 23% for Reserve Class C and 30% vs. 19% for Regular Force Veterans.
  - Work stress past year quite a bit/extreme: 39% vs. 27% for Reserve Class C and 28% vs. 20% for Regular Force Veterans.
- More often had a regular medical doctor: 90% vs. 76% for Reserve Class C and 87% vs. 77% for Regular Force Veterans.

#### Interpretation Guidance

- Use caution comparing the Veteran groups. Statistical analysis that accounts for confounding (differences in factors such as age, sex etc.) is required to confirm differences and similarities, and to identify reasons for differences.
- LASS 2013 was a point-in-time, cross-sectional survey, therefore causal conclusions cannot be drawn from this study alone, including effects of military service or DND/CAF/VAC programs.
- Be cautious about drawing conclusions about the presence of "risk" and "protective" factors. Inferential statistical methodology is required to control for the joint effects of characteristics and indicators on each other (confounding), and because the survey was cross-sectional then conclusions cannot be made about causal relationships.
- Findings cannot be generalized to all Veterans because the survey included only those who released in 1998-2012 (Regular Force) and 2003-2012 (Reserve Force).

#### **Next Steps**

These descriptive findings provide valuable insights into the socioeconomics, military characteristics, health, disability and well-being of CAF Primary Reserve and Regular Force Veterans. Further analyses are being planned that will deepen understanding of the health and well-being of these Veterans to inform policies, programs and services supporting CAF personnel in transition to civilian life.

# Santé et bien-être des vétérans des Forces canadiennes : Conclusions de l'Enquête sur la vie après le service militaire de 2013

# Sommaire

#### Introduction

Le premier sondage exhaustif sur la santé et le bien-être des vétérans des Forces armées canadiennes (FAC)<sup>8</sup> a été l'Enquête sur la transition à la vie civile de 2010 (ETVC 2010). L'ETVC 2010 était l'un des deux volets du programme de recherche « Étude sur la vie après le service militaire » de 2010 (EVASM 2010), l'autre étant l'étude sur le revenu. L'EVASM 2010 portait sur la santé et le bien-être des anciens membres de la Force régulière qui ont été libérés entre 1998 et 2007. Les vétérans de la Force de réserve n'ont pas été inclus dans les études menées en 2010 en raison des limites des données disponibles à ce moment-là. Depuis la première querre du Golfe (1990-1991), y compris les missions en Bosnie et en Afghanistan, les FAC ont de plus en plus souvent fait appel au personnel de la Première réserve pour compléter le personnel de la Force régulière. Il est donc important d'étudier également leur santé et leur bien-être.

Le programme de 2013 a prolongé les études menées en 2010 en incluant pour la première fois les vétérans de la Force de la première réserve ainsi que les vétérans de la Force régulière qui ont été libérés entre 1998 et 2012. Comme en 2010, deux études ont été réalisées : une étude sur le revenu et une Enquête sur la vie après le service militaire (EVAS 2013). Le présent rapport fait état des conclusions de cette enquête.

#### Méthodes

L'EVAS 2013 était une enquête fondée sur des entrevues téléphoniques assistées par ordinateur qui a été menée par Statistique Canada pour le compte d'Anciens Combattants Canada (ACC) et du ministère de la Défense nationale (MDN) en février et mars 2013. L'enquête a été menée auprès d'anciens membres de la Première réserve en service de classe A/B ou en service de classe C<sup>9</sup> qui ont été libérés entre le 1<sup>er</sup> janvier 2003 et le 31 août 2012 et de membres de la Force régulière qui ont été libérés entre le 1<sup>er</sup> janvier 1998 et le 31 août 2012 :

- 1. Force de réserve, service de classe A/B : Vétéran qui était membre de la Première réserve, qui avait été en service de classe B (service temporaire à temps plein) en plus d'être en service de classe A, et qui n'avait jamais servi dans la Force régulière.
- 2. Force de réserve, service de classe C : Vétéran qui était membre de la Première réserve, qui avait été en service de classe C en plus d'être en service de classe A et en service de classe B, et qui n'avait jamais servi dans la Force régulière. Le service de classe C est uniquement autorisé pour ceux qui sont déployés dans le cadre d'opérations au pays ou à l'étranger.
- 3. Force régulière : Vétéran qui était membre de la Force régulière. Certains vétérans qui faisaient partie de cette catégorie avaient également servi dans la Force de réserve.

<sup>&</sup>lt;sup>8</sup> Aux fins de cette étude, « vétéran » s'entend d'un ancien membre des FAC, quelle que soit la durée de son service. <sup>9</sup> Les membres retraités des FAC qui comptaient uniquement du service de classe A n'ont pas été

sondés.

L'échantillon se composait de vétérans de la Première réserve en service de classe A/B (514 inclus dans l'échantillon; taux de réponse de 60 %; taux de partage de 93 %), de vétérans de la Première réserve en service de classe C (1 013 inclus dans l'échantillon; taux de réponse de 70 %; 91 % ayant accepté que leurs données soient partagées avec ACC et le MDN), et de vétérans de la Force régulière (2 611 inclus dans l'échantillon; taux de réponse de 72 %; taux de partage de 89 %). Les échantillons étaient considérés comme étant représentatifs des vétérans des FAC de la Première réserve en service de classe A/B et en service de classe C, et des vétérans de la Force régulière vivant au sein de la population canadienne en général au cours de ces périodes.

#### Importance de l'âge et du sexe

Les vétérans en service de réserve de classe A/B qui ont été libérés entre 2003 et 2012 étaient plus jeunes (moyenne d'âge de 31 ans, plage de 18 à 67 ans) que les vétérans en service de réserve de classe C libérés au cours de la même période (moyenne d'âge de 40 ans, plage de 20 à 67 ans). Pour leur part, ces derniers étaient plus jeunes que les vétérans de la Force régulière qui ont été libérés entre 1998 et 2012 (moyenne d'âge de 44 ans, plage de 18 à 78 ans). Il y avait aussi des différences dans les proportions de femmes : 19 % pour le service de réserve de classe A/B, 23 % pour le service de réserve de classe C, et 13 % pour les vétérans de la Force régulière. Il est important de tenir compte de ces différences d'âge et du sexe lorsqu'on compare les prévalences entre ces trois groupes de vétérans. Par exemple, les problèmes de santé physique augmentent avec l'âge et les problèmes de santé mentale augmentent chez les adultes d'âge moyen.

#### Bien-être des vétérans de la Première réserve et de la Force régulière

Le tableau suivant donne une vue d'ensemble de l'état de santé, de l'incapacité, du niveau de stress/de satisfaction et des déterminants de la santé pour les trois groupes de vétérans. Une analyse statistique qui tiendrait compte des facteurs de confusion (différence d'âge, sexe et autres facteurs) est nécessaire pour confirmer les différences et les similitudes et pour déterminer les causes de ces différences entre les groupes.

- Les vétérans de la Première réserve en service de classe A/B étaient en moyenne plus jeunes et, en général, ils avaient un meilleur état de santé et de bien-être. Très peu d'entre eux participent aux programmes d'ACC.
- La situation des vétérans de la Première réserve en service de classe C semble ressembler davantage à celle des vétérans de la Force régulière qu'à celle des vétérans en service de classe A/B. Les choses allaient bien pour la plupart d'entre eux, mais ils étaient en moyenne plus âgés que les vétérans en service de classe A/B et étaient plus souvent aux prises avec des problèmes.
- Les vétérans de la Force régulière ayant participé à l'EVAS 2013 ont obtenu des résultats très semblables à ceux du tableau dressé dans le cadre de l'ETVC 2010 : la plupart des vétérans de la Force régulière qui ont été libérés entre 1998 et 2012 se tiraient bien d'affaire, mais des trois groupes, ce sont eux qui avaient les taux de prévalence de problèmes liés à la santé et au bien-être les plus élevés.

	Vétérans en service de	Vétérans en service de	Vétérans de la Force
Caractéristique ou indicateur <sup>10</sup>	réserve de classe A/B libérés entre 2003 et 2012	réserve de classe C libérés entre 2003 et 2012	régulière libérés entre 1998 et 2012
Participation aux programmes d'ACC	F*	17 %	35 %
Âge moyen	31 ans, plage de 18 à 67 ans	40 ans, plage de 20 à 67 ans	44 ans, plage de 18 à 78 ans
Femmes (IC)	19 % (15-22 %)	23 % (21-26 %)	13 % (12-15 %)
Situation de famille	56 % étaient mariés ou en union libre 39 % étaient célibataires ou n'avaient jamais été mariés F* pour les veufs/veuves, séparés ou divorcés	72 % étaient mariés ou en union libre 22 % étaient célibataires ou n'avaient jamais été mariés 6 % étaient veufs/veuves, séparés ou divorcés	74 % étaient mariés ou en union libre 16 % étaient célibataires ou n'avaient jamais été mariés 10 % étaient veufs/veuves, séparés ou divorcés
Niveau d'instruction	<ul> <li>25 % avaient fait des études secondaires</li> <li>39 % avaient fait des études postsecondaires (autres que menant à un diplôme universitaire)</li> <li>35 % avaient un diplôme universitaire</li> </ul>	<ul> <li>26 % avaient fait des études secondaires</li> <li>41 % avaient fait des études postsecondaires (autres que menant à un diplôme universitaire)</li> <li>30 % avaient un diplôme universitaire</li> </ul>	<ul> <li>43 % avaient fait des études secondaires</li> <li>36 % avaient fait des études postsecondaires (autres que menant à un diplôme universitaire)</li> <li>17 % avaient un diplôme universitaire</li> </ul>
Taux de chômage (IC)	6 % (4-9 %)	5 % (4-7 %)	7 % (6-8 %)
Activité sur le marché du travail au moment de l'enquête	84 % occupaient un emploi 10 % ne faisaient pas partie de la population active	80 % occupaient un emploi 13 % ne faisaient pas partie de la population active	72 % occupaient un emploi 19 % ne faisaient pas partie de la population active 4 % étaient incapables de travailler
Activité principale au cours des 12 derniers mois	<ul> <li>77 % avaient un emploi ou dirigeaient une entreprise</li> <li>14 % fréquentaient un établissement d'enseignement ou suivaient une formation</li> </ul>	<ul> <li>77 % avaient un emploi ou dirigeaient une entreprise</li> <li>6 % fréquentaient un établissement d'enseignement ou suivaient une formation</li> <li>5 % avaient une incapacité ou étaient en congé d'invalidité</li> <li>6 % étaient à la retraite</li> </ul>	69 % avaient un emploi ou dirigeaient une entreprise 5 % fréquentaient un établissement d'enseignement ou suivaient une formation 6 % avaient une incapacité ou étaient en congé d'invalidité 12 % étaient à la retraite
Faible revenu (IC)	12 % (9-15 %)	8 % (6-10 %)	8 % (6-10 %)
Durée du service	21 % <2 ans 66 % 2-9 ans 10 % 10-19 ans F* > 20 ans	F* pour <2 ans 41 % 2-9 ans 36 % 10-19 ans 2 % > 20 ans	21 % <2 ans 20 % 2-9 ans 12 % 10-19 ans 48 % > 20 ans
Type de libération (IC)	76 % (72-80 %) : pour raisons volontaires 16 % (12-20 %) : pour raisons involontaires <sup>11</sup> F* pour les autres types de libération, y compris la libération pour raisons médicales	65 % (61-68 %) : pour raisons volontaires 10 % (8-12 %) : pour raisons involontaires 13 % (11-15 %) : pour raisons médicales 8 % (6-10 %) : service achevé 5 % (4-7 %) : atteinte de l'âge de la retraite	52 % (50-55 %) : pour raisons volontaires 7 % (5-8 %) : pour raisons involontaires 21 % (19-23 %) : pour raisons médicales 16 % (14-17 %) : service achevé 5 % (4-5 %) : atteinte de l'âge de la retraite

 <sup>&</sup>lt;sup>10</sup> Voir le tableau 1 de l'annexe pour des définitions.
 <sup>11</sup> Les « raisons involontaires » pour une libération comprennent le renvoi pour inconduite, une inconduite relative au service, l'absence illégale, l'enrôlement frauduleux, une conduite insatisfaisante, un rendement insatisfaisant, le fait d'avoir un emploi non avantageux, un décès et une mutation de sortie.

	Vétérans en service de	Vétérans en service de	Vétérans de la Force
Caractéristique ou indicateur <sup>10</sup>	réserve de classe A/B libérés entre 2003 et 2012	réserve de classe C libérés entre 2003 et 2012	régulière libérés entre 1998 et 2012
Grade à la libération	F* pour les officiers supérieurs et les militaires du rang (MR) supérieurs 7 % étaient des officiers subalternes 33 % étaient des MR subalternes 14 % étaient des soldats 39 % étaient des recrues	<ul> <li>17 % étaient des officiers</li> <li>20 % étaient des MR</li> <li>supérieurs</li> <li>58 % étaient des MR</li> <li>subalternes</li> <li>F* pour le nombre de cadets,</li> <li>de soldats et de recrues</li> </ul>	<ul> <li>15 % étaient des officiers</li> <li>4 % étaient des cadets</li> <li>25 % étaient des MR</li> <li>supérieurs</li> <li>30 % étaient des MR</li> <li>subalternes</li> <li>7 % étaient des soldats</li> <li>18 % étaient des recrues</li> </ul>
Époque de l'enrôlement	16 % dans les années 1990 et 77 % dans les années 2000, ce qui suggère un taux de roulement élevé	Un sommet a été atteint dans les années 1990, mais les enrôlements étaient répartis entre toutes les époques à compter des années 1960	Les enrôlements étaient globalement répartis entre toutes les époques à compter des années 1950
Année de libération	Variait très peu, soit de 6 à 12 % au cours de la période visée pour les libérations (de 2003 à 2012)	Taux légèrement plus élevé en 2011 (16 %)	Variait de 4 à 10 % par année tout au long de la période visée pour les libérations (de 1998 à 2012), un sommet ayant été atteint en 2008
Environnement de service	83 % : Armée de terre 13 % : Marine F* pour la Force aérienne	80 % : Armée de terre 13 % : Marine 7 % : Force aérienne	54 % : Armée de terre 16 % : Marine 30 % : Force aérienne
Dernier groupe professionnel militaire	59 % : armes de combat 15 % : administration, logistique ou sécurité 10 % : opérations maritimes F* pour les cinq autres groupes	44 % : armes de combat 27 % : administration, logistique ou sécurité 11 % : communications 8 % : opérations maritimes F* pour les quatre autres groupes	26 % : armes de combat 24 % : administration, logistique ou sécurité 8 % : communications 14 % : aviation 12 % : maritime 11 % : technique et génie 5 % : médecine
Adaptation à la vie civile (IC) Auto-évaluation	74 % (70-78 %) : Facile 11 % (8-14 %) : Difficile 69 % (65-73 %) : Très	61 % (58-64 %) : Facile 24 % (21-27 %) : Difficile 61 % (58-64 %) : Très	56 % (54-59 %) : Facile 27 % (25-29 %) : Difficile 53 % (50-55 %) : Très
de la santé (IC)	bonne/Excellente 7 % (5-10 %) : Passable/Mauvaise	bonne/Excellente 13 % (11-15 %) : Passable/Mauvaise	bonne/Excellente 18 % (16-20 %) : Passable/Mauvaise
Auto-évaluation de la santé mentale (IC)	74 % (70-77 %) : Très bonne/Excellente 6 % (5-9 %) : Passable/mauvaise	67 % (64-70 %) : Très bonne/Excellente 11 % (9-13 %) : Passable/Mauvaise	62 % (59-64 %) : Très bonne/Excellente 16 % (14-18 %) : Passable/Mauvaise
Un problème de santé physique chronique ou plus <sup>12</sup> (IC)	55 % (50-60 %)	68 % (65-71 %)	74 % (72-76 %)

<sup>&</sup>lt;sup>12</sup> Problème de santé physique chronique = l'une ou l'autre des affections suivantes : trouble musculosquelettique chronique (arthrite ou maux de dos), affection cardiovasculaire (maladie cardiaque, troubles dus à un accident vasculaire cérébral ou hypertension), affection gastro-intestinale (ulcère ou troubles intestinaux), affection respiratoire (asthme ou maladie pulmonaire obstructive chronique [MPOC]), affection du système nerveux central (migraine, démence cérébrale ou troubles dus à un traumatisme cérébral [TCC]), incontinence urinaire, diabète, cancer, obésité, problème auditif ou douleurs/inconfort chroniques.

Vétérans en service de réserve de classe A/B libérés entre 2003 et 2012Vétérans en service de réserve de classe C libérés entre 2003 et 2012Vétérans de la Force régulière libérés entre et 2012Problèmes de santé mentale chroniques (IC)Maux de dos : 17 % (14-21 %) Affections cardiovasculaires : 7 % (5-10 %) Affections gastro-intestinales : 7 % (5-10 %) Affections gastro-intestinales : 7 % (5-10 %) Migraines : 10 % (7-13 %) Obésité : 18 % (15-22 %) Douleurs ou inconfort chroniques : 13 % (10-16 %) F* pour les autres affectionsMaux de dos : 35 % (32- Affections gastro-intestinales : 9 % (7-11 %) Affections respiratoires : 7 % (6-9 %)Maux de dos : 35 % (32- Affections cardiovasculaires : 14 % (12-17 %) Affections gastro-intestinales : 9 % (7-11 %) Affections respiratoires : 7 % (6-9 %)Maux de dos : 35 % (32- Affections gastro-intestinales : 9 % (7-10 %) Affections respiratoires : 7 % (6-9 %)Maux de dos : 35 % (32- Affections gastro-intestinales : 9 % (7-10 %) Affections respiratoires : 7 % (6-9 %)Maux de dos : 35 % (32- Affections gastro-intestinales : 9 % (7-10 %) Affections respiratoires : 10 % (7-13 %) (6-9 %)Maux de dos : 35 % (32- Affections respiratoires : 9 % (7-10 %)F* pour les autres affectionsMigraines : 11 % (9-13 %) Toubles dus à un traumatisme cérébral : (TCC) 3 % (2-4 %) Diabète : 5 % Obésité : 24 % (21-26 %)Migraines : 14 % (13-16 Troubles dus à un traumatisme cérébral : (TCC) 3 % (2-28 %) Douleurs ou inconfort chroniques : 28 % (25-31 %)Diabète : 6 % Obésité : 24 % (22-26 %)Un problème de santé mentale chronique ou plus9 % (7-12 %)17 % (15-20 %)24 % (22-26 %) <th>-37 %) ) ires : nales : 7 % %) natisme 4 %) %</th>	-37 %) ) ires : nales : 7 % %) natisme 4 %) %
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Un problème de santé mentale chronique ou plus       9 % (7-12 %)       17 % (15-20 %)       Cancer : 2 % (1-2 %)       Incontinence urinaire : 3 Douleurs ou inconfort chroniques : 34 % (32-34 %)	%
Un problème de santé mentale chronique ou plus       9 % (7-12 %)       17 % (15-20 %)       24 % (22-26 %)	
Un problème de santé mentale chronique ou plus     9 % (7-12 %)     17 % (15-20 %)     24 % (22-26 %)	
Un problème de santé mentale chronique ou plus         9 % (7-12 %)         17 % (15-20 %)         24 % (22-26 %)	6 %)
Un problème de santé mentale chronigue ou plus         9 % (7-12 %)         17 % (15-20 %)         24 % (22-26 %)	<u>, ,, ,</u>
santé mentale chronigue ou plus	
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chroniquesTrouble de l'anxiété : 8 %Trouble de l'anxiété 11 %(6-10 %)13 %)	% (10-
Trouble de stress Trouble de stress	
post-traumatique (TSPT) : 8 % post-traumatique (TSPT)	) ·
(6-9 %) 13 % (12-15 %)	,.
Probabilité de         7 % (5-9 %) : Faible         8 % (6-10 %) : Faible         9 % (7-10 %) : Faible	
développer desF* pour Modérée et ForteF* pour Modérée5 % (4-6 %) : Modérée	
troubles de santé         6 % (5-8 %) : Forte         8 % (6-9 %) : Forte	
mentale	
(K-10) (IC)         Image: A la fois un field of the second s	
problème de santé	
physique et un	
problème de santé	
mentale	
Pensées         F*         5 % (4-7 %)         7 % (6-8 %)	
suicidaires au	
cours des 12 derniers mois	
12 derniers mols         Physique : 54,1 (53,5-54,8)         Physique : 50,8 (50,1-51,4)         Physique : 47,9 (47,4-48)	(5)
<b>vie liée à la santé</b> Mentale : $52,6$ ( $51,8-53,3$ ) Mentale : $51,1$ ( $50,4-51,8$ ) Mentale : $51,3$ ( $50,8-51,4$ )	
(IC)	- /
Réduction des         23 % (19-27 %)         40 % (37-43 %)         50 % (47-52 %)	
activités dans l'un	
des principaux	
domaines de la vie	
(IC)         89 % (87-91 %)           Satisfait ou très         94 % (91-96 %)	
satisfait à l'égard	
de la vie (IC)	
Stress la plupart33 % : Pas du tout/Pas29 % : Pas du tout/Pas36 % : Pas du tout/Pas	
des journées tellement tellement tellement	
17 % : Assez/Extrêmement 26 % : Assez/Extrêmement 23 % : Assez/Extrêmement	t

<sup>&</sup>lt;sup>13</sup> Trouble de l'humeur (y compris la dépression), trouble de l'anxiété, trouble de stress post-traumatique (TSPT).

	Vétérans en service de	Vétérans en service de	Vétérans de la Force
Caractéristique ou	réserve de classe A/B	réserve de classe C libérés	régulière libérés entre 1998
indicateur <sup>10</sup>	libérés entre 2003 et 2012	entre 2003 et 2012	et 2012
Stress au travail	29 % : Pas du tout/Pas	26 % : Pas du tout/Pas	33 % : Pas du tout/Pas
au cours des	tellement	tellement	tellement
12 derniers mois	18 % : Assez/Extrêmement	28 % : Assez/Extrêmement	22 % : Assez/Extrêmement
Satisfaction à	80 % étaient satisfaits ou très	75 % étaient satisfaits ou très	75 % étaient satisfaits ou très
l'égard de	satisfaits	satisfaits	satisfaits
l'activité			
principale au			
cours des			
12 derniers mois			
Usage quotidien	10 %	13 %	17 %
du tabac			
Consommation	32 %	28 %	25 %
abusive d'alcool			
Couverture	83 % : Frais des médicaments	88 % : Frais des médicaments	92 % : Frais des médicaments
d'assurance	sur ordonnance	sur ordonnance	sur ordonnance
	75 % : Frais dentaires	78 % : Frais dentaires	87 % : Frais dentaires
	68 % : Coût des lunettes	73 % : Coût des lunettes	84 % : Coût des lunettes
Médecin régulier	76 % (71-79 %)	78 % (76-81 %)	81 % (79-83 %)
(IC)			
Services à	F*	4 % (3-5 %)	7 % (6-9 %)
domicile dont le			
coût est assumé			
par le			
gouvernement Services à	F*		
domicile dont le	F	9 % (7-11 %)	8 % (7-9 %)
coût n'est pas			
assumé par le			
gouvernement			
Besoins en	12 % (9-15 %)	16 % (14-18 %)	16 % (14-18 %)
matière de soins			
de santé non			
comblés au cours			
des 12 derniers			
mois (IC)			
	financial OF 0/		

IC – Intervalle de confiance de 95 %.

\*F – Taille de l'échantillon insuffisante pour des estimations fiables.

Les proportions et les taux de prévalence ne sont pas ajustés en fonction des différences d'âge, du sexe et d'autres facteurs.

#### Comparaison avec la population canadienne en général

Des comparaisons avec la population canadienne en général ont été établies pour chacun des groupes en ajustant les taux de prévalence observés dans la population générale, de manière à refléter la structure des groupes de vétérans selon l'âge et le sexe et en utilisant des intervalles de confiance de 95 % dans les comparaisons pour évaluer la signification statistique.

Tous les trois groupes de vétérans avaient des taux similaires de chômage et des taux de faible revenue, comparativement à la population canadienne en générale.

La situation des <u>vétérans de la Force de réserve en service de classe A/B</u> était semblable à celle de l'ensemble de la population canadienne dont la structure âge-sexe était la même. La prévalence que représente le fait d'être marié ou de vivre en union libre ainsi que la prévalence de l'éducation secondaire ou postsecondaire étaient plus élevées que chez la population générale, alors que la prévalence que représente le fait de passer des journées assez

stressantes ou extrêmement stressantes et de faire un usage quotidien du tabac était moins élevée. Les taux de prévalence sont semblables à ceux que l'on retrouve dans la population générale pour la plupart des indicateurs de santé et de bien-être, mais la prévalence des maux de dos et des affections gastro-intestinales était légèrement plus élevée chez ce groupe de vétérans.

La situation des <u>vétérans de la Force de réserve en service de classe C</u> ressemblait davantage à celle des vétérans de la Force régulière qu'à celle de l'ensemble de la population canadienne. La prévalence de l'auto-évaluation de la santé mentale comme étant excellente ou très bonne étaient moins élevée, alors que la prévalence de l'arthrite, des maux de dos, des problèmes gastro-intestinaux, de l'obésité, des problèmes auditifs, des douleurs et de l'inconfort, des troubles de l'humeur, des troubles de l'anxiété et des limitations d'activités (les deux types) était plus élevée. Les vétérans de ce groupe étaient moins souvent satisfaits de leur vie que les Canadiens en général.

La situation des <u>vétérans de la Force régulière</u> est celle qui ressemblait le moins à celle de la population canadienne générale après avoir ajusté les taux de prévalence observés dans la population en général de manière à refléter la structure du groupe de vétérans de la Force régulière selon l'âge et le sexe. La prévalence de l'auto-évaluation de la santé et de la santé mentale comme étant excellentes ou très bonnes était moins élevée, alors que la prévalence de l'arthrite, des maux de dos, des problèmes gastro-intestinaux, des troubles de nature cardiovasculaire, des migraines, de l'obésité, des problèmes auditifs, des douleurs et de l'inconfort, des troubles de l'humeur, des troubles de l'anxiété et des limitations d'activités était plus élevée. Les vétérans de ce groupe avaient moins souvent un fort sentiment d'appartenance à la communauté et étaient moins souvent satisfaits de la vie que les Canadiens en général, mais ils étaient toutefois moins nombreux à éprouver un niveau de stress assez élevé.

# Vétérans de la Force régulière libérés entre 1998 et 2007 : l'EVAS 2013 comparativement à l'ETVC 2010

L'EVAS 2013 et l'ETCV 2010 ont dressé un tableau semblable de l'état de santé et du bien-être des vétérans de la Force régulière qui ont été libérés entre 1998 et 2007. L'âge moyen était de 44 ans, selon l'ETVC 2010, et de 47 ans, selon l'EVAS 2013, ce qui est compatible avec l'intervalle de trois ans qui s'est écoulé entre les deux enquêtes. La proportion de femmes (12 %) et la proportion de clients d'ACC (34 %) étaient les mêmes dans les deux études. Il n'y avait pas de différence notable dans les taux de prévalence de la plupart des problèmes de santé chroniques (taux de prévalence variant de 1 à 2 % entre les deux enquêtes), des troubles de l'anxiété (10 % en 2013 contre 11 % en 2010), des TSPT (11 % contre 13 %) et des prévalence pour la plupart des autres indicateurs liés à la santé et au bien-être semblent être à peu près similaires. Dans les deux études, les taux ajustés pour tenir compte de l'âge et du sexe aux fins de comparaisons statistiques avec l'ensemble de la population canadienne indiquent que le niveau de bien-être des vétérans de la Force régulière est inférieur dans bien des domaines.

# Les vétérans de la Force régulière qui ont été libérés entre 2008 et 2012 par rapport à ceux qui ont été libérés entre 1998 et 2007

Sur le plan des problèmes de santé et de l'incapacité, les taux de prévalence appréciables observés chez les vétérans de la Force régulière qui ont été libérés entre 2008 et 2012 étaient

semblables à ceux qui ont été observés chez les vétérans de la Force régulière libérés entre 1998 et 2007. Leur moyenne d'âge, qui était de 39 ans, était moins élevée que celle de ces derniers (47 ans selon l'EVAS 2013) et la proportion de femmes au sein de ce groupe était également semblable (13 % selon l'EVAS 2013). Le nombre de vétérans de la Force régulière libérés entre 2008 et 2012 qui se disaient célibataires ou non mariés était à peine plus élevé (27 % contre 10 %), ce qui est compatible avec leur moyenne d'âge moins élevée. Les taux de prévalence de la difficulté à s'adapter à la vie civile étaient semblables pour les deux groupes (29 % contre 26 %). Un nombre moins élevé souffraient d'affections musculosquelettiques (39 % contre 46 %), ce qui est attribuable en partie à la moyenne d'âge moins élevée. Compte tenu de leur moyenne d'âge moins élevée, ils présentent une prévalence notable sur le plan de la faible auto-évaluation de l'état de santé et de l'état de santé mentale, les problèmes de santé mentale et physique et l'incapacité étant évalués comme réduisant les activités de la vie quotidienne de base et essentielles dans les principaux domaines de la vie.

#### Vétérans recevant des services d'ACC (clients d'ACC)

Un peu plus du tiers des vétérans de la Force régulière (35 %) recevaient des services d'ACC alors que 17 % des vétérans de la Force de réserve de classe C étaient des clients d'ACC. Seuls 3 %<sup>14</sup> des vétérans de la Force de réserve de classe A/B étaient des clients d'ACC, consistent par le fait que ces vétérans sont en moyenne plus jeunes et sont moins nombreux à présenter des problèmes de santé chroniques. De les vétérans de la Force de réserve de classe C et de la Force régulière, presque tous qui étaient clients d'ACC avaient un ou plusieurs problèmes de santé physique chronique (95 % et 92%). La moitié des clients d'ACC étaient atteints de problèmes de santé mentale (50 % et 47 %), compliqués dans bien des cas par des troubles physique co-survenant). Les vétérans de la Force régulière et de la Force de réserve de classe C qui étaient des clients d'ACC sont nombreux à présenter des affections chroniques, tel que décrit ci-bas. Moins de 10 % des non-clients avait la comorbidité de santé physique et mentale, ce qui permet de constater que pendant les programmes d'ACC rejoignent principalement les vétérans ayant des besoins plus complexes en matière de santé, certains ne sont pas.

En général, la situation des vétérans en service de réserve de classe C et des vétérans de la Force régulière qui étaient des clients d'ACC était similaire. Par rapport aux non-clients, les clients d'ACC :

- étaient plus âgés en moyenne :
  - 48 ans contre 39 ans pour les vétérans en service de classe C et 48 ans contre 41 ans pour les vétérans de la Force régulière;
- étaient plus nombreux à mentionner une adaptation difficile à la vie civile : 56 % contre 18 % pour les vétérans en service de classe C et 47 % contre 17 % pour les vétérans de la Force régulière;
- étaient plus nombreux à ne pas occuper un emploi : 15 % contre 6 % pour les vétérans en service de classe C et 11 % contre 7 % pour les vétérans de la Force régulière;
- n'étaient pas plus susceptibles d'avoir un faible revenu :

<sup>&</sup>lt;sup>14</sup> Basé sur le couplage des données de la base de sondage ensemble, pas l'échantillon de l'enquête: trop peu de répondants classe A / B de l'échantillon de l'enquête (<30) étaient des clients d'ACC pour calculer une estimation fiable.

5 % contre 9 % pour les vétérans de la Force régulière;

- étaient plus susceptibles de compter 20 ans de service ou plus :
  - 39 % contre 18 % pour les vétérans en service de classe C et 64 % contre 39 % pour les vétérans de la Force régulière;
- étaient beaucoup plus nombreux à mentionner des contraintes à l'emploi limitant les possibilités de carrière (libération pour raisons médicales) :
  - 52 % contre 4 % pour les vétérans en service de réserve de classe C et 49 % contre 5 % pour les vétérans de la Force régulière;
- étaient beaucoup plus nombreux à signaler des problèmes de santé physique chroniques :

(95 % contre 63 % pour les vétérans en service de réserve de classe C et 92 % contre 63 % pour les vétérans de la Force régulière);

- étaient beaucoup plus nombreux à signaler des problèmes de santé mentale : (50 % contre 10 % pour les vétérans en service de réserve de classe C et 47 % contre 11 % pour les vétérans de la Force régulière);
- étaient beaucoup plus nombreux à signaler des problèmes concomitants de santé physique et de santé mentale (comorbidité) :
  - 49 % contre 9 % pour les vétérans en service de classe C et 44 % contre 9 % pour les vétérans de la Force régulière;
- avaient une qualité de vie liée à la santé mentale et physique inférieure selon le questionnaire abrégé sur la santé SF-12 :
  - pour la composante physique, un score de 39 contre 53 pour les vétérans en service de classe C et un score de 39 contre 53 pour les vétérans de la Force régulière;
  - pour la composante mentale, un score de 45 contre 52 pour les vétérans en service de classe C et un score de 47 contre 54 pour les vétérans de la Force régulière;
- étaient beaucoup plus nombreux à signaler une incapacité mesurée sous l'angle des limitations d'activités :
  - réduction des activités dans l'un des principaux domaines de la vie : 93 % contre 29 % pour les vétérans en service de classe C et 88 % contre 28 % pour les vétérans de la Force régulière;
  - besoin d'aide avec au moins une des activités de la vie quotidienne et activités instrumentales de la vie quotidienne, soit 47 % contre 6 % pour les vétérans en service de classe C et 46 % contre 6 % pour les vétérans de la Force régulière;
- étaient plus nombreux à être soumis à des mesures des marqueurs de stress, de la difficulté à s'adapter et de la satisfaction à l'égard de la vie :
  - la plupart de leurs journées étaient extrêmement/assez stressantes, soit 42 % contre 23 % pour les vétérans en service de classe C et 30 % contre 19 % pour les vétérans de la Force régulière;
  - leurs journées au travail au cours des 12 derniers mois étaient assez/extrêmement stressantes, soit 39 % contre 27 % pour les vétérans en service de classe C et 28 % contre 20 % pour les vétérans de la Force régulière;
- étaient plus nombreux à avoir un médecin régulier : 90 % contre 76 % pour les vétérans en service de classe C et 87 % contre 77 % pour les vétérans de la Force régulière.

#### Interprétation

- Faire preuve de prudence dans la comparaison des groupes de vétérans. Une analyse statistique qui tiendrait compte des facteurs de confusion (différence d'âge, sexe et autres facteurs) est nécessaire pour confirmer les différences et les similitudes et pour déterminer les causes de ces différences entre les groupes.
- L'EVAS 2013 était une enquête ponctuelle, transversale. Par conséquent, aucune conclusion causale ne peut être tirée de cette seule étude, notamment en ce qui concerne les effets du service militaire ou des programmes du MDN, des CAF et d'ACC.
- Il faut se garder de tirer des conclusions relativement à la présence de facteurs de « risque » et de « protection ». L'utilisation d'une méthode d'induction statistique s'avère nécessaire pour effectuer un contrôle des effets combinés et réciproques des caractéristiques et des indicateurs (confusion) et, comme il s'agissait d'une enquête transversale, aucune conclusion ne peut être tirée concernant les relations de cause à effet.
- Les conclusions ne peuvent être généralisées de façon à s'appliquer à tous les vétérans, puisque l'enquête visait uniquement ceux qui ont été libérés entre 1998 et 2012 (Force régulière) et ceux qui ont été libérés entre 2003 et 2012 (Force de réserve).

#### **Prochaines étapes**

Ces conclusions descriptives fournissent des renseignements précieux sur les caractéristiques socioéconomiques et militaires, ainsi que sur la santé, l'incapacité et le bien-être des vétérans de la Première réserve et de la Force régulière des FAC. D'autres analyses sont prévues pour approfondir la compréhension de la santé et du bien-être de ces vétérans afin d'orienter les politiques, les programmes et les services qui visent à aider le personnel des FAC à faire la transition à la vie civile.

# Health and Well-Being of Canadian Forces Veterans: Findings from the 2013 Life After Service Survey

# Introduction

In the 1990s, research by Veterans Affairs Canada (VAC), the Department of National Defence (DND), the Canadian Armed Forces (CAF) and others demonstrated clear need for enhanced transition support for personnel leaving military service. This research led to a comprehensive variety of new programs, benefits and services including those introduced by the 2006 *Canadian Forces Members and Veterans Compensation and Reestablishment Act*. Much of the quantitative population-based research at that time had been done only in the subpopulation of Veterans receiving benefits from VAC (VanTil et al. 2011, Pedlar and Thompson 2011). Less than 20% of the estimated 594,300 CAF Veterans living in March 2013 who served in other than the Second World War and the Korean War were VAC clients. Much less was known about the majority of Veterans living in the Canadian general population including those who were not VAC clients.

The 2003 *Canadian Community Health Survey* (CCHS 2003) included Veteran identifier questions, for the first time providing an initial picture of the health and well-being of all Canadian Veterans (MacLean et al. 2013). Although CCHS 2003 included Reserve Force as well as Regular Force Veterans, Veteran status was indentified through self report and there was no information on military service characteristics and only limited information on health and other well-being indicators.

The 2010 *Survey on Transition to Civilian Life* (STCL 2010; MacLean et al. 2010, Thompson et al. 2011) was the first comprehensive study of the health and well-being of Veterans in Canada. STLC 2010 was one of the first two studies in the *Life After Service Studies* (LASS) program of research, the other being the 2010 LASS *Income Study*. LASS 2010 linked Department of National Defence (DND), VAC and Canadian tax file datasets to objectively identify former CAF Regular Force personnel (see References). While these two studies provided unprecedented detail about CAF Regular Force Veterans, Reserve Force Veterans could not be included at the time owing to limitations in data available for linkage. In the 2001-2014 deployments to Afghanistan and other commitments, the CAF drew on the Reserve Force to fill multiple roles both alongside Regular Force personnel. It is therefore important to assess the health and well-being of both Reserve and Regular Force Veterans.

The 2013 *Life After Service Survey* (LASS 2013) was one of two major studies in 2013, the other being the 2013 *Income Study*. In the LASS 2013 survey, Statistics Canada used computer-assisted telephone interviews conducted in February-March 2013. The LASS 2013 survey extended STCL 2010 by including Primary Reserve Force personnel who released in 2003-2012 and Regular Force personnel who released to 1998-2012.

The 2013 *Life After Service Survey* in (LASS 2013) extended the 2010 *Survey on Transition to Civilian Life* (STCL 2010) by including Primary Reserve Force personnel who were released in 2003-12 and Regular Force personnel who were released in 1998-2012.

This report is the first of a series of LASS 2013 survey analyses that will be undertaken over the next few years to support Veterans services. This initial report will inform service providers, program and policy development and further research. The specific objectives of this initial report are to:

1. Describe the socioeconomics, health, disability and determinants of health and wellbeing for Veterans of the Reserve Force and the Regular Force.

- 2. Compare Reserve Force Veterans and Regular Force Veterans to the Canadian population.
- 3. Provide a comprehensive basis to inform further analyses of the LASS 2013 survey data.

# **Methods**

### Ethics and Confidentiality

Ethical approval was provided by Statistics Canada. Interviewers asked respondents for permission to share their data with VAC and DND. Researchers only had access to anonymized data.

#### **Conceptual Framework**

The survey design and approach to this report were based on the Veteran's Wellbeing Conceptual Framework (Thompson et al. 2013).

#### **Definitions of Veteran and VAC** Client

For the purposes of this study, "Veteran" means a former CAF member with any length of service. "VAC client" means a Veteran who was in receipt of benefits from VAC as of March 2013. This would include a Veteran who in the past had received a disability benefit (disability award or pension) because they would have ongoing eligibility for health care benefits. It would not include a Veteran

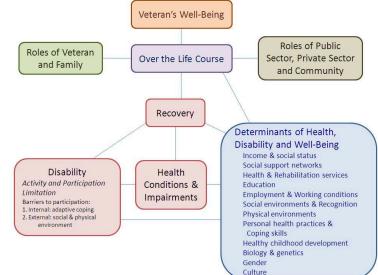


Figure 1. Veteran's well-being conceptual framework.

who had participated in a program in the past and was no longer in receipt of benefits, however only a very small number of VAC clients would be in that category. For example, in March 2013 98% of CAF VAC clients had disability benefits (VAC Quarterly Fact Sheet) for service-related medical diagnoses and permanent disability, and of the remainder some would have been in receipt of other benefits when the data linkage was made.

# **Characteristics and Indicators**

The survey questionnaire was developed by a multidisciplinary team from VAC and DND and included a wide variety of sociodemographic and military characteristics and health, disability and determinants of health indicators (Appendix Table 1).

Indicators such as age, gender, most military characteristics and VAC client status were objectively determined by data linkage. Other data were self-reported in the telephone survey.

The 45 minute questionnaire was administered by Statistics Canada interviewers using computer-assisted telephone interviews.

#### Sample Frame

See Figure 1 for details of the sampling frame. The survey sampled former CAF Primary Reserve Force personnel with Class A/B or C service<sup>15</sup> who released from service 01 January 2003 to 31 August 2012 and Regular Force personnel who released 01 January 1998 to 31 August 2012. Electronic records were only available for Reserve Force personnel from 2003.

- 1. *Reserve Force Class A/B.* Veteran who was a Primary Reserve Force member with any Class B temporary full-time service in addition to Class A service, and no Regular Force service.
- 2. *Reserve Force Class C*: Veteran who was a Primary Reserve Force member with Class C service, and also had Class A and Class B service and no Regular Force service. Class C service is full-time service in support of deployed operations, domestically or internationally.
- 3. *Regular Force*. Veteran who was a member of the Regular Force; some in this category also had service in the Primary Reserve Force.

The sample frame was assembled in November 2012. The sample was derived by Statistics Canada using DND's human resources dataset. Contact information was obtained by Statistics Canada through linkage with DND and VAC administrative data, the Canadian Child Tax Benefit file, and the T1 Tax files.

The sample excluded those who had Class A service only (former Primary Reserve Force members who did not have Class B or C service); had re-enrolled in the CAF; or were living in institutions, the northern Territories or outside Canada owing to small numbers and difficulties contacting Veterans in those locations.

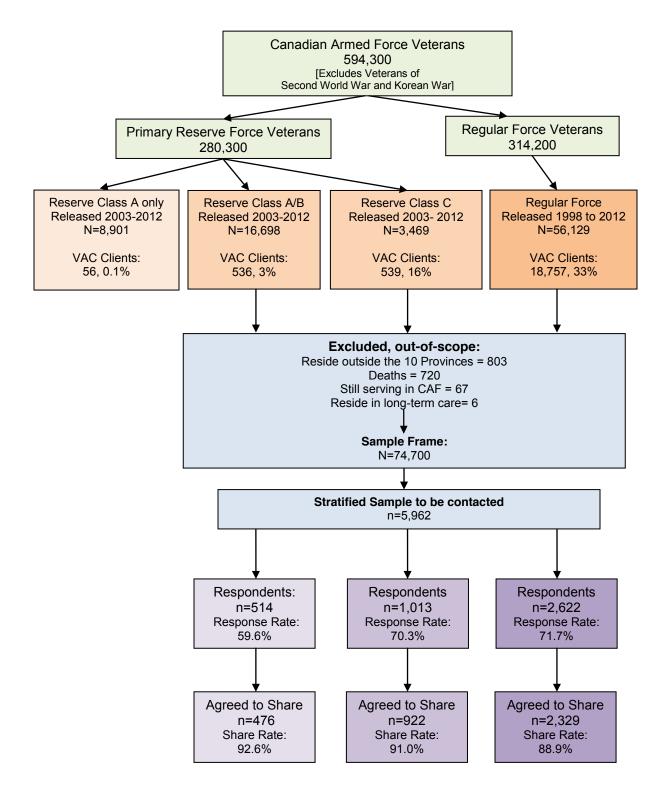
#### Sample

The survey sample had a complex stratification strategy: (1) Regular Force Veterans were stratified by rank at release into commissioned officers, senior non-commissioned members, or junior non-commissioned members; and (2) Reserve Force Veterans were stratified by Class into Class A/B or Class C.

Sample sizes were calculated based on sufficient power in the longitudinal design for 5 cycles of data collection and the expected attrition of non-response over the 5 cycles, resulting in about 6,000 individuals sent for data collection. Of these, 4,149 completed the questionnaire (70% response rate). The non-responders were unable to be contacted over the 6 week data collection period in February and March 2013. Of the responders, 3,727 agreed to share their data with VAC and DND (90% share rate).

<sup>&</sup>lt;sup>15</sup><u>http://www.admfincs.forces.gc.ca/qro-orf/vol-01/doc/chapter-chapitre-009.pdf</u>

#### Figure 1: LASS 2013 Sample Design



#### **Statistical Methods**

This report contains estimates of proportions and prevalences. "Prevalence" is the ratio of the number of people in a population who have a condition at a certain point in time to the number in the population. For self-reported characteristics and indicators, prevalences refer to the time of the survey in March 2013. For objective characteristics obtained through data linkage, prevalences refer to the time of release from service unless otherwise specified. Weighted estimates were calculated using individual respondent sampling weights provided by Statistics Canada that accounted for the stratified sample design, and for differences between respondents and non-respondents.

Use caution in directly comparing the Veteran groups when prevalences and proportions were not adjusted for subgroup differences in age, gender and other factors. Stata was used to calculate 95% confidence intervals for weighted population estimates. Further statistical analysis is required to confirm Statistical analysis is required to confirm differences and similarities, and to identify reasons for differences between groups.

differences and similarities, and to identify reasons for differences between the subgroups.

Age-gender adjustments and confidence intervals were calculated for comparisons with the general Canadian population. Comparators were calculated by age-sex adjusting the Canadian comparator data to the LASS study sub-populations. Comparators were taken from the 2010 and 2011-12 Canadian Community Health Surveys (CCHS), 2010 Labour Force Survey (LFS) and 2011 Survey on Labour Income and Dynamics (SLID). Confidence intervals were calculated for the indicators of interest using public use microdata files and survey weights supplied by Statistics Canada. Since the confidence intervals were often asymmetrical, the largest interval was used and the limits were conservatively rounded up to the next tenth of a percentage point. All confidence intervals calculated in this manner are conservatively wide and ranged 0.3% to 1%.

In calculating means and 95% confidence intervals for SF-12 summary components, respondent sampling weightings provided by Statistics Canada were applied to individual respondents' SF-12 data.

In reporting proportions and prevalences, the symbol "X" was used for sample sizes less than 5 respondents and "F" for weighted population estimates based on sample sizes less than 30 respondents, in keeping with Statistics Canada guidelines.

# **Findings**

This survey sampled former CAF Primary Reserve Force personnel with Class A/B or C service who released from service 01 January 2003 to 31 August 2012 and Regular Force personnel who released 01 January 1998 to 31 August 2012. See Figure 1 for participation rates.

Appendix Table 2 gives prevalences for socioeconomic and military characteristics and health, disability and determinants of health indicators for the three Veteran groups. In that table the prevalences are not adjusted for differences in age, gender and other factors, so cannot be directly compared across the groups. For this report, age-gender adjustments and confidence intervals were calculated only for comparisons with the general Canadian population. In all other cases, control for confounding and chance using statistical tests will be required to confirm whether differences between groups are statistically significant and to explain differences.

### Age and Gender

The age and gender structures of all three CAF Veteran groups were very different from adults in the Canadian general population (see figures on the next page).

- The mean age of Reserve Class A/B Veterans (31 years) was much lower than Reserve Class C Veterans (40) who in turn were younger than Regular Force Veterans (44).
- There were two modes in the Regular Force Veterans, one centered on ages 30-34 and the other on ages 50-54, and the latter mode was largest. The Reserve Class A/B Veterans were strongly unimodal around ages 25-29. The Reserve Class C Veterans were more like the Regular Force Veterans, but the younger mode was much stronger than the older one.
- The proportions of women Veterans (Reserve Class A/B 19% [15-22%], Reserve Class C 23% [21-26%] and Regular Force 13% [12-15%]) were much lower than in Canadian general population adults aged 20 and older (51% in 2013). The difference between Regular Force and Reserve Force was statistically significant (more women in the Reserve Force groups).

There are significant sociodemographic, health and well-being differences between age groups and between men and women. In seeking to explain differences between the Veteran subgroups it is important to account for these differences. For example, physical health conditions are more prevalent with age. Very young and retired adults more often had lower incomes than middle-aged adults, while the middle-aged adults are more often challenged with the stresses of juggling families, employment and health issues than younger or older Veterans.

#### Socioeconomics and Other Determinants of Health and Well-Being

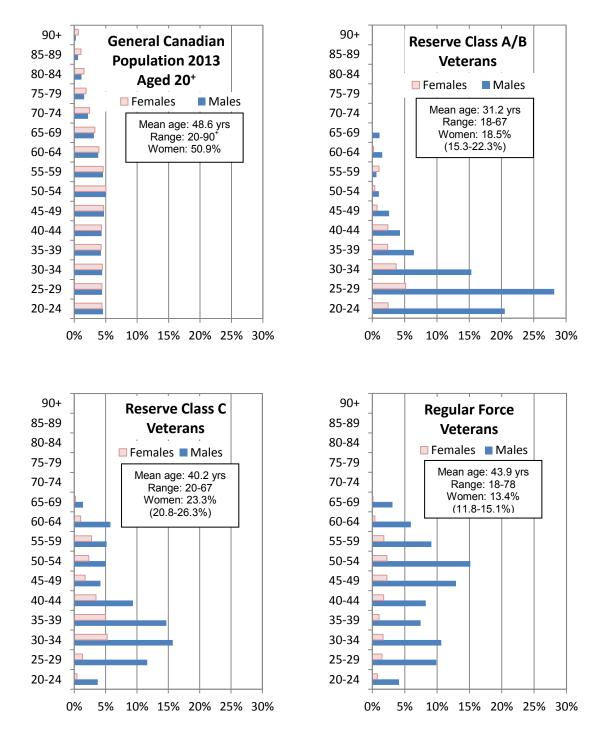
#### Marital Status

- Not surprisingly, given the age distributions discussed above, the prevalences of being married/commonlaw were 56% (95% CI 52-61%) for Reserve Class A/B, 72% (69-75%) for Reserve Class C and 74% (72-76%) for Regular Force Veterans.
- The prevalences of being single/never married were 39% for Reserve Class A/B, 22% for Reserve Class C and 16% for Regular Force Veterans.
- This "in-between" nature of the Reserve Class C Veteran subgroup was typical for most socioeconomic characteristics and indicators of health and disability.

#### Education

- Very few had less than high school graduation.
- The prevalence of high school graduation varied significantly: 25% (95% CI 21-29%) for Reserve Class A/B, 26% (23-29%) for Reserve Class C and 43% (40-45%) for Regular Force.
- Post-secondary graduation attainment was higher in the Reserve Force:
  - Reserve Force with post-secondary graduation: 73% (95% CI 69-77%) for Class A/B and 71% (68-74%) for Class C.
  - Regular Force with post-secondary graduation: 52% (50-55%).
- The proportion attending school or training in the prior year was 14% for Reserve Class A/B, 6% Reserve Class C and 5% Regular Force, consistent with the younger average age of the Reserve Class A/B Veterans.

Age at survey and Gender profiles of the Veteran groups compared to the 2013 Canadian general population<sup>16</sup>.



<sup>16</sup> <u>http://www.statcan.gc.ca/tables-tableaux/sum-som/I01/cst01/demo10a-eng.htm</u>

Vertical axis: 5-yr age groups. Horizontal axis: Weighted percent of population aged 20 and older. There were too few respondents less than 20 years of age in the Veteran groups for reliable population estimates of that age group.

#### **Employment**

#### Unemployment Rate:

• The unemployment rate (unadjusted for age and other factors) was not significantly different across the three groups: 6% (95% CI 4-9%) for Reserve Class A/B, 5% (4-7%) for Class C and 7% (6-8%) for Regular Force Veterans.

#### Worked in the Past Year:

• The proportion working at a job or business in the past year was 92% for Reserve Class A/B, 85% for Reserve Class C and 78% for Regular Force.

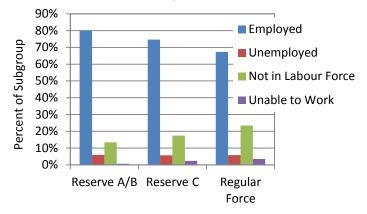
#### Main Activity in the Past Year:

- The proportion for whom working at a job or business was their main activity in the past year was 77% for Reserve Class A/B and C, and 69% for Regular Force Veterans.
- Retired and not looking for work in the past year: too few Class A/B Veterans for a reliable estimate; 6% of Reserve Class C and 12% of Regular Force Veterans, consistent with the older average age of the Regular Force Veterans.

#### Current Labour Force Participation:

- The proportion currently employed was 84% of Reserve Class A/B, 80% of Reserve Class C and 72% of Regular Force (see graph on right).
- "In the labour force" includes both employed and unemployed.
- "Not in the labour force" includes those who were not working, not absent from a job, or did not do anything to look for work at the time of the survey. The main activities in the past year of Veterans in this group included working at a job or business, least the survey.

Current Labour Force Participation:



included working at a job or business, looking for work and being disabled or on disability, raising the possibility that some could return to the labour force.

#### Activity Limitations in Those Working:

• In those working, a long-term physical or mental condition or health problem reduced the amount or kind of activity at work sometimes or often in 8% of Reserve Class A/B, 15% of Class C and 33% of Regular Force Veterans.

#### Skills Transferability

Respondents were asked "To what extent do you agree with the following statement: The knowledge and skills I use at my current or most recent job are the same as the knowledge and skills used in my military service?"

	Reserve		
Knowledge and Skills	Class	Reserve	Regular
Transferable to Civilian Job	A/B	Class C	Force
Agree	32%	47%	46%
Neither	17%	16%	13%
Disagree	52%	37%	41%

Proportions not adjusted for age, gender and other differences.

Interpretation of these findings will require further analysis and qualitative knowledge of how respondents might have interpreted that question. For example, most Reserve Class A/B Veterans probably had two jobs while in service: their Reserve position and a civilian job that might have been quite unrelated. Transferability of skills and knowledge between military and civilian jobs might be a different issue for Regular Force personnel. Many other factors need to be considered such as whether a Veterans' job in service was similar to their civilian job, such as a health professional, technician, mechanic or engineer.

#### Income

- The proportion with income below the Low Income Measure (LIM; see Appendix 1 for definition) was 12% (95% CI 9-15%) for Reserve Class A/B, 8% (6-10%) for Reserve Class C and 8% (6-9%) for Regular Force Veterans: differences not statistically significant.
- Lower household income might have been more prevalent for Reserve Class A/B than Reserve Class C or Regular Force Veterans, consistent with their younger average age and higher rate of attending school or training,

#### Health Behaviours: Drinking and Smoking

Both drinking alcohol and smoking tobacco are associated with adverse health and related disability. LASS 2013 used the same measures of drinking and smoking as STCL 2010.

- Heavy drinking (5 or more drinks on one occasion, 12 or more times a year) was present in 32% (95% CI 28-36%) of Reserve Class A/B, 28% (25-31%) of Reserve Class C and 25% (23-27%) of Regular Force Veterans.
- Daily smoking was present in 10% (8-13%) of Reserve Class A/B, 13% (11-16%) of Reserve Class C and 17% (15-18%) of Regular Force Veterans.
- These findings are consistent with the age differences in the three groups.

#### Health Care: Insurance, Regular Doctor and Home Care

Access to and use of quality health care is a key determinant of health and well-being. As in STCL 2010, LASS 2013 asked about health insurance coverage, access to a regular medical doctor and utilization of various types of providers and home care.

	Reserve Class		
Indicator	A/B	Reserve Class C	Regular Force
Prescription Drug Insurance	83% (79-86%)	88% (86-90%)	92% (90-93%)
Dental Insurance	75% (71-79%)	78% (75-81%)	87% (85-88%)
Eye Glasses Insurance	68% (63-72%)	73% (70-76%)	84% (82-86%)
Regular medical doctor	76% (71-79%)	78% (76-81%)	81% (79-83%)
Home care paid by government	F	4% (3-5%)	7% (6-9%)
Home care not paid by government	F	9% (7-11%)	8% (7-9%)

#### Health Care: Unmet Health Care Need

Unlike LASS 2010, LASS 2013 included measures of unmet health care need. In the past year 12-16% had unmet need and the differences between the Veteran groups were not statistically significant. There were a variety of reasons for unmet need. Note in the table below that the large "other" category both for reasons for getting the care and for setting where care was sought. The prevalence of perceived unmet need for mental health care was too low to measure for Reserve Force Veterans and 3% for Regular Force. Unmet need for physical health problems was higher.

	<b>Reserve Class A/B</b>	<b>Reserve Class C</b>	Regular Force
Unmet health care need past year**	12% (95% CI 9-15%)	16% (14-18%)	16% (14-18%)
Type of unmet health care need**:			
Physical health & injury	8%	12%	11%
Mental health	F	F	3%
Other type	F	F	2%
Reasons for not getting the care***:			
Not available locally	F	F	12%
Not available when need required	F	F	F
Waiting time too long	F	F	22%
Believed care would be inadequate	F	F	F
Cost	F	27%	13%
Too busy to seek care	F	F	F
Did not get around to it	F	F	10%
Decided not to seek care	F	F	12%
Doctor thought care not necessary	F	F	F
Other	F	26%	28%
Where care sought***:			
Doctor's office	F	31%	35%
Community health center/CLSC	F	F	F
Walk-in clinic	F	F	11%
Appointment clinic	F	F	F
Hospital emergency room	F	F	11%
Hospital outpatient clinic	F	F	F
Other	F	42%	39%

F = Sample size <30 so population estimate considered unreliable.

CI=95% Confidence Interval.

\*\*The denominators for these prevalences are the total study population.

\*\*\*The denominators for these prevalences are only those with unmet health care need in the past year.

# **Military Characteristics**

#### Enrolment Eras

- The great majority of Reserve Class A/B Veterans enrolled in the 1990s and 2000s (93%) and the majority had served less than 9 years (87%), consistent with their young age mode and suggesting a high turnover rate.
- Almost half (48%) of Regular Force Veterans had served 20 or more years. Most enrolled in the 1970s through 2000s, with one peak in the 1980s and another in the 2000s.

• As is typical for most other characteristics and indicators, Reserve Class C Veterans were "in between" the Reserve Class A/B and Regular Force Veterans: their peak enrolment was in the 1990s (48%).

#### Type of Release from Service

- 13% of Reserve Class C and 21% of Regular Force Veterans were released owing to career-limiting medical employment limitations (CE-MELs or "medical release").
- Reserve Class A/B: The great majority (92%) were released from service voluntarily (76%) or involuntarily (16%). So few were released owing to CE-MELs, retirement age or complete service that reliable population estimates could not be calculated for those three release types.

Type of Release	Reserve Class		
From Service	A/B	Reserve Class C	Regular Force
Voluntary	76% (72-80%)	65% (61-68%)	52% (50-55%)
Medical*	F	13% (11-15%)	21% (19-23%)
Retirement Age	F	5% (4-7%)	5% (4-5%)
Involuntary**	16% (12-20%)	10% (8-12%́)	7% (5-8%)
Service complete	`F	8% (6-10%)	16% (14-17%)

\*"Medical release" means that the Veteran was released owing to career-limiting medical employment limitations.

\*\*"Involuntary Release" includes Misconduct Dismissal, Misconduct Service, Illegally Absent, Fraudulent Enrollment, Unsatisfactory Conduct, Unsatisfactory Performance, Not Advantageously Employed, Death and Transfer Out.

F = Sample size <30 so population estimate considered unreliable.

Proportions not adjusted for age, gender and other differences.

#### <u>Rank</u>

Rank <sup>17</sup> at Release	Reserve Class A/B	Reserve Class C	Regular Force
Officer	7%	17%	15%
Cadet	F	F	4%
Senior NCM	F	20%	25%
Junior NCM	33%	58%	30%
Private	14%	F%	7%
Recruit	39%	F%	18%

F = Sample size <30 so population estimate considered unreliable. Proportions not adjusted for age, gender and other differences. See Appendix 1 for definitions of the rank groups.

<sup>17</sup> Senior officer – Major, Lieutenant Colonel, Colonel, General, Lieutenant Commander, Commander, Captain (N), Commodore, Admiral; *Junior officer* – Second Lieutenant, Lieutenant, Captain, Acting Sublieutenant, Sublieutenant, Lieutenant (N); *Cadet* – Officer Cadet, Naval Cadet.

Senior NCM – Sergeant, Warrant Officer, Master Warrant Officer, Chief Warrant Officer, Petty Officer First and Second Class, Chief Petty Officer First and Second Classes; Junior NCM – Corporal, Master Corporal, Leading Seaman, Master Seaman; *Privates* – Private, Able Seaman; *Recruit* – Private (Recruit), Private (Training), Ordinary Seaman. Privates are junior NCMs however they are shown here separately from the other junior NCM ranks to provide detail.

#### Service Environment (Branch) at Release from Service

There were distinct differences in service environment: the majority of Reserve Veterans had been in the Army, while relatively more Regular Force Veterans had been in the Navy or Air Force.

Service	Reserve		
Environment	Class	Reserve	Regular
(Branch)	A/B	Class C	Force
Army	83%	80%	54%
Navy	13%	13%	16%
Air Force	F	7%	30%

Proportions not adjusted for age, gender and other differences.

F = Sample size <30 so population estimate considered unreliable.

#### Last Military Occupation

The eight military occupation code groupings do not necessarily reflect the nature of military service including exposure to combat, since personnel in various occupation groups and service environments can serve together in a variety of circumstances.

- The predominant occupation at release in each group was Combat Arms, particularly Reserve Class A/B (59%) and Reserve Class C (44%).
- Regular Force Veterans were more generally distributed across the eight occupation categories, although Combat Arms was the largest (26%).

#### Length of Service

Many CAF personnel transition between Reserve Force, Regular Force and civilian life in a variety of ways during their working lives. Respondents were classified as Regular Force if they had any Regular Force service and Reserve Force if they had only served in the Primary Reserve Force. For those classified as Regular Force, their Reserve Force service was not included in length of service. For those classified as Reserve Force, all of their Reserve Force service periods were included. For those with multiple enrollment and release dates, the time between periods of service was not counted in length of service.

Length of Service	Reserve Class A/B	Reserve Class C	Regular Force
< 2 years	21%	F	21%
2-9 years	66%	41%	20%
10-19 years	10%	36%	12%
20+ years	F	22%	48%

F = Sample size <30 so population estimate considered unreliable.

#### Adjustment to Civilian Life

As in STCL 2010, respondents were asked a single question about their ease of adjustment to civilian life: "*In general, how has the adjustment to civilian life been since you were released from the Canadian Forces?*".

Ease of Adjustment to	Reserve Class		
Civilian Life	A/B	Reserve Class C	Regular Force
Very or moderately easy	74% (70-78%)	61% (58-64%)	56% (54-59%)
Neither difficult nor easy	15% (12-19%)	15% (13-18%)	16% (15-18%)
Very or moderately difficult	11% (8-14%)	24% (21-27%)	27% (25-29%)
Proportions not adjusted for ane de	nder and other differences	2	

Proportions not adjusted for age, gender and other differences.

MacLean et al. (2014) analyzed STCL 2010 data to identify factors *at release from service* that were associated with difficult adjustment to civilian life. In contrast, the following table compares prevalences of characteristics *at the time of the survey* (2013) for those who regarded their adjustment as easy or difficult. Those who recalled a difficult adjustment were much more likely to have markers of current poor well-being on average, particularly mental and/or physical health. For example, 85% of Class A/B with easy adjustment were currently employed, as were 80% of Class A/B with difficult adjustment.

	Reserve Class A/B		Reserve Class C		Regular Force	
	Easy	Difficult	Easy	Difficult	Easy	Difficult
Proportion of group $\rightarrow$	74%	11%	61%	24%	56%	27%
Age, Mean (Years)	31	34	39	42	44	43
Women	17%	F	22%	25%	12%	15%
Married/Common law	57%	F	78%	59%	77%	68%
Unemployment rate	7%	2%	4%	8%	4%	12%
Currently employed	85%	80%	84%	70%	78%	56%
Income below LIM	11%	F	F	F	7%	8%
Main activity past year:						
Worked at job or business	79%	67%	83%	65%	76%	54%
On disability	F	F	F	13%	F	17%
Medical release	F	F	6%	31%	11%	41%
Poor/fair self-rated health	F	F	F	35%	9%	38%
Poor/fair self-rated mental health	F	F	F	32%	5%	39%
Physical HRQoL (SF-12 PCS)	54.9	49.7	53.2	45.0	50.8	42.0
Mental HRQoL (SF-12 MCS)	54.0	44.4	54.0	43.7	55.1	43.4
1+ physical health condition	45%	72%	59%	85%	64%	83%
1+ mental health condition	F	F	8%	42%	10%	54%
Both physical and mental health condition	F	F	7%	39%	9%	48%
K10 psychological distress:						
0-9 likely well	94%	63%	93%	58%	92%	50%
10-14 mild mental disorder	F	F	F	15%	5%	17%
15-19 moderate disorder	F	F	F	F	F	12%
20-40 severe disorder	F	F	F	21%	F	21%
Reduction activity life domains	16%	59%	27%	69%	34%	77%
Need help with an ADL	F	F	F	31%	10%	42%
Weak sense of community belonging	38%	64%	32%	57%	33%	62%
Extreme/quite a bit of stress in life	15%	37%	21%	39%	14%	40%
Extreme/quite a bit of work stress past year	18%	19%	26%	38%	17%	37%
Heavy drinker	32%	31%	27%	27%	24%	27%
Regular medical doctor	73%	85%	80%	76%	80%	80%
Unmet health care need past year	9%	F%	9%	32%	7%	34%

F = Sample size <30 so population estimate considered unreliable.

### Health

Health status was measured using a variety of indicators including self-rated health and mental health, health-related quality of life (HRQoL using the SF-12 version 2), diagnosed chronic physical and mental health conditions, absence of pain, and psychological distress (K10). Since this is a cross-sectional study, conclusions cannot be drawn about causality, for example effects of military service or support programs on the prevalence of health conditions in the Veteran life course.

#### Self-Rated Health

Excellent/very good self-rated health was least prevalent in Regular Force Veterans, consistent with findings described below for prevalences of physical and mental health conditions. Self-rated health needs to be interpreted in the context of age differences, since physical health conditions are more common with age and average age increased across the three groups.

	Reserve Class		
Self-Rated Health	A/B	<b>Reserve Class C</b>	Regular Force
Very good/excellent	69% (65-73%)	61% (58-64%)	53% (50-55%)
Good	24% (20-27%)	26% (23-29%)	30% (28-32%)
Fair/poor	7% (5-10%)	13% (11-15%)	18% (16-20%)

#### Self-Rated Mental Health

Excellent/very good self-rated mental health was also least prevalent in Regular Force Veterans. Self-rated mental health can be used in further analysis with chronic mental health conditions and the K10 measure of psychological distress to estimate the presence of undiagnosed mental health problems.

	Reserve Class		
Self-Rated Mental Health	A/B	<b>Reserve Class C</b>	Regular Force
Very good/excellent	74% (70-77%)	67% (64-70%)	62% (59-64%)
Good	20% (17-24%)	22% (19-25%)	23% (21-25%)
Fair/poor	6% (5-9%)	11% (9-13%)	16% (14-18%)

#### Chronic Physical Health Conditions

Compared to STCL 2010, LASS 2013 captured a broader range of types of diagnosed chronic physical health conditions that lasted or were expected to last 6 months or more<sup>18</sup>. The 2013 survey included three central nervous system conditions (migraine, effects of traumatic brain injury and dementia) and a disabling condition more common in older adults: urinary incontinence.

• At least one of the physical health conditions asked about in the survey was present in 55% of Reserve Class A/B, 68% of Reserve Class C and 74% of Regular Force

<sup>&</sup>lt;sup>18</sup> Any one of: musculoskeletal condition (arthritis or back problem), cardiovascular condition (heart disease, effects of stroke or high blood pressure), gastrointestinal condition (ulcer or bowel disorder), respiratory condition (asthma or COPD chronic obstructive pulmonary disease), central nervous system condition (migraine, dementia or effects of TBI traumatic brain injury), urinary incontinence, diabetes, cancer, obesity, hearing problem or chronic pain/discomfort.

Veterans, consistent with their age profiles. This trend across the Veteran subgroups was also consistent for most of the individual types of conditions.

- As would be expected in these young and middle-aged adults, physical conditions more commonly associated with morbidity than mortality (musculoskeletal conditions and migraine) were more prevalent than conditions commonly associated with premature mortality (heart disease, effects of stroke, COPD, diabetes and cancer).
- A wide variety of the less common physical conditions together with many more physical health conditions that were not asked about in the survey undoubtedly contributed in aggregate to the overall burden of physical health conditions, as is true for the general population.
- Chronic Pain. Chronic pain has physical, psychological, social and disability (biopsychosocial) dimensions. STCL 2010 found that the majority of Canadian Regular Force Veterans had "chronic pain or discomfort" and that it was associated with mental health conditions, suicidality and disability measured as activity limitations (Thompson et al. 2011, 2013, 2014). LASS 2013 used the HUI (Health Utilities Index) pain module for comparability with Canadian general population surveys. Unlike STCL 2010, which asked directly about the *presence* of chronic persistent or reoccurring pain or discomfort, LASS 2013 asked about the *absence* of pain or discomfort, which explains at least some of the difference in prevalences between surveys. In LASS 2013, the prevalences of those not free of pain or discomfort were significantly different across the three groups: 13% for Reserve Class A/B, 28% for Reserve Class C and 34% for Regular Force. LASS 2013 included a measure of pain severity, unlike STCL 2010. Moderate to severe pain/discomfort was present in 7% of Reserve Class A/B, 19% of Reserve Class C and 27% of Regular Force Veterans.
- *Musculoskeletal conditions* were the most prevalent type of chronic condition, as they were in STCL 2010, and typically account for the majority of chronic pain states in population studies. Like chronic pain, the prevalences of musculoskeletal conditions increased across the three Veteran subgroups. Musculoskeletal conditions are well known to be more common with age.
- *Traumatic Brain Injury (TBI)*. This survey yielded the first estimate of the prevalence of self-reported effects of traumatic brain injury in Canadian military Veterans: 3% for Reserve Class C and 4% for Regular Force Veterans (difference not statistically significant). The sample size for Reserve Class A/B was too small to produce a reliable estimate. Traumatic brain injury is an acute physical injury that can have persistent health effects. TBI attracted considerable attention in the Iraq and Afghanistan wars owing to the use of blast weapons. The injury is also commonly caused in military populations by non-blast and non-combat mechanisms of injury.
- *Migraine*. Migraine is a relatively common central nervous system condition in the general population that can significantly impact quality of life and contribute to disability in some. The prevalence of migraine ranged 10-14% across the three groups and the differences were barely statistically significant, comparing confidence intervals at the tenth of a percent (data not shown).
- *Hearing Problems*. Hearing loss is a well-recognized military occupational hazard and is common in the general population owing to occupational and recreational exposures and

aging. Unlike STCL 2010, LASS 2013 used a standard hearing loss module that provided more information about degree of hearing loss and allowed for comparison with the general Canadian population. A hearing problem (difficulty hearing in a group or without a hearing aid) was present in 5% of Reserve Class C and 9% of Regular Force Veterans and the difference was statistically significant. The number for Reserve Class A/B was too small for a reliable estimate.

The LASS 2013 prevalence of hearing problems for Regular Force Veterans (9%) is considerably lower than the 28% measured in STCL 2010. The STCL 2010 derived variable counted those who could not hear without an assistive device or had difficulty hearing, and excluded those who had no problem hearing. The derived variable used in CCHS and therefore LASS 2013 for comparability was much more conservative: it counted only those who had a hearing problem (correctable with an aid or uncorrectable) in conversation.

- *Urinary incontinence*. As expected, urinary incontinence was uncommon in these young and middle-aged adults, less than 3%.
- Dementia. Also as expected, dementia was uncommon in these young and middle-aged adults: sample sizes were too small to produce reliable estimates for all Veteran subgroups.

Chronic Physical Health Condition	Reserve Class A/B	Reserve Class C	Regular Force
At least one physical health condition)*	55% (50-60%)	68% (65-71%)	74% (72-76%)
Musculoskeletal	20% (16-23%)	39% (36-42%)	43% (41-46%)
Back problems	17% (14-21%)	32% (29-35%)	35% (32-37%)
Arthritis	6% (4-8%)	16% (14-19%)	22% (21-24%)
Chronic pain or discomfort	13% (10-16%)	28% (25-31%)	34% (32-36%)
Obesity**	18% (15-22%)	24% (21-26%)	26% (24-28%)
Central nervous system	11% (9-15%)	12% (10-15%)	16% (15-18%)
Dementia	F	F	F
Migraine	10% (7-13%)	11% (9-13%)	14% (13-16%)
Effects of traumatic brain injury	F	3% (2-4%)	3% (2-4%)
Cardiovascular	7% (5-10%)	14% (12-17%)	19% (18-21%)
High blood pressure	6%	12%	17%
Heart disease	F	F	3%
Effects of stroke	F	F	F
Hearing problem	F	5% (4-6%)	9% (7-10%)
Gastrointestinal	7% (5-10%)	9% (7-10%)	9% (7-10%)
Ulcers	F	3%	4%
Bowel disorders	F	5%	6%
Respiratory	F	7% (6-9%)	7% (6-8%)
Asthma	F	7%	6%
Chronic obstructive pulmonary disease (COPD)	F	F	2%
Urinary incontinence	F	F	3%
Diabetes	F	5%	6%
Cancer	F	F	2% (1-2%)

\*Any one of: musculoskeletal condition (arthritis or back problem), cardiovascular condition (heart disease, effects of stroke or high blood pressure), gastrointestinal condition (ulcer or bowel disorder), respiratory condition (asthma or chronic obstructive pulmonary disease [COPD]), central nervous system condition (migraine, dementia or effects of TBI traumatic brain injury), urinary incontinence, diabetes, cancer, obesity, hearing problem or chronic pain/discomfort).

F = Sample size < 30, estimate considered unreliable.</li>
 Proportions not adjusted for age, gender and other differences.
 \*\*Not adjusted for typical Canadian respondent bias: see Navaneelan and Janz 2014.

#### Mental Health

STCL 2010 had asked about self-rated mental health and four conditions that were not mutually exclusive (mood disorders without mentioning depression to respondents, anxiety disorders, depression or anxiety, and post-traumatic stress disorder or PTSD).

LASS 2013 used more precise questions about three common types of diagnosed mental health conditions that had lasted or were expected to last 6 months or more (mood disorders including depression, anxiety disorders and PTSD), as well as self-rated mental health. The survey expanded on the 2010 STCL by including PTSD symptoms (the Primary Care PTSD screening tool), degree of psychological distress and degree of psychological distress interference with activities (K10).

- The prevalence of having at least one of the three mental health conditions differed significantly across the age groups (unadjusted for differences in age and gender): 9% in Reserve Class A/B, 17% in Class C and 24% in Regular Force Veterans.
- Mood disorder was the most prevalent mental health condition. Anxiety disorder and PTSD were tied for second (difference not statistically significant).
- PC-PTSD Symptom Screen. The Primary Care PTSD screen, using a cutoff of 3 or more items, indicated possible PTSD in 11% of Reserve Class C and 14% of Regular Force Veterans. The sample size with probable PTSD was too low for a reliable estimate for Reserve Class A/B. Further analysis is required to determine whether the difference for Reserve Force Class C Veterans is statistically significant and to assess whether such a difference might indicate unmet need for PTSD recognition and diagnosis.

Mental Health Condition	Reserve Class A/B	Reserve Class C	Regular Force
At least one of: mood or anxiety disorder or PTSD	9% (7-12%)	17% (15-20%)	24% (22-26%)
Diagnosed mood disorder	F	12% (10-14%)	17% (15-19%)
Diagnosed PTSD	F	7% (6-9%)	13% (12-15%)
Diagnosed anxiety disorder	F	8% (7-10%)	11% (10-13%)
Probable PTSD (PC-PTSD 3 or more items)	F	11% (9-14%)	14% (12-16%)
Possible mental disorder (K10 score 10 or more)	10%	17%	20%

Proportions not adjusted for age, gender and other differences.

F =Sample size < 30, estimate considered unreliable.

• *Psychological Distress.* The K10 instrument indicated probable current mental disorders in 10% of Reserve Class A/B, 17% of Reserve Class C and 24% of Regular Force Veterans, similar to the prevalences of current diagnosed chronic mental health conditions although further analysis is required to determine degree of overlap among individuals.

K10 Measure of	<b>Reserve Class</b>	<b>Reserve Class</b>	
Psychologic Distress	A/B	С	Regular Force
0-9 Likely well	90% (87-92%)	83% (81-86%)	79% (77-81%)
10-14 Likely mild mental disorder	7% (5-9%)	8% (6-10%)	9% (7-10%)
15-19 Likely moderate mental disorder	F	F	5% (4-6%)
20-40 Likely severe mental disorder	F	6% (5-8%)	8% (6-9%)
Overall Score 0-40 (Mean)	4	5	6

F = Sample size <30 so estimate considered unreliable.

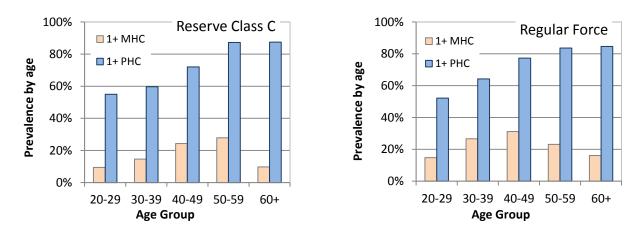
Proportions not adjusted for age, gender and other differences.

#### Chronic Health Conditions and Age

The graphs below show the prevalences of physical (PHC<sup>19</sup>) and mental health conditions  $(MHC^{20})$  by age group for the three Veteran groups. Note that:

- 1. The prevalence of chronic physical health conditions increased with age.
- 2. The prevalence of chronic mental health conditions was highest in the middle age groups and lowest for the youngest and oldest.

These trends are similar to both the STCL 2010 and surveys of the general Canadian population.



#### Suicidal Ideation and Attempts

Although suicidality (ideation, attempts and completed suicide) is strongly associated with mental health conditions, suicide is about more than the presence of psychiatric disorders. Suicidality in Veterans, as in civilians, is also influenced by physical health (Thompson et al. 2014), psychological predisposition and socioeconomic factors.

Past-year suicidal ideation was present in 5% (CI 4-7%) of Reserve Class C and 7% (CI 6-8%) of Regular Force Veterans. Too few Reserve Class A/B Veterans had past-year ideation to produce a reliable population estimate.

<sup>&</sup>lt;sup>19</sup> PHC = Any one of: musculoskeletal condition (arthritis or back problem), cardiovascular condition (heart disease, effects of stroke or high blood pressure), gastrointestinal condition (ulcer or bowel disorder), respiratory condition (asthma or COPD chronic obstructive pulmonary disease), central nervous system condition (migraine, dementia or effects of TBI traumatic brain injury), urinary incontinence, diabetes, cancer, obesity, hearing problem or chronic pain/discomfort). <sup>20</sup> MHC = Any one of mood disorder, anxiety disorder or posttraumatic stress disorder (PTSD).

 In LASS 2013, suicide attempt questions were asked only of those who had past-year suicidal ideation. The sample sizes of past-year suicide attempts were too small to produce reliable population estimates for all three Veteran groups.

#### Attribution to Military Service

Unlike STCL 2010, the question "*Do you think any of the previously mentioned conditions you identified are related to your military service?*" was asked only once, at the end of the chronic conditions module. Self-reported attribution to military service was present in 13% of Reserve Class A/B, 33% of Reserve Class C and 42% of Regular Force Veterans. The question did not apply to chronic pain/discomfort, hearing problems, the PC-PTSD screener or the K10 psychological distress screen. In contrast, the higher prevalences of attribution to service found in STCL 2010 were likely due in part to asking the question after every chronic health condition including chronic pain or discomfort.

#### Comorbidity

Comorbidity is the co-occurrence of more than one health condition in the same person. Comorbidity is correlated with quality of life, disability, case complexity, prognosis and outcomes such as health system utilization, suicidality, and unemployment.

Multimorbidity of 3 or more chronic physical health conditions was present in 11% of Reserve Class A/B, 22% of Reserve Class C and 30% of Regular Force Veterans.

As in STCL 2010, there was a very high co-occurrence of physical health conditions in those with mental health conditions: 73% in Reserve Class A/B, 93% in Reserve Class C and 92% in Regular Force Veterans. Mental health conditions were not uncommon in those with physical health conditions: 12% in Reserve Class A/B, 24% in Reserve Class C and 30% in Regular Force Veterans. These findings need to be interpreted in light of subgroup differences in age, gender and other factors. The important implication of finding these high rates of co-occurrence is that services for either type of condition must include consideration of the other.

Chronic physical and mental health conditions lie on a continuum of human health. Depending on circumstances, a physical health condition and a mental health condition can occur together without a shared cause; both together sharing the same cause; or either one can contribute causally to the other.

Previous analyses of STCL 2010 findings demonstrated associations of both multimorbidity of physical or mental health conditions and the co-occurrence of physical and mental health conditions with use of the VAC Rehabilitation Program, suicidality, health-related quality of life, activity limitations and other measures of well-being in CAF Regular Force Veterans (Thompson et al. 2012, 2013, 2014).

Type and Degree of	<b>Reserve Class</b>		
Comorbidity	A/B	<b>Reserve Class C</b>	Regular Force
No PHC or MHC*	42%	31%	24%
Any PHC (+/- MHCs)	55% (50-60%)	68% (65-71%)	74% (72-76%)
Any MHC (+/- PHCs)	9% (7-12%)	17% (15-20%)	24% (22-26%)
Both a PHC and a MHC	F	16% (14-18%)	22% (20-24%)
MHC in those with a PHC	12%	24%	30%
PHC in those with a MHC	73%	93%	92%
3 or more PHCs (+/- MHCs)	12%	23%	31%

2 or more MHCs (+/- PHCs)	F	8%	13%
DUC – chronic physical boolth cond	ition: only one of museu	lookalatal condition (arthri	tio or book problem)

PHC = chronic physical health condition: any one of musculoskeletal condition (arthritis or back problem), cardiovascular condition (heart disease, effects of stroke or high blood pressure), gastrointestinal condition (ulcer or bowel disorder), respiratory condition (asthma or chronic obstructive pulmonary disease [COPD]). central nervous system condition (migraine, dementia or effects of TBI traumatic brain injury), urinary incontinence, diabetes, cancer, obesity, hearing problem or chronic pain/discomfort. MHC = chronic mental health condition: any one of mood disorder, anxiety disorder or PTSD.

\*Meaning absence of the chronic conditions included in the survey, not absence of all possible physical and mental health problems.

F = Sample size less than 30, estimate considered unreliable.

Proportions not adjusted for age, gender and other differences.

#### Health-Related Quality of Life

Since people with chronic health problems can have good quality of life, it is important to measure health-related quality of life (HRQoL) in addition to the presence of health conditions. Another advantage of HRQoL is that it captures impacts of undiagnosed health problems as well as those that were diagnosed, and diagnosed conditions not included in those asked about in the survey.

As in STCL 2010, LASS 2013 measured HRQoL using QualityMetric's Short Form Health Survey (SF-12 version 2), a series of 12 questions. The SF-12 PCS (physical) and MCS (mental) component scales measure physical and mental HRQoL respectively. Higher scores indicate better HRQoL. A small decrease in either PCS or MCS signals a large decrease in HRQoL. The Canadian norms are slightly above the US population reference norm of 50 (Thompson et al. 2013), however since PCS and MCS vary with age then age differences have to be taken into consideration.

In STCL 2010, CAF Regular Force Veterans had below-norm physical HRQoL and average mental HRQoL compared to the Canadian general population (Thompson et al 2013), meaning that on average physical health problems had a greater overall impact on HRQoL than mental health problems, in part owing to the fact that physical health problems were more common. LASS 2013 findings for Regular Force Veterans were similar to STCL 2010.

	Reserve Class		
SF-12 Component Scale	A/B	<b>Reserve Class C</b>	Regular Force
PCS – Physical HRQoL	54.1 (53.5-54.8)	50.8 (50.1-51.4)	47.9 (47.4-48.5)
MCS – Mental HRQoL	52.6 (51.8-53.3)	51.1 (50.4-51.8)	51.3 (50.8-51.8)
Scores not adjusted for age, gende	r and other differences.	· · ·	

cores not adjusted for age, gender and other differences.

Mean HRQoL scores were lower for those with mental or physical health conditions, suicidal ideation or disability. The lower PCS score in those with mental health conditions reflects the high co-occurrence of physical health conditions. The SF-12 scores can also be used to identify the number of individuals with low HRQoL.

SF-12 Component Scale	Reserve Class A/B	Reserve Class C	Regular Force
Those with chronic physical hea	Ith condition	าร:	
PCS – Physical HRQoL	51.5	47.7	44.6
MCS – Mental HRQoL	51.4	49.8	50.2
Those with chronic mental health	h conditions	8:	
PCS – Physical HRQoL	51.5	44.4	41.1
MCS – Mental HRQoL	41.7	38.0	38.9

## Disability

As in STCL 2010, LASS 2013 measured disability as in three ways: impairments and activity limitations combined (participation and activity limitation or PAL); restriction of activity in major life domains (RALD); and need for assistance with basic and instrumental activities of daily living. Since activity limitations are associated with physical health conditions, physical health conditions are more prevalent with age and average age increased across the three groups, then it is not surprising that activity limitations were increased in prevalence across the three groups. LASS 2013 also included two additional measures: number of activities limited owing to pain/discomfort and interference with life and activity limitations owing to psychological distress.

As in STCL 2010, LASS 2013 included questions about whether a long-term physical or mental condition or health problem reduced the amount or kind of activity in four major life domains: home, school, work and other, and questions about whether respondents needed help with at least one basic or instrumental activity of daily living. Unlike STCL 2010, LASS 2013 assessed whether pain or discomfort was limiting activities, and the degree to which psychological distress was interfering with activity.

	Reserve Class		
Disability Measure	A/B	<b>Reserve Class C</b>	<b>Regular Force</b>
Reduction of activity in one or more major life domain	23% (19-27%)	40% (37-43%)	49% (47-52%)
At home	15%	32%	41%
At work in those working	8%	15%	16%
At school in those at school	13%	26%	33%
Other settings	20%	32%	41%
Needs help with at least one			
basic or instrumental activity	F	13% (11-15%)	20% (18-22%)
of daily living			
Activities limited by pain or discomfort	9%	23%	30%
Psychological distress interfering	g with activity:		
A little	22%	22%	20%
Some	7%	9%	13%
A lot	2%	7%	8%

F=Sample size less than 30, estimate considered unreliable.

Proportions not adjusted for age, gender and other differences.

#### Stress, Coping and Satisfaction

As in STCL 2010, LASS 2013 included several measures of stress, coping and satisfaction, although there were some differences in instruments used. The prevalence of satisfaction with life was significantly lower in Regular Force Veterans than the other two groups. There was no significant difference in sense of community belonging.

Indicator	<b>Reserve Class A/B</b>	<b>Reserve Class C</b>	Regular Force
Satisfied or very satisfied with life	94% (91-96%*)	89% (87-91%)	86% (84-87%)
Sense of community belonging			
Very/somewhat strong	57% (53-62%)	60% (57-63%)	58% (55-60%)
Very/somewhat weak	43% (38-47%)	40% (37-43%)	43% (40-45%)
Stress most days:			
Not at all or not very	33% (29-38%)	29% (26-32%)	36% (34-39%)
Extremely or quite a bit	17% (14-21%)	26% (23-29%)	23% (21-25%)

Indicator	<b>Reserve Class A/B</b>	<b>Reserve Class C</b>	Regular Force
Work stress past year in job or business			
Not at all or not very	29% (25-33%)	26% (23-29%)	33% (30-35%)
Extremely or quite a bit	18% (14-21%)	28% (25-32%)	22% (20-24%)
Satisfaction with main activity in past year			
Satisfied or very satisfied	80% (77-84%)	75% (72-78%)	75% (73-77%)
Dissatisfied or very dissatisfied	10% (8-13%)	14% (12-16%)	14% (12-15%)
Mastery			
High	38%	35%	29%
Medium	61%	64%	69%
Low	F	F	2%
Social Provisions Scale (Mean, 0-40)	35.7	35.1	34.1

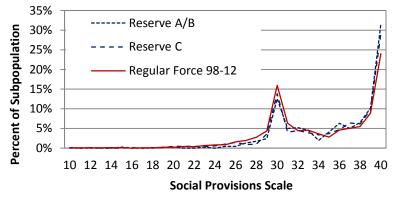
\*95% confidence interval.

Proportions not adjusted for age, gender and other differences.

F=Sample size less than 30, estimate considered unreliable.

#### Social Provisions Scale

LASS 2013 used a different measure of social support than the one used in STCL 2010. The Social Provisions Scale (SPS) ranges 10-40 low to high for perceived (not received) social support and is derived from 10 questions covering 5 dimensions: *guidance* (advice or information), *reliable alliance* (assurance that can count on others in time of stress), *reassurance of* 

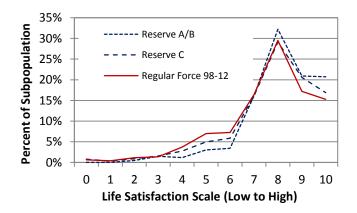


*worth* (recognition of one's competence), *attachment* (emotional closeness) and *social integration* (sense of belonging to group of friends). The SPS is intended to be used as a continuous score and there are no established cutoffs for "low perceived social support".

The frequency distribution shows two peaks, one at a score of 30 owing to peaks at a score of 6 in all five of the component questions, and another at the maximum of 40 (high perceived social support). Each of the five dimensions was based on 2 questions, and respondents could pick from one of 4 answers: strongly agree (score 4), agree (3), disagree (2) or strongly disagree (1). A score of 6/8 in each dimension could occur in a variety of ways, for example strongly agree (4) for one of the two questions and disagree (2) for the other, or agree (3) in both. The nature of the distribution will need to be considered in statistical analyses using this indicator.

#### Life Satisfaction Scale

The 11-point most-days life satisfaction scale ranges 0-10 low to high and can be converted to a 5-point scale (very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied) consistent with usage in the Canadian Community Health Survey (see CCHS 2011-12 Derived Variable Specifications). The frequency distribution is shown in this figure. Note the peaks at a score of 8 out of 10 for all three subgroups. The



nature of the distribution will need to be considered in statistical analyses using this indicator.

#### Women

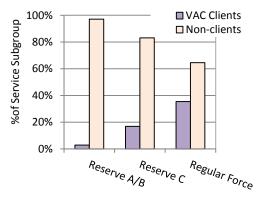
Analysis of similarities and differences between women and men is beyond the scope of this initial report. The proportion of women in the CAF is low, as in most military forces, which means that sample sizes for women were small and that will limit analyses to some extent.

#### **Families**

Veterans' health and well-being influences the well-being of whole families, individual family members, and vice-versa. The STCL 2010 and LASS 2013 surveys focused on Veterans, but vielded some indirect information about their families that could be assessed further (Appendix 1). Examples include marital status; the Social Provisions Scale; number of household members and number of household members aged 18 and younger; and household income.

## Veterans Participating in VAC Programs (VAC Clients)

Just over a third (35%) of Regular Force Veterans was receiving services from VAC (VAC clients) as were 17% of Reserve Class C Veterans. Verv few Reserve Class A/B Veterans were VAC clients  $(3\%^{21})$ , consistent with their younger average age and lower prevalence rates of chronic health conditions.



Almost all Class C and Regular Force Veterans who were VAC clients had one or more chronic physical health condition (95% and 92%) and half had a mental health condition (50% and 47%) almost always complicated by a comorbid chronic physical

condition (49% and 44% had co-occurring mental and physical health conditions). Most CAF Veterans who participate in VAC programs do so owing to chronic health problems and related disability. As of March 2013, the time of this survey, 98% of all VAC serving and Veteran CAF clients had disability benefits for service-related<sup>22</sup> medical diagnoses of physical or mental health conditions and permanent disability<sup>23</sup>.

The survey showed that a significant proportion but not all Reserve Class C and Regular Force Veterans with health, disability and well-being challenges were participating in VAC programs. Less than 10% of non-clients had comorbidity of physical and mental health conditions. demonstrating that while Veterans with more complex health conditions are largely reached by VAC programs, some are not.

Characteristics of Reserve Class C and Regular Force Veterans who were participating in VAC programs at the time of the survey are shown in Appendix Tables 3-4 and shown below for selected indicators. In general, VAC clients in both groups were similar. More Reserve Class C

<sup>&</sup>lt;sup>21</sup> Based on data linkage of the whole sampling frame, not the survey sample: too few Class A/B respondents in the survey sample (< 30) were VAC clients to calculate a reliable estimate.

<sup>&</sup>lt;sup>22</sup> "Service-related" can mean either caused or aggravated by a factor in service or arose in service but not necessarily caused or aggravated by a factor in service. <sup>23</sup> VAC Quarterly Fact Sheet March 2013, VAC Statistics Directorate.

VAC clients were women (30%) compared to non-clients (22%). For Regular Force Veterans similar proportions were women; 12% of clients compared to 14% of non-clients.

Compared to non-clients (Appendix Tables 3 and 5), VAC clients:

- Were older on average than non-clients:
- 48 vs. 39 years for Reserve Class C and 48 vs. 41 years for Regular Force Veterans.
- More often were unemployed: 13% vs. 4% for Reserve Class C and 9% vs. 6% for Regular Force Veterans.
- Were not more likely to have low income: Too few for reliable estimate vs. 8% for Reserve Class C and 5% vs. 9% for Regular Force Veterans.
- Were more likely to have 20 or more years of service: 39% vs. 18% for Reserve Class C and 64% vs. 39% for Regular Force Veterans.
- Much more often experienced a self-reported difficult transition to civilian life: 56% vs. 18% Reserve Class C and 47% vs 17% Regular Force.
- Much more often had chronic physical health conditions: 95% vs. 63% Reserve Class C and 92% vs 63% Regular Force.
- Much more often had mental health conditions:
  - 50% vs. 10% Reserve Class C and 47% vs 11% Regular Force.
- Much more often had co-occurring (comorbid) physical and mental health conditions: 49% vs. 9% for Reserve Class C and 44% vs. 9% for Regular Force.
- Much more often had service career-limiting employment limitations:
  - Medical release: 52% vs. 4% Reserve Class C and 49% vs 5% Regular Force.
- Were experiencing low physical and mental health-related quality of life (SF-12 Short Form Health Survey)<sup>24</sup>:
  - Physical component score 39 vs. 53 for Reserve Class C and 39 vs. 53 for Regular Force Veterans.
  - Mental component score 45 vs. 52 for Reserve Class C and 47 vs. 54 for Regular Force Veterans.
- Much more often had disability measured as activity limitations:
  - Reduction in activity in a major life domain: 93% vs. 29% for Reserve Class C and 88% vs. 28% for Regular Force Veterans.
  - Needing assistance with at least one basic or instrumental activity of daily living: 47% vs. 6% years for Reserve Class C and 46% vs. 6% for Regular Force Veterans.
- More often had markers of stress, difficulty coping and satisfaction with life
  - Most days extremely/quite a bit stressful: 42% vs. 23% for Reserve Class C and 30% vs. 19% for Regular Force Veterans.
  - Work stress past year quite a bit/extreme: 39% vs. 27% for Reserve Class C and 28% vs. 20% for Regular Force Veterans.
- More often had a regular medical doctor:
  - 90% vs. 76% years for Reserve Class C and 87% vs. 77% for Regular Force Veterans.
- More often had unmet health care needs:
  - 32% vs. 13% years for Reserve Class C and 25% vs. 11% for Regular Force Veterans.

<sup>&</sup>lt;sup>24</sup> SF-36 scores correspond reasonably well with SF-12 scores (Thompson et al 2013). Small decreases in either the SF-12 physical or mental component scores signal large decreases in HRQoL.

In summary, these findings demonstrate that a significant proportion of Class C Reserve and Regular Force Veterans who had chronic health and disability problems were seeking assistance from VAC, and that many VAC clients had a significant degree of case complexity. In other words, many of the Veterans served by VAC front line staff have the most complex types of health and disability problems.

	Reserve		Regula	
Characteristic/Indicator	Clients 17%	Non-Clients 83%	Clients 35%	Non-Clients 65%
Mean age	48 yrs	39 yrs	48 yrs	41 yrs
Female	30% (24-38%)	22% (19-25%)	12% (9-14%)	14% (12-17%)
Unemployment rate	13% (8-21%)	4% (3-6%)	9% (6-12%)	6% (4-8%)
Worked at job or business past year	59% (52-66%)	91% (88-92%)	62% (59-66%)	86% (84-88%)
Income below LIM	F	8% (6-10%)	5% (4-7%)	9% (7-11%)
Length of service				
< 2 years	F	F	F	32%
2 to 9 years	F	46%	15%	22%
10 to 19 years	43%	35%	20%	7%
≥ 20 years	39%	18%	64%	39%
Release type				
Medical	52% (45-60%)	4% (3-6%)	49% (46-53%)	5% (4-7%)
Voluntary	29% (23-36%)	72% (68-75%)	30% (27-33%)	64% (62-67%)
Retirement Age, Involuntary, Service	. ,		· · · ·	
Complete	19%	24%	21%	30%
Rank				
Officers and Cadets	18%	17%	14%	23%
Senior NCM	33%	18%	36%	19%
Junior NCM	49%	59%	44%	23%
Privates and Recruits	F	6%	7%	36%
Enrolment Era				
≤ 1970s	17%	8%	32%	23%
1980s	26%	13%	41%	20%
1990s	47%	48%	14%	14%
≥ 2000s	F	32%	13%	44%
Service Environment				
Air Force	F	5%	29%	30%
Army	72%	82%	57%	52%
Navy	F	13%	14%	17%
Adjustment to Civilian Life				
Very or moderately easy	31% (24-38%)	67% (64-70%)	38% (35-42%)	66% (63-69%)
Neither difficult nor easy	F	15% (13-18%)	15% (12-18%)	17% (15-20%)
Very or moderately difficult	56% (48-63%)	18% (15-20%)	47% (43-50%)	17% (14-19%)
Self-Rated Health				
Very good or excellent	21%	69%	25%	68%
Good	F	F	39%	25%
Fair or poor	41%	7%	37%	8%
Self-Rated Mental Health				
Very good or excellent	35%	74%	41%	73%
Good	29%	21%	26%	21%
Fair or poor	36%	6%	33%	6%
SF-12 Health-related quality of life				
Mean PCS (physical HRQoL)	39 (37-41)	53 (53-54)	39 (38-40)	53 (52-53)
Mean MCS (mental HRQoL)	45 (43-47)	52 (52-53)	47 (46-48)	53 (53-54)
Chronic Health Conditions				
	95% (90-97%)	62% (59-66%)	92% (89-94%)	63% (60-66%)
Any chronic physical health condition			( )	
Any chronic physical health condition Any chronic mental health condition	50% (43-58%)	10% (8-13%)	47% (44-51%)	11% (9-13%)
	50% (43-58%) 49% (41-56%)	10% (8-13%) 9% (7-12%)	47% (44-51%) 44% (41-48%)	11% (9-13%) 10% (8-12%)

	Reserve Class C		Regula	r Force
	Clients	Non-Clients	Clients	Non-Clients
Characteristic/Indicator	17%	83%	35%	65%
Disability				
Reduction of activity in a major life domain	93% (87-96%)	29% (26-33%)	88% (86-90%)	28% (26-31%)
Need for assistance with at least one ADL	47% (40-55%)	6% (4-8%)	46% (42-50%)	6% (5-7%)
Pain/discomfort limits activities	65% (57-72%)	15% (12-18%)	60% (56-63%)	13% (11-15%)
Psychological distress interferes with activity (a lot, some or a little)	69% (62-76%)	33% (29-36%)	65% (62-69%)	28% (25-31%)
Social Provisions Scale (Mean, low 0 to high	22	20	20	25
40)	33	36	32	35
Sense of community belonging, strong	44%	63%	47%	63%
Satisfied with life	67%	93%	74%	92%
Low mastery	F	F	4%	F
Most days extremely/quite a bit stressful	42%	23%	30%	19%
Work stress past year quite a bit/extreme	39%	27%	28%	20%
Smoking daily	F	13%	19%	15%
Heavy drinking	F	30%	26%	24%
Prescription Drug Insurance	97%	87%	97%	90%
Dental Insurance	77%	79%	90%	85%
Eye Glasses Insurance	82%	71%	89%	82%
Regular medical doctor	90% (85-94%)	76% (73-79%)	87% (84-89%)	77% (74-80%)
Home care	F	F	17%	F

F = Sample size <30 so estimate considered unreliable.

Proportions not adjusted for age, gender and other differences.

#### Veterans Compared to the Canadian General Population

The following table compares the well-being of CAF Veterans to the Canadian general population. General population prevalences were adjusted to match the age and gender profiles of each Veteran group separately. This adjustment only allows comparison between the Veteran group and the general population and indirect comparisons across the Veteran groups and it artificially distorts the Canadian general population prevalences.

- All three Veteran groups had higher prevalences of being married or in commonlaw relationships and of high school graduation in terms of highest education attained.
- All three Veteran groups had similar rates of unemployment and lower rates of low income compared to the Canadian general population.
- Reserve Class A/B Veterans were largely not different from the Canadian general population. They had slightly higher prevalence back problems and gastrointestinal conditions, and slightly lower prevalence of life stress. In all other respects they were not different from the general population. They had higher rates of both high school and post-secondary graduation. Sample sizes were too small for reliable estimates of some health and disability indicators, suggesting very low prevalence ratios.
- Reserve Class C and Regular Force Veterans were different from the general population in several respects. They both had lower prevalences of excellent/very good self-rated mental health and higher prevalences of arthritis, back problems, gastrointestinal problems, obesity, hearing problems, pain or discomfort, mood disorders, anxiety disorders, and activity limitations (both types). They were less often satisfied with life than Canadians in the general population.

- Regular Force Veterans were least like the general Canadian population after adjusting the general population prevalences to match the age-gender structure of the Regular Force Veterans. They had lower prevalences of excellent/very good self-rated health and self-rated mental health and higher prevalences of arthritis, back problems, gastrointestinal problems, cardiovascular disorders, migraine, obesity, hearing problems, pain or discomfort, mood disorders, anxiety disorders, and activity limitations. They less often had a strong sense of community belonging and were less often satisfied with life than Canadians in the general population, but less often had quite a bit or extreme life stress.
- All three Veteran groups were less often daily smokers than the general population, and none were different from the general population in heavy drinking prevalence.
- Compared to the general population, Reserve C and Regular Force Veterans more often felt they had a need for health care but did not receive it. There are many possible reasons for this type of unmet health care need, including deciding not to seek needed health care or encountering a barrier (see the unmet health care needs section above). It is not unreasonable to hypothesize that the prevalence of unmet need is correlated with the prevalence of health conditions in a population.

Indicator	Reserve Class A/B 2003-2012 Wt% (95% C.I.)	Reserve Class C 2003-2012 Wt% (95% C.I.)	Regular Force 1998-2012 Wt% (95% C.I.)
Married or commonlaw	56.3% (51.8-60.8%) <sup>™</sup>	71.8% (68.7-74.7%) <sup>™</sup>	73.8% (71.6-75.9%) <sup>™</sup>
Canadian General Population, Adjusted <sup>1</sup>	49.0% (48.4-49.6%)	67.9% (67.3-68.5%)	68.7% (68.2-69.2%)
High school graduate	25.0% (21.329.3%) <sup>™</sup>	25.9% (23.2 <b>-28.9%)</b> <sup>™</sup>	42.6% (40.3-45.0%) <sup>™</sup>
Canadian General Population, Adjusted <sup>1</sup>	18.9% (18.4-19.4%)	16.5% (16.0-17.0%)	17.0% (16.5-17.5%)
Post-secondary certification/graduate	73.1% (68.8-77.0%) <sup>™</sup>	71.0% (67.9-73.9%) <sup>E</sup>	52.3% (50.0-54.7%) <sup>∟</sup>
Canadian General Population, Adjusted <sup>1</sup>	64.4% (63.8-65.0%)	69.2% (68.6-69.8%)	67.1% (66.5-67.7%)
Unemployment rate	5.9% (4.0-8.7%) <sup>E</sup>	5.4% (4.0-7.2%) <sup>E</sup>	6.9% (5.6-8.5%) <sup>E</sup>
Canadian General Population, Adjusted <sup>2</sup>	7.4% (3.4-11.4%)	6.3% (0-13.3%)	6.4% (0-13.4%)
Income below Low Income Measure	12.0% (9.2-15.4%)	7.8% (6.1-9.8%)	7.6% (6.3-9.1%)
Canadian General Population, Adjusted <sup>3</sup>	18.7 (18.2, 19.2)% <sup>3</sup>	15.3 (14.8, 15.8)% <sup>3</sup>	15.1 (14.6, 15.6)% <sup>3</sup>
Self-rated health very good/excellent	69.3% (65.0-73.4%) <sup>E</sup>	61.2% (58.0-64.3%) <sup>E</sup>	52.6% (50.2-54.9%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	67.1% (66.5-67.7%)	63.8% (63.2-64.4%)	61.5% (60.9-62.1%)
Self-rated mental health v. good/excellent	73.7% (69.5-77.5%) <sup>E</sup>	67.2% (64.1-70.2%) <sup>W</sup>	61.6% (59.3-63.9%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	74.3% (73.8-74.8%)	73.1% (72.6-73.6%)	72.8% (72.3-73.3%)
Arthritis	5.9% (4.1-8.3%) <sup>E</sup>	16.1% (13.9-18.6%) <sup>w</sup>	22.4% (20.7-24.3%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	4.5% (4.1-4.9%)	8.8% (8.4-9.2%)	10.8% (10.4-11.2%)
Back problems	17.0% (13.9-20.6%) <sup>w</sup>	31.5% (28.6-34.6%) <sup>w</sup>	34.5% (32.4-36.7%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	13.1% (12.6-13.6%)	17.2% (16.7-17.7%)	18.8% (18.3-19.3%)
Cardiovascular conditions	7.1% (5.2-9.7%) <sup>E</sup>	14.1% (12.1-16.5%) <sup>E</sup>	19.3% (17.6-21.0%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	6.2% (5.7-6.7%)	12.8% (12.3-13.3%)	16.8% (16.3-17.3%)
Gastrointestinal conditions	7.4% (5.4-10.2%) <sup>w</sup>	8.5% (6.8-10.5%) <sup>w</sup>	8.6% (7.4-10.0%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	4.3% (4.0-4.6%)	5.3% (5.0-5.6%)	5.2% (4.9-5.5%)
Respiratory conditions	F	7.3% (5.8-9.2%) <sup>E</sup>	7.2% (6.1-8.5%) <sup>E</sup>
Canadian General Population, Adjusted <sup>1</sup>	8.7% (8.4-9.0%)	8.2% (7.9-8.5%)	8.1% (7.8-8.4%)
Migraine	9.8% (7.3-12.9%) <sup>E</sup>	11.1% (9.2-13.3%) <sup>E</sup>	14.1% (12.5-15.9%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	8.5% (8.1-8.9%)	9.4% (9.0-9.8%)	8.2% (7.8-8.6%)
Cancer	F	F	1.6% (1.2-2.2%) <sup>E</sup>
Canadian General Population, Adjusted <sup>1</sup>	0.5% (0.3-0.7%)	1.0% (0.8-1.2%)	1.3% (1.1-1.5%)

Indicator	Reserve Class A/B 2003-2012 Wt% (95% C.I.)	Reserve Class C 2003-2012 Wt% (95% C.I.)	Regular Force 1998-2012 Wt% (95% C.I.)
Obesity	17.8% (14.6-21.6%) <sup>E</sup>	23.5% (20.8-26.4%) <sup>w</sup>	26.1% (24.1-28.2%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	15.3% (14.8-15.8%)	19.0% (18.5-19.5%)	20.2% (19.7-20.7%)
Hearing problem	F	4.7% (3.5-6.3%) <sup>w</sup>	8.5% (7.4-9.8%) <sup>w</sup>
Canadian General Population, Adjusted⁴	1.1% (0.8-1.4%)	1.6% (1.3-1.9%)	2.2% (1.9-2.5%)
Chronic pain or discomfort	13.2% (10.4-16.5%) <sup>E</sup>	28.1% (25.3-31.1%) <sup>w</sup>	33.8% (31.7-36.0%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	14.9% (14.4-15.4%)	18.7% (18.2-19.2%)	20.1% (19.6-20.6%)
Mood disorder	F	12.1% (10.2-14.4%) <sup>w</sup>	17.1% (15.4-19.0%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	6.0% (5.7-6.3%)	6.6% (6.3-6.9%)	6.3% (6.0-6.6%)
Anxiety disorder	F	8.1% (6.5-10.0%) <sup>w</sup>	11.1% (9.7-12.7%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	5.9% (5.6-6.2%)	5.9% (5.6-6.2%)	5.6% (5.3-5.9%)
Restriction of activity in major life domains	22.7% (19.1-26.7%) <sup>E</sup>	40.0% (36.8-43.2%) <sup>W</sup>	49.5% (47.2-51.8%) <sup>W</sup>
Canadian General Population, Adjusted⁵	19.1% (18.4-19.8%)	22.6% (21.9-23.3%)	24.6% (23.9-25.3%)
Needs help with an activity of daily living	F	12.6% (10.7-14.9%) <sup>w</sup>	20.1% (18.4-22.0%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	4.5% (4.0-5.0%)	5.9% (5.4-6.4%)	6.0% (5.5-6.5%)
Life stress quite a bit/extremely	17.0% (13.9-20.6%) <sup>в</sup>	25.9% (23.2-28.9%) <sup>E</sup>	22.5% (20.6-24.5%) <sup>B</sup>
Canadian General Population, Adjusted <sup>1</sup>	22.8% (22.3-23.3%)	25.7% (25.2-26.2%)	25.8% (25.3-26.3%)
Satisfaction with life, very or satisfied	93.8% (91.2-95.7%) <sup>E</sup>	88.7% (86.6-90.6%) <sup>w</sup>	85.8% (84.0-87.4%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	93.8% (93.5-94.1%)	92.7% (92.4-93.0%)	92.1% (91.8-92.4%)
Sense of community belonging strong	57.4% (52.9-61.9%) <sup>E</sup>	60.0% (56.8-63.2%) <sup>E</sup>	57.5% (55.2-59.8%) <sup>w</sup>
Canadian General Population, Adjusted <sup>1</sup>	57.9% (57.3-58.5%)	61.0% (60.4-61.6%)	62.1% (61.5-62.7%)
Daily smoking	10.3% (7.8-13.4%) <sup>в</sup>	13.4% (11.3-15.9%) <sup>B</sup>	16.5% (14.7-18.4%) <sup>B</sup>
Canadian General Population, Adjusted <sup>1</sup>	19.8% (19.4-20.2%)	19.6% (19.2-20.0%)	20.4% (20.0-20.8%)
Heavy drinking	31.7% (27.6-36.1%) <sup>E</sup>	27.8% (24.9-30.9%) <sup>E</sup>	24.7% (22.7-26.8%) <sup>E</sup>
Canadian General Population, Adjusted <sup>1</sup>	35.2% (34.7-35.7%)	26.6% (26.1-27.1%)	27.0% (26.5-27.5%)
Unmet health care need: Ever a time in past year where felt that health care needed but did not receive it.	11.6% (9.0-14.8%) <sup>E</sup>	15.9% (13.7-18.4%) <sup>w</sup>	15.8% (14.1-17.6%) <sup>w</sup>
Canadian General Population, Adjusted <sup>2</sup>	11.8% (11.3-12.3%)	12.2% (11.7-12.7%)	11.4% (10.9-11.9%)

Footnotes:

C.I. = Confidence Interval.

F = Sample size <30 so estimate considered unreliable.

Sources of comparator general Canadian population prevalences, age-sex standardized to Veteran group's age and sex distribution:

<sup>1</sup>2011-12 Canadian Community Health Survey (CCHS).

<sup>2</sup>March 2013 Labour Force Survey; confidence intervals conservatively estimated as the prevalence  $\pm$  two times the coefficient of variation.

<sup>3</sup>2011 Survey on Labour Income and Dynamics (SLID); confidence intervals are approximate based on unadjusted confidence intervals.

<sup>4</sup>2010 Canadian Community Health Survey (CCHS).

<sup>5</sup>CCHS 2012.

Comparisons to Canadian general population, based on comparing confidence intervals:

- M Prevalence higher in Veterans.
- L Prevalence lower in Veterans.
- **E** Prevalence in Veterans not different.
- **B** Prevalence in Veterans indicates that they were better off on average.

W - Prevalence in Veterans indicates that they were worse off on average.

#### LASS 2013 Compared to the 2010 Survey on Transition to Civilian Life

Both STCL 2010 and LASS 2013 surveyed Regular Force Veterans who were released since 1998-and most of the respondents were unique individuals.

In the STCL 2010, the well-being of Regular Force Veterans who released in 1998-2007 was

different from the well-being of Canadian general population (Thompson et al. 2011). Although they were better off on average for having a regular medical doctor, they were worse off for other indicators. The prevalences of arthritis, back problems, gastrointestinal conditions, obesity, anxiety and disability were considerably higher in Veterans. They were also worse off for self-rated health and mental health, satisfaction with life and sense of community belonging. The STCL 2010 findings have been analyzed in depth in more than 20 reports and journal publications to date (see References).

Considering the 3-year difference in mean age (44 years old in STCL 2010<sup>25</sup> and 47 years old in 2013), both surveys had similar findings for Regular Force Veterans who released in 1998-2007 (Appendix Table 7):

- The proportions of women were the same (12% in both).
- The proportions who were VAC clients were the same (34% in both).
- The prevalences of individual chronic pain conditions were very similar in the two surveys, generally within 1-2 percentage points.
- The prevalence of having one or more chronic physical health condition was different (81% in 2010 vs. 71% in 2013) owing to differences in the way chronic pain was assessed. The prevalence of chronic pain/discomfort using the STCL question was 64%, but in LASS 2013 it was 36%. In STCL 2010 all respondents were asked whether they had pain or discomfort that was always present or reoccurred from time to time. In LASS 2013 all respondents were asked whether they were usually free of pain or discomfort and it was presumed that those who said no therefore usually had pain or discomfort. This suggests that the latter method captures fewer people with chronic pain or discomfort. The measure used in LASS 2013 was chosen to enable comparability with Canadian general population surveys.
- The hearing questions also differed between the two surveys, yielding quite different estimates for having a hearing problem: 28% in STCL 2010 versus 9% in LASS 2013. In STCL 2010, respondents with hearing problems had answered yes to either not being able to hear without the use of a hearing aid or assistive device or yes to difficulty hearing. In the LASS 2013 hearing question module, the initial question more conservatively eliminated from having a hearing problem all those who answered "*yes*" to "*Are you usually able to hear what is said in a group conversation with at least three other people without a hearing aid?*" STCL 2010 cast a wider net, capturing those who had a hearing problem but were able to hear in a group conversation without a hearing aid.
- The prevalence of anxiety disorders (10% vs. 11%) and PTSD (11% vs. 13%) was roughly similar in the two surveys.
- The prevalence of mood disorders much lower in 2010 (3%) than 2013 (17%) however the 2010 questionnaire did not include the word "depression" in that question as is usual in Canadian population surveys, so presumably many with depression did not realize that they had a mood disorder.
- The prevalence of past-year suicidal ideation was the same (5.8%).
- The prevalences of most other sociodemographic and military characteristics and indicators of health and well-being appeared to be roughly similar.

<sup>&</sup>lt;sup>25</sup>Previous STCL 2010 publications reported an average age of 46 years, however it has been discovered that this was based on sample data not weighted data. When weighting was applied, the average age was found to be 44 years.

#### Regular Force Veterans Released in 2008-2012 Compared to 1998-2007

LASS 2013 extended data on the health and well-being of Regular Force Veterans beyond STCL 2010 by including Regular Force Veterans who released after 2007 (Appendix Table 7). The mean age of those released in 2008-12 was 39 years, younger than those who released in 1998-2007: 47 LASS 2013.

Like Regular Force Veterans who were released in 1998-2007 in LASS 2013, those who were released in 2008-2012 also had notable prevalences of health and disability problems, even though they were considerably younger on average. Those who released in 2008-12 had the following characteristics compared to those who released in 1998-2007:

- Similar proportion of women (15% vs. 13% in LASS 2013).
- More often single/never married (27% vs. 10%).
- Similar prevalence of difficult adjustment to civilian life (29% vs. 26%).
- Considering their younger average age, they had notable prevalences of poor self-rated health, poor self-rated mental health, physical and mental health conditions and disability assessed as both reduction of activities in major life domains and as basic and instrumental activities of daily living.

# Discussion

The LASS 2013 survey was the first comprehensive study of the health and well-being of CAF Primary Reserve Force Veterans and extended the comprehensive STCL 2010 study of contemporary Regular Force Veterans. The LASS 2013 survey confirmed the heterogeneity of CAF Regular Force Veterans: they are all ages and all ranks with a wide variety of years of service and states of health and well-being. Reserve Class A/B Veterans had very similar health and well-being compared to Canadians in the general population, and very few of them had accessed VAC programs. Primary Reserve Class C Veterans were more like Regular Force Veterans in terms of sociodemographics, military characteristics, health and well-being and participation in VAC programs. Both Primary Reserve Class C and Regular Force Veterans had worse well-being on average compared to the general Canadian population in terms of several health indicators.

#### Strengths

The LASS 2013 survey has a number of important strengths:

- Like STCL 2010, the data linkage process used by Statistics Canada enabled confidential, objective identification and contacting of CAF Reserve and Regular Force personnel.
- The survey used generous sample sizes and had very good response rates and high share rates, so it is considered representative of the Veteran groups sampled.
- Respondent weightings provided by Statistics Canada account for the stratified sample design and for differences between respondents and non-respondents in the calculation of prevalences and proportions.
- The questionnaire used questions from national Canadian population health studies and validated to varying degrees in a number of studies.
- Statistics Canada has well-developed systems for conducting computer-assisted telephone interviews in national population studies and protecting confidentiality.

- Use of interviewers outside VAC and DND reassured respondents and offered them the choice of whether to share their responses with the two departments.
- Researchers who analyzed the survey data were not aware of respondents' identities.

#### Limitations

All research studies are subject to limitations. For this initial report:

- Comparisons across the three groups of Veterans will require further analysis because they differ in age and gender composition and other important characteristics that can influence prevalences for health and well-being indicators.
- LASS 2013 was a cross-sectional, point in time study, so conclusions cannot be drawn about causal relationships between factors such as military service and participation in VAC programs; however these findings provide valuable evidence for hypotheses about causation, particularly in conjunction with findings from other studies.
- Primary Reserve Force Veterans will have had variable lengths of time in Reserve A, B or C service. Many Regular Force Veterans will have had some Reserve Force service, making it difficult to disentangle effects of the two types of service.
- Findings cannot necessarily be generalized to all Veterans, only those released during this time period; however the findings are considered representative of Veterans who released in those periods. Concordance between the STCL 2010 and LASS 2013 surveys for Regular Force Veterans who released in 1998-2007 was reassuring on this point.
- Most of the health and well-being findings are based on self-report, however most of the self-report indicators have been used for many years in many studies and their strengths and limitations are reasonably well understood. For example, there is evidence of reasonable agreement between self-reported diagnosed physical and mental health conditions and clinical records for several conditions. The questions about self-reported diagnosed mental health conditions were supplemented with the question on self-rated mental health, the Primary Care PTSD symptom-based screening tool and the K10 measure of psychological distress.
- While Reserve Force personnel with only Class A service were not surveyed, it is felt that the findings for Class A/B Veterans likely apply to the majority of those with Class A or B service since most Reservists have some training for periods that by the time they leave service qualify them as Class B consistent with the definitions described in the Methods section.

#### **Practical Implications**

The findings of this initial descriptive analysis provide evidence to support the needs of CAF Reserve and Regular Force personnel in transition to civilian life for both (1) care of individuals by service providers and (2) development of policies and programs before and after leaving service. The findings will assist DND, CAF and VAC in mitigating problems in transition to civilian life and preventing health and well-being problems later in the Veteran life course.

#### **Further Analysis and Research**

The descriptive findings in this report will enable researchers to develop hypotheses and conduct further analysis of the LASS 2013 survey data to provide greater insights into the health and well-being of CAF Veterans. Differences and similarities between the Veteran groups will need to be confirmed with statistical tests to account for chance. Further analyses will be

required to account for confounding, meaning the simultaneous effects of multiple factors, in order to understand why differences were found. Comparisons with other Canadians in high stress occupations would put the findings for Class C and Regular Force Veterans in perspective. The findings will also enable researchers to plan new studies to close gaps in knowledge about CAF Veterans and their families. Longitudinal studies that are being planned will yield much clearer understanding of CAF Veterans' health and well-being over their life courses.

# References

Bliese PD, Wright KM, Adler AB, Cabrera O, Castro CA, Hoge CW. Validating the primary care posttraumatic stress disorder screen and the posttraumatic stress disorder checklist with soldiers returning from combat. J Consult Clin Psychol 2008 Apr;76(2):272-281

Mawani FN, Gilmour H. Validation of self-rated mental health. Ottawa, ON: Statistics Canada. Health Reports. Catalogue no. 82-003-XPE. 2010;21(3).

MacLean MB, VanTil L, Thompson JM, Pedlar D, Poirier A, Adams J, Hartigan S, Sudom K. Life After Service Study: Data Collection Methodology for The Income Study and The Transition to Civilian Life Survey. Veterans Affairs Canada Research Directorate Technical Report. April 29 2010: 79 p.

MacLean MB, VanTil L, Kriger D, Sweet J, Poirier A, Pedlar D. Well-being of Canadian Armed Forces Veterans: Canadian Community Health Survey (2003). Research Directorate Technical Report. Veterans Affairs Canada. 2013 May 10;65p.

MacLean MB, Van Til L, Thompson J, Sweet J, Poirier A, Sudom K, Pedlar D. Post-military adjustment to civilian life: Potential risk and protective factors. Phys Ther June 2014.

Navaneelan T, Janz T. Adjusting the scales: Obesity in the Canadian population after correcting for respondent bias. Ottawa, ON: Statistics Canada. Health at a Glance. May 2014.

Pedlar DJ, Thompson JM. Research in the life courses of Canadian military Veterans and their families. Chapter 2 in: A. Aiken & S.A.H. Bélanger (Eds.): *Shaping the Future, Military and Veteran Health Research*. Canadian Defence Academy Press. Kingston, Ontario. 2011; pages 15-31.

Thompson JM, Hopman W, Sweet J, VanTil L, MacLean MB, VanDenKerkhof E, Sudom K, Poirier A, Pedlar D. Health-Related Quality of Life of Canadian Forces Veterans After Transition to Civilian Life. Can J Pub Health. February 2013.

Thompson JM, MacLean MB, Van Til L, Sudom K, Sweet J, Poirier A, Adams J, Horton V, Campbell C, Pedlar D. Survey on Transition to Civilian Life: Report on Regular Force Veterans. Research Directorate, Veterans Affairs Canada, Charlottetown, and Director General Military Personnel Research and Analysis, Department of National Defence, Ottawa. 04 January 2011:103 p.

Thompson JM, Pranger T, Poirier A, Sweet J, Iucci S, Ross D. Life After Service Studies (LASS) Secondary Analysis (2012 Series Release 9) Mental health findings in the 2010 Survey on transition to civilian life.. Research Directorate. Veterans Affairs Canada Technical Report. 2012 Aug 01;42p.

Thompson JM, Pranger T, Sweet J, Poirier A, McColl MA, MacLean MB, Besemann M, Shubaly C, Moher D, Pedlar D. Life After Service Studies (LASS) Secondary Analysis (2013 Series Release 14). Disability findings from the 2010 survey on transition to civilian life. Research Directorate. Veterans Affairs Canada Technical report. 2013 Oct 18;68p.

Thompson JM, Zamorski M, Sweet J, VanTil L, Sareen J, Pietrzak R, Hopman W, MacLean MB, Pedlar D. Roles of physical and mental health in suicidal ideation in Canadian Armed Forces Regular Force Veterans. Can J Pub Health. 2014.

# Appendices

# Appendix Table 1. Definitions of characteristics and indicators in the LASS 2013 survey.

Indicator	Source or Survey Question Comparator
1. From Data Lin	kage Using Administrative Datasets
Participation in V	VAC Programs
VAC Client	VAC dataset."VAC client" means a Veteran who was in receipt of benefits from VAC as of March 2013. This includes a Veteran who received a disability award (disability award or pension) in the past because they would have ongoing eligibility for health care benefits. It would not include a Veteran who had participated in a program in the past and was no longer in receipt of benefits, however only a very small number of VAC clients would be in that category. For example, 98% of CAF VAC clients had disability benefits in March 2013 (VAC Quarterly Fact Sheet) and of the remainder some would have been in receipt of other benefits when the data linkage was made.
Sociodemograp	hics
Age	DND dataset and survey. Age at survey.
Sex	DND dataset and survey (asked by interviewer if not obvious from name). Male or female.
Military Characte	eristics
Year of Enrolment	DND dataset.
Year of Release	DND dataset.
Type of Service	DND dataset. Respondents were classified as Regular Force if they had any Regular Force service and Reserve Force if they had only served in the Primary Reserve Force.
Length of Service	DND dataset. For those classified as Regular Force, their Reserve Force service was not included in length of service. For those classified as Reserve Force, all of their Reserve Force service periods were included. For those with multiple enrollment and release dates, the time between periods of service was not counted in length of service. Respondents were classified as Regular Force if they had any Regular Force service and Reserve Force if they had only served in the Primary Reserve Force. For those classified as Regular Force, their Reserve Force service was not included in length of service. For those classified as Regular Force, all of their Reserve Force service periods were included. For those with multiple enrollment and release dates, the time between periods of service was not counted in length of service.
Release Type	DND dataset. Voluntary, Medical, Retirement Age, Involuntary and Service Complete. Same as STCL 2010. "Voluntary" includes Voluntary Immediate Annuity, Voluntary Fixed Service and Voluntary Other Causes. "Medical release" means that the Veteran was released owing to career-limiting medical employment limitations; includes medical disabled member and medical disabled military occupation codes. "Involuntary release" includes misconduct dismissal, misconduct service, illegally absent, fraudulent enrollment, unsatisfactory conduct, unsatisfactory performance, not advantageously employed, death and transfer out. "Service complete" means completed service for which required.

Indicator	Source or Survey Question Comparator	
Last Rank	<ul> <li>DND dataset. Same as STCL 2010.</li> <li>Senior officer – Major, Lieutenant Colonel, Colonel, General, Lieutenant Commander, Commander, Captain (N), Commodore, Admiral.</li> <li>Junior officer – Second Lieutenant, Lieutenant, Captain, Acting Sublieutenant, Sublieutenant, Lieutena (N).</li> <li>Cadet – Officer Cadet, Naval Cadet.</li> <li>Senior NCM – Sergeant, Warrant Officer, Master Warrant Officer, Chief Warrant Officer, Petty Officer First and Second Class, Chief Petty Officer First and Second Classes.</li> <li>Junior NCM – Corporal, Master Corporal, Leading Seaman, Master Seaman, Private, Able Seaman.</li> <li>Recruit – Private (Recruit), Private (Training), Ordinary Seaman.</li> </ul>	
Service Environment	DND dataset. Element or Service Environment: Army (Land), Air Force (Air), Navy (Sea).	
Military Occupation	<ul> <li>Last Military Occupation Code (MOC). The individual codes were grouped into 8 categories:</li> <li>1. Combat Arms</li> <li>2. Communications</li> <li>3. Maritime (Maritime, Maritime Communications, Maritime Technical)</li> <li>4. Aviation (Aviation, Aviation Technical)</li> <li>5. Admin/Logistics/Security (Admin/Logistics/Security/Intelligence/Emergency Services)</li> <li>6. Engineering/Technical (Engineering, Technical)</li> <li>7. Medical</li> <li>8. General Officer Specialist</li> <li>These occupation categories do not necessarily indicate deployment and combat exposure.</li> </ul>	

#### 2. From LASS 2013 Survey (Self-reported)

Socioeconomics	3	
Marital Status	Are you married, living common-law, widowed, separated, divorced, single/never married.	STCL 2010 CCHS 2012
Highest education attained	<ul> <li>What is the highest certificate, diploma or degree that you have <u>completed</u>? Less than high school diploma or its equivalent, High school diploma or a high school equivalency certificate, Trade certificate or diploma, College, CEGEP or other non-university certificate or diploma (other than trades certificates or diplomas), University certificate or diploma below the bachelor's level, Bachelor's degree (e.g. B.A., B.Sc., LL.B.), University certificate, diploma, degree above the bachelor's level.</li> <li>In further analyses we used: less than high school graduation, high school graduation bachelor's degree or higher.</li> </ul>	STCL 2010 CCHS 2012
Post secondary graduate	Derived by VAC using the question " <i>What is the highest certificate, diploma or degree that you have completed?</i> " and age at survey. Population aged 25 to 54 who have obtained a post-secondary certificate, diploma, or degree. The source for the general population is the 2006 Census (20% sample).	STCL 2010 CCHS 2012
Labour Force Participation	<ol> <li>Last week, did you work at a job or a business? Please include part-time jobs, seasonal work, contract work, self-employment, baby-sitting and any other paid work, regardless of the number of hours worked.</li> <li>Last week, did you have a job or business from which you were absent?</li> <li>In the past four weeks, did you do anything to find work?</li> <li>Statistics Canada derived variable: worked at a job or business, had a job but did not work (absent), did not have a job, permanently unable to work.</li> <li>We developed these 4 mutually exclusive categories from the above:</li> <li>Employed: yes to 1 or 2.</li> <li>Unemployed: yes to 3 or did not have a job in past week.</li> <li>Not in the labour force: Not working, not absent from a job, or did not do anything to find work.</li> <li>Unable to work: Permanently unable to work.</li> </ol>	STCL 2010 CCHS 2012
Job or business past year	Have you worked at a job or business at any time in the past 12 months? Yes/No.	CCHS 2012

Indicator	Source or Survey Question	Comparator
Main Activity Past Year	What has been your main activity in the past 12 months? Worked at a job or ran a business; Retired and not looking for work; Attended school or training; Looked for work; Cared or nurtured a family member or partner; Was disabled or on disability; Other, specify.	STCL 2010
Skills Transfer	To what extent do you agree with the following statement: The knowledge and skills I use at my current or most recent job are the same as the knowledge and skills used in my military service. Do you? Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree.	Not STCL 2010
Unemployment Rate	The unemployment rate is the number of unemployed persons aged 15 and older expressed as a percentage of the labour force aged 15 and older. Unemployed: Those who reported they did not work last week and were not absent from a job or business, and who said yes to " <i>In the past four weeks, did you do anything to find work?</i> " The unemployment rate for a particular group is the number of unemployed in that group expressed as a percentage of the labour force for that group. The labour force consists of people who are currently employed, and people who are unemployed but were available to work in the reference week and had looked for work in the past 4 weeks.	STCL 2010 and monthly Labour Force Survey
Number of persons in household	<ol> <li>Including yourself, how many persons usually live in your household?</li> <li>How many of these persons are 18 years or younger?</li> </ol>	STCL 2010 CCHS 2012
Low income (below LIM: Low Income Measure)	Proportion of the population with before-tax household incomes (or personal income if only one person in the household) below the Low Income Measure by household size. Derived by VAC from number of people living in the household, total household income during the year ending 2012 and corresponding LIM thresholds published by Statistics Canada for 2011 inflated to 2012. For the STCL, the before-tax Low Income Measure (LIM) of \$45,440 for a household size of four persons for 2011 as published in Statistics Canada Catalogue no. 75F0002M No. 002 was inflated to \$46,258 for the income year reported in LASS 2013 and converted to other household sizes using the formula provided by the same publication. The source of the general population comparison is a special tabulation from the Statistics Canada 2011 Survey of Labour and Income Dynamic for the working population whose before-tax household income is below the before-tax LIM.	STCL 2010 and 2011 SLID
Household Income	<ol> <li>What is your best estimate of the total household income received by all household members, from all sources, before taxes and deductions, during the year ending December 31, 2012? Income can come from various sources such as from work, investments, pensions or government. Examples include Employment Insurance, Social Assistance, Child Tax Benefit and other income such as child support, alimony and rental income.</li> <li>Can you estimate in which of the following groups your household income falls? Was the total household income during the year ending December 31, 2012? Asked of those who did not provide a specific dollar figure.</li> </ol>	STCL 2010 CCHS 2012
Income Adequacy	Household income divided by LIM for number of persons in the household, categorized into quintiles (Tjepkema et al. 2013).	STCL 2010
Personal Income	<ol> <li>What is your best estimate of your total personal income, before taxes and deductions, from all sources during the year ending December 31, 2012? Income can come from various sources such as from work, investments, pensions or government. Examples include Employment Insurance, Social Assistance, Child Tax Benefit and other income such as child support, alimony and rental income.</li> <li>Can you estimate in which of the following groups your personal income falls? Was your total personal income during the year ending December 31, 2012? Asked of those who did not provide a specific dollar figure.</li> </ol>	
Adjustment to C	Civilian Life	
Adjustment to civilian life	In general, how has the adjustment to civilian life been since you were released from the Canadian Forces? Very Difficult, Moderately Difficult, Neither Difficult nor Easy, Moderately Easy, Very Easy.	STCL 2010

Indicator	Source or Survey Question	Comparator
General Health		
Self-Rated health	Self-rated health (SRH). <i>In general, would you say your health is? Excellent, Very, good, Good, Fair, Poor.</i> There is also a second question asking how self-rated health is now compared to 1 year ago.	STCL 2010 CCHS 2012
Self-Rated mental health	Self-rated mental health (SRMH). <i>In general, would you say your mental health is? Excellent, Very good, Good, Fair, Poor.</i> Validated by Mawani and Gilmour (2010).	STCL 2010 CCHS 2012
Health-related quality of life (SF-12)	QualityMetric's SF-12 Health Survey (Short-Form 12-Item Health Survey version 2) is a measure of self-reported, health-related quality of life (HRQoL) or functional general health. Version 2 includes physical (PCS) and mental (MCS) component summary scores and 8 subscales. Scores derived using QualityMetric's computer scoring software accounting for survey sampling weights.	STCL 2010 (V.1)
Physical Health		
(heart disease, e condition (asthma	ealth Condition: Any one of: musculoskeletal condition (arthritis or back problem), card ffects of stroke or high blood pressure), gastrointestinal condition (ulcer or bowel disorder a or chronic obstructive pulmonary disease [COPD]), central nervous system condition traumatic brain injury), urinary incontinence, diabetes, cancer, obesity, hearing problem	er), respiratory (migraine, dementia
Chronic physica lasted 6 months	al health conditions diagnosed by a health professional that are expected to last os or more:	or have already
Musculoskeletal	Conditions:	
Arthritis	Do you have arthritis, excluding fibromyalgia?	STCL 2010 CCHS 2012
Back Problems	Do you have back problems, excluding fibromyalgia and arthritis?	STCL 2010 CCHS 2012
Cardiovascular C	Conditions:	
High Blood Pressure	Do you have high blood pressure? Have you ever been diagnosed with high blood pressure? We did not include ever having been diagnosed with high blood pressure in the initial analyses.	STCL 2010 CCHS 2012
Heart Disease	Do you have heart disease?	STCL 2010 CCHS 2012
Stroke effects	Do you suffer from the effects of a stroke?	STCL 2010 CCHS 2012
Gastrointestinal (	Conditions:	
Bowel Disorder	Do you suffer from a bowel disorder such as Crohn's" s Disease, ulcerative colitis, Irritable Bowel Syndrome or bowel incontinence? There is an additional question asking for the type of bowel disease.	STCL 2010 CCHS 2012
Ulcers	Do you have intestinal or stomach ulcers?	STCL 2010 CCHS 2012
Respiratory Cond	ditions:	
Asthma	Do you have asthma? There are additional questions on asthma treatment.	STCL 2010
COPD	Do you have chronic bronchitis, emphysema or chronic obstructive pulmonary disease or COPD? Asked of those aged 35 and older.	CCHS 2012 STCL 2010 CCHS 2012
Neurological Cor	nditions:	
Migraine	Do you have migraine headaches?	CCHS 2012
Dementia	Do you have Alzheimer's Disease or any other dementia?	CCHS 2012

Indicator	Source or Survey Question	Comparator
TBI Effects	Do you suffer from the effects of a traumatic brain injury (TBI) or concussion? (Yes, Maybe and No). Asked after mood disorder in this survey but in the 2013 CAF mental health survey it was asked after the physical health conditions and before the mental health conditions.	Not STCL 2010
Other Chronic Ph	ysical Health Conditions:	
Diabetes	Has a health professional ever told you that you have diabetes? Excluded those who were pregnant. There were several additional questions providing more detail on diabetes diagnosis and treatment.	STCL 2010 CCHS 2012
Incontinence Cancer	Do you have urinary incontinence? Do you have cancer?	CCHS 2012 Not STCL 2010 STCL 2010
	Have you ever been diagnosed with cancer? We used the former (current) in this report not the latter (lifetime).	CCHS 2012
Physical Health,	Other:	
Body Mass Index Category	Derived by Statistics Canada from series of questions on weight and height. The categories are underweight, normal, overweight and obese. "Obese" includes all three BMI categories of obesity.	STCL 2010 CCHS 2012
	Asked of all respondents except pregnant respondents. "Overweight" is a specific Body Mass Index (BMI) category. BMI is calculated by dividing the respondent" s body weight (in kilograms) by their height (in meters) squared. Excludes pregnant females. Each of the obese categories is associated with progressively higher health risk.	
	There is a followup question asking if they consider themselves underweight, just right or overweight.	
Hearing	There were five questions on hearing from the Health Utilities Index: HUI1_Q06 Are you usually able to hear what is said in a group conversation with at least three other people without a hearing aid? HUI1_Q07A Are you usually able to hear what is said in a group conversation with at least three other people with a hearing aid? HUI1_Q07B Are you able to hear at all?	CCHS 2010 but not STCL 2010 (different indicator used in STCL 2010)
	HUI1_Q08 Are you usually able to hear what is said in a conversation with one other person in a quiet room without a hearing aid? HUI1_Q09 Are you usually able to hear what is said in a conversation with one other person in a quiet room with a hearing aid?	
	There are various methods for summarizing and reporting these findings. This report used the complex CCHS derived variable for comparability, essentially counting only those who had a hearing problem (correctable with an aid or uncorrectable) in conversation.	
Chronic Pain or Discomfort	Prefaced with "The next set of questions asks about the level of pain or discomfort you usually experience. They are not about illnesses like colds that affect people for short periods of time." Are you usually free of pain or discomfort?" Assumed that chronic pain or discomfort was present if answered no. Then asked of those who said "no" whether they were usually free of pain or discomfort:	CCHS 2012 but not STCL 2010
	How would you describe the usual intensity of your pain or discomfort? Mild, moderate or severe; and How many activities does your pain or discomfort prevent? None, a few, some or most. From the Health Utilities Index. Used in Canadian general population studies	
	(reviewed by Reitsma et al. 2011).	

Indicator	Source or Survey Question	Comparator
Mental Health		
Chronic mental lasted 6 months	health conditions diagnosed by a health professional that are expected to last or s or more:	have already
Mood disorder	Do you have a mood disorder such as depression, mania, dysthymia or bipolar disorder?	CCHS 2012 but not STCL 2010
Anxiety Disorder	Do you have an anxiety disorder such as a phobia, obsessive-compulsive disorder or a panic disorder? Followed by a question on the type of anxiety disorder (phobia, obsessive-compulsive, panic or other).	STCL 2010 CCHS 2012
PTSD	Do you have post-traumatic stress disorder (PTSD)? Asked after the question on anxiety disorder.	STCL 2010 CCHS 2012
Mental Health O	ther:	
Possible PTSD	<ul> <li>PC-PTSD screener: Have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you</li> <li>1. Have had nightmares about it or thought about it when you did not want to?</li> <li>2, Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?</li> <li>3. Were constantly on guard, watchful, or easily startled?</li> <li>4, Felt numb or detached from others, activities, or your surroundings?</li> <li>Uses DSM-IV criteria. The [Primary care-PTSD screen or "PC-PTSD" developed for primary care settings by National Center for PTSD] includes 4 questions covering the key domains of PTSD, including re-experiencing trauma, numbing, avoidance, and hyper-arousal. (Hoge et al., 2006). The 2-4 items cut-off compared to the 3-4 items cut-off has higher sensitivity (0.91 vs 0.78) and lower specificity (0.72 vs 0.87) in U.S. V.A. settings where there is a higher prevalence of PTSD (25%) than in the general population (Prins et al. 2003). In U.S. serving personnel, the most efficient cutoff values for the PC-PTSD were either 2 or 3 "yes" responses with the latter favoring specificity (Bliese et al 2008).</li> <li>Fifth question: Were you thinking about an experience related to your military service?</li> </ul>	Not STCL 2010
Service-related psychologically traumatic experience	The preamble to the PC-PTSD screener asked about a psychologically traumatic experience and after the 4 PC-PTSD items the survey asked this question: <i>Were you thinking about an experience related to service?</i>	Not STCL 2010
Psychological distress K10	Psychological distress is a state of emotional suffering characterized by symptoms of depression and anxiety (Drapeau et al. <u>www.itechopen.com</u> ). The Kessler Psychological Distress Scale K10 instrument uses 10 questions consistent with 15 domains represented in the DSM-III-R diagnoses of major depression and generalized anxiety disorder plus the positive affect domain. Does not capture psychosis. Past month; score range 0-40; higher = more distress. Higher score = probable DSM-IV depression or anxiety. Scale used by Australian Center for Posttraumatic Mental Health (http://www.acpmh.unimelb.edu.au/site_resources/TrainingInitiativeDocuments/follo w-up/K10.pdf): 0-9 Likely well 10-14 Likely mild mental disorder 15-19 Likely moderate mental disorder 20-40 Likely severe mental disorder	CCHS-MHS 2012 but Not STCL 2010
Frequency of Psychological Distress	Statistics Canada derives a scale from 1-8 of frequency, from a lot more than usual to never had any, from three questions following the K10 that ask about past month frequency of psychological distress.	Not STCL 2010
Suicidality		
Suicidal ideation	Have you ever seriously considered committing suicide or taking your own life? Has this happened in the past 12 months?	STCL 2010

Indicator	Source or Survey Question	Comparator
Suicide attempt Service Attributi	This question was only asked of those with past-year suicidal ideation, unlike other surveys. Have you ever attempted to commit suicide or tried taking your own life? Did this happen in the past 12 months?	
Service Attribution	Do you think any of the previously mentioned conditions you identified are related to your military service? Did not apply to hearing problems, PC-PTSD screener, K10 screener, or pain/discomfort.	Not STCL 2010

Disability		
Impairments	RAC_R1: <i>Do you have any difficulty hearing, seeing, communicating, walking, climbing stairs, bending, learning or doing any similar activities?</i> Double-counts persons with chronic conditions in which these functional impairments are common.	STCL 2010, CCHS 2010-11
Reduction of activity in life domains (RALD)	RACDIMP: Derived by Statistics Canada from 5 questions (RAC_Q2A-C): <i>Does a long-term physical condition or mental condition or health problem, reduce the amount or the kind of activity you can do: at home; at school; at work; in other activities, for example, transportation or leisure?</i>	STCL 2010, CCHS 2010-11
Participation and Activity Limitation (PAL)	RACDPAL: Derived by Statistics Canada from 6 questions (RAC_R1 and RAC_Q2A-C): Do you have any difficulty hearing, seeing, communicating, walking, climbing stairs, bending, learning or doing any similar activities? Sometimes, Often, Never. Does a long-term physical condition or mental condition or health problem reduce the amount or the kind of activity you can do at home, work, school or other such as leisure or transportation? Sometimes, Often, Never. Combines impairments and reduction of activity in life domains. For work and school one of the choices was not working or not at school, which is how the prevalence of activity reduction in those at work or at school was determined.	STCL 2010
Attribution	After the above two sets of questions: Which one of the following is the best description of the cause of this condition? Accident at home, motor vehicle accident, other type of accident, existed from birth or genetic, work conditions, disease or illness, aging, emotional or mental health problem or condition, use of alcohol or drugs, other (specify).	Not same as in STCL 2010
ADL Need	Because of any physical condition or mental condition or health problem, do you need the help of another person with (at least one from a list of 6 basic and instrumental ADLs (activities of daily living): preparing meals, getting to appointments/errands, housework, personal care, moving about inside house, personal finances.	STCL 2010, CCHS 2010-11
K10 Distress Interference with life or activities	Last question in the K10 DIS (psychological distress) module: During the past month, how much did these feelings usually interfere with your life or activities? Not at all, a little, some, a lot.	Not STCL2010
Activity prevented by pain or discomfort	Asked of those who said no to whether they were usually free of pain or discomfort: How many activities does your pain or discomfort prevent? None, a few, some or most.	CCHS 2012 but not STCL2010
Stress, Coping a	nd Satisfaction	
Perceived life stress	Thinking about the amount of stress in your life, would you say that most days are? Not at all, not very, a bit, quite a bit, extremely (stressful).	STCL 2010 CCHS 2012

Indicator	Source or Survey Question	Comparator
Satisfaction with life	Using a scale of 0 to 10 where 0 means very dissatisfied and 10 means very satisfied, how do you feel about your life as a whole right now? (Score 0-10). Can be converted to a 5-point scale (very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied) consistent with usage in the Canadian Community Health Survey (see CCHS 2011-12 Derived Variable Specifications).	STCL 2010 CCHS 2012
Sense of community belonging	How would you describe your sense of belonging to your local community? Would you say it is? very strong, somewhat strong, somewhat weak, very weak	STCL 2010 CCHS 2012
Work stress	Would you say that most days at work were? Not at all stressful, Not very stressful, A bit stressful, Quite a bit stressful, Extremely stressful. Asked of those who said yes to Have you worked at a job or business at any time in the past 12 months?	CCHS 2012 but not STCL2010
Satisfaction with job or main activity	Thinking about [main activity past year] how satisfied are you? Very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied.	STCL 2010
Satisfaction with financial situation	How satisfied are you with your financial situation? Very satisfied, satisfied, neither satisfied nor dissatisfied, Dissatisfied, very dissatisfied.	STCL 2010
Mastery	Derived by VAC using seven questions on mastery. For example "You have little control over the things that happen to you." strongly agree, agree, neither agree nor disagree, disagree, strongly disagree. Score 0-35 low to high. Low mastery if $\leq$ 7 (Lee et al. 2010), high if $\geq$ 23 (Stephens et al. 2000).	STCL 2010
Social Provisions Scale	This module focuses on the degree to which respondents' social relationships provide various dimensions of social support. SPS provides a comprehensive assessment of perceived social support without identifying particular sources (Gottlieb et al. 2010). The 10-item short form of the Social Provisions Scale (SPS) was developed for CCHS-MH 2012 by Dr. Jean Caron at McGill University (Caron 2013, Une validation de la forme abrégée de l'Échelle de provisions socials: l'ÉPS-10 items, Sante mentale au Quebec) and maintains the psychometric properties of the original 24-item SPS. This version has two questions for 5 of the 6 SPS provisions that were in the original: <i>guidance</i> (advice or information), <i>reliable alliance</i> (assurance can count on others in time of stress), <i>reassurance of worth</i> (recognition of one's competence), <i>attachment</i> (emotional closeness) and <i>social integration</i> (sense of belonging to group of friends). There is a continuous derived variable for overall social support: score 10-40, higher = more social support. There are no categorical cutoffs, so we describe the population's SPS in terms of mean and standard deviation. There are 5 derived continuous variables for each of the provisions: score 2-8 for each and no cutoffs into categories for them either.	New and optional in CCHS 2011 (Que, BC, YT, NWT and Nvt); not same as the MOS social support module used in STCL 2010 and prior national surveys
Health Behaviou	rs	
Smoking	Derived by Statistics Canada from a series of questions on smoking. "Daily smoker" refers to those who reported smoking cigarettes every day. Other questions asked about occasional smoking including former daily smokers who now smoke occasionally. Several questions detailing age of onset, number of cigarettes per day, number of years ago quit smoking completely or partially, month quit smoking,	STCL 2010 CCHS 2012
Heavy drinking	How often in the past 12 months have you had five or more drinks on one occasion? Never, Less than once a month, Once a month, 2 to 3 times a month, Once a week, More than once a week. Heavy drinking = 5 or more drinks on one occasion, at least once a month in the past year, asked of respondents who reported taking a drink in prior 12 months.	STCL 2010 CCHS 2012
Health Services		
Regular medical doctor	<i>Do you have a regular medical doctor</i> ? Followed by question on why not. Population who reported that they have a regular medical doctor.	STCL 2010 CCHS 2012

Indicator	Source or Survey Question	Comparator				
Inpatient care	npatient care       In the past 12 months, have you been a patient overnight in a hospital, nursing home or convalescent home?         Home many nights in past 12 months?					
Contacts with health care professionals	Series of questions on contacts with health professionals in outpatient settings for physical, emotional or mental health, asking about contact in past 12 months, number of contacts past 12 months and setting. Asked for family doctor, pediatrician or general practitioner; ophthalmologist/optometrist; surgeon, allergist, orthopedist, gynecologist/urologist, or psychiatrist; nurse; dentist, dental hygienist or orthodontist; physiotherapist; psychologist; social worker or counsellor; audiologist, speech or occupational therapist.					
Complementary medicine	In the past 12 months, have you seen or talked to an alternative health care provider such as an acupuncturist, homeopath or massage therapist about your physical, emotional or mental health?	Not STCL 2010				
Home Care	Have you received any home care services in the past 12 months, with the cost being entirely or partially covered by government? Have you received any other care services in the past 12 months, with the cost not covered by government (for example: care provided by a private agency or by a spouse or friends)?	Not STCL 2010				
Non- Government Care	Have you received any other care services in the past 12 months, with the cost not covered by government (for example: care provided by a private agency or by a spouse or friends)?	Not STCL 2010				
Unmet health care needs	<ul> <li>During the past 12 months, was there ever a time when you felt that you needed health care but you didn't receive it? (Yes/No)</li> <li>Followed by 3 questions: <ol> <li>Thinking of the most recent time, why didn't you get care? Not available in the area, Not available at time required (e.g. doctor on holidays, inconvenient hours), Waiting time too long, Felt would be inadequate, Cost, Too busy, Didn't get around to it/didn't bother, Decided not to seek care, Doctor didn't think it was necessary, Other Specify.</li> <li>Again, thinking of the most recent time, what was the type of care that was needed? Treatment of a physical health problem, Treatment of an emotional or mental health problem, A regular check-up (including regular prenatal care), Care of an injury, Other Specify.</li> <li>Where did you try to get the service you were seeking? Doctor's office, Community health centre / CLSC, Walk-in clinic, Appointment clinic, Hospital - emergency room, Hospital - outpatient clinic, Other - Specify</li> </ol> </li> </ul>	Not STCL 2010				
Suicide help- seeking	Did you see or talk to a health professional following your attempt or consideration to commit suicide? Only asked of those who said yes to suicide attempt in the past 12 months, not of all with either ideation or attempts. Whom did you see or talk to? Family doctor or general practitioner; Psychiatrist; Psychologist; Nurse; Social worker or counsellor; Religious or spiritual advisor such as a priest, chaplain or rabbi; Teacher or guidance counsellor; Other.	Not STCL 2010				
Supplemental He	alth Insurance					
Insurance for prescription medications	Do you have insurance that covers all or part of the cost of your prescription medications? Yes, No.	STCL 2010				
Insurance for dental expenses	Do you have insurance that covers all or part of the cost of your dental expenses? Yes, No.	STCL 2010				
Insurance for eye glasses	Do you have insurance that covers all or part of the cost of eye glasses or contact lenses? Yes, No.	STCL 2010				

# Appendix Table 2. Prevalences<sup>26</sup> for Reserve Class A/B 2003-12, Reserve Class C 2003-12 and Regular Force 1998-2012.

			ve Class A/B	Reserve Class C		Regular Force	
Variable	Category	n	Wt%	n	Wt%	n	Wt%
Group Totals		476	100.0%	922	100.0%	2329	100.0%
Client Status	VAC Clients	17	F	170	16.9%	898	35.4%
Chefit Status	Non Clients	459	97.1%	752	83.1%	1431	64.6%
Age	Age, Mean (years)		31.2		40.2		43.9
	≤ 19 Years	Х	F	0	0.0%	X	F
	20-29	251	56.0%	135	17.1%	219	16.2%
	30-39	139	27.7%	366	40.6%	352	20.8%
	40-49	50	9.9%	184	18.7%	583	25.1%
	50-59	17	F	150	15.2%	808	28.2%
	60-69	17	F	87	8.4%	364	9.5%
Gender	Male	387	81.5%	703	76.6%	2039	86.6%
	Female	89	18.5%	218	23.3%	290	13.4%
	Less than high school graduation	10	F	28	F	110	5.1%
Education at	High school graduation	115	25.0%	234	25.9%	917	42.6%
time of survey	Post-secondary grad < bachelors	182	38.5%	376	40.9%	707	35.9%
	University graduation ≥ bachelors	168	34.6%	67	30.1%	226	16.5%
Marital status	Married/Commonlaw	272	56.3%	673	71.8%	1839	73.8%
time of survey	Widowed/Separated/Divorced	21	F	60	6.2%	226	10.0%
	Single/Never married	182	39.4%	189	22.0%	264	16.1%
Unemployment	Unemployment Rate		5.9%		5.4%		6.9%
	Employed	398	84.1%	728	79.9%	1606	71.9%
Labour Force	Unemployed	24	F	42	4.5%	109	5.3%
Participation	Not in the workforce	50	10.0%	129	13.3%	532	19.3%
	Unable to work	Х	F	23	F	80	3.5%
Worked at job or business in past year	Worked at job/business past year	437	92.3%	777	85.3%	1737	77.7%
yeur	Worked at a job or ran a business	366	77.3%	702	76.9%	1549	69.0%
	Attended school or training	63	13.5%	53	6.1%	92	5.1%
Main activity 12	Looked for work	8	F	14	6.170 F	50	2.4%
months prior to	Caregiving	6	F	21	F	38	1.7%
survey	Was disabled or on disability	8	F	53	5.3%	128	6.2%
	Retired and not looking for work	12	F	61	5.8%	393	12.2%
	Other	13	F	15	5.070 F	74	3.3%
Skills Transferability	Agree/strongly agree	150	31.8%	422	46.7%	1131	46.0%
	Neither	78	16.5%	145	16.0%	273	13.2%
	Disagree/strongly disagree	242	51.7%	327	37.3%	805	40.8%
With children	Persons ≤ age 18 in household, Mean		0.7		1.0		0.7
Low Income Measure	Below LIM	52	12.0%	66	7.8%	121	7.6%
Household	\$0 to <\$50,000	61	23.2%	73	15.9%	195	18.1%
income not	\$50,000 to <\$100,000	150	55.0%	262	57.0%	720	57.7%
adjusted for	\$100,000 to <\$150,000	46	17.2%	100	22.0%	252	20.1%
household/LIM	\$150,000+	13	F	24	F	71	4.2%
	< 2 years	95	20.6%	7	F	336	21.3%
Length of	2 to 9 years	306	66.0%	338	41.1%	304	19.7%
Service	10 to 19 years	55	10.1%	352	36.4%	228	11.5%
	≥ 20 years	20	F	225	21.6%	1461	47.5%

<sup>&</sup>lt;sup>26</sup> Column sums to 100% within variables. Prevalences not adjusted for age, gender.

			ve Class	Reserv	ve Class C	Regular Force	
Variable	Category	n '	A/B Wt%	n	Wt%	n	Wt%
Group Totals		476	100.0%	922	100.0%	2329	100.0%
•	Medical	17	F	128	12.5%	482	21.0%
	Voluntary	367	75.8%	601	64.6%	1156	52.2%
Release Type	Retirement Age	13	F	56	5.4%	186	4.6%
	Involuntary	62	15.7%	69	9.9%	100	6.7%
	Service Complete	15	F	68	7.6%	397	15.5%
	Senior Officer	9	F	78	7.4%	330	7.7%
	Junior Officer	34	6.9%	90	9.7%	304	7.6%
	Cadet	8	F	X	F	141	4.2%
Rank	Senior NCM	22	F	204	20.4%	844	25.1%
	Junior NCM	164	33.3%	510	57.5%	414	30.1%
	Private	63	13.5%	11	F	89	7.4%
	Recruit	176	39.1%	28	F	207	17.9%
	1950's	Х	F	Х	F	12	F
	1960's	Х	F	17	F	185	4.7%
	1970's	6	F	79	7.7%	665	21.0%
Enrolment Era	1980's	16	F	153	15.0%	700	27.1%
	1990's	86	16.1%	444	48.0%	266	13.6%
	2000's	354	77.1%	226	27.4%	460	30.3%
	2010's	11	F	Х	F	41	2.9%
	1998	Х	F	Х	F	126	5.6%
	1999	Х	F	Х	F	139	5.5%
	2000	Х	F	Х	F	140	5.6%
	2001	Х	F	Х	F	137	5.6%
	2002	Х	F	Х	F	105	4.2%
	2003	31	6.4%	60	6.6%	132	5.3%
	2004	52	10.4%	75	8.4%	164	7.0%
Release Year	2005	52	11.2%	81	9.2%	161	7.2%
	2006	53	11.2%	89	9.9%	199	8.1%
	2007	45	9.4%	74	7.9%	188	8.0%
	2008	48	10.3%	99	10.4%	228	10.2%
	2009	57	12.1%	121	13.0%	184	8.3%
	2010	45	9.6%	107	10.9%	147	6.9%
	2011	55	11.4%	142	15.5%	159	6.5%
	2012	38	8.0%	74	8.0%	120	5.9%
Servico	Air Force	19	F	67	6.9%	819	29.9%
Service Environment	Army	394	83.3%	738	80.4%	1101	53.8%
	Navy	63	13.2%	117	12.7%	409	16.3%
Last Military	Combat arms	226	59.1%	282	43.8%	448	26.4%
Occupation	Communications	26	F	71	10.8%	168	7.8%
	Maritime	39	9.9%	51	8.0%	270	11.6%
	Aviation	Х	F	11	F	356	13.8%
	Administration, Logistics, Security,	60	14.9%	187	27.0%	539	24.3%
	Intelligence, Emergency services						
	Engineering/technical	9	F	27	F	234	10.8%
	Medical	23	F	27	F	115	4.1%
Adjustment to	General Officer Specialist	5 351	F 74.0%	8 550	F	41	1.2%
Civilian Life	Very or moderately easy Neither difficult nor easy	351 73	74.0% 15.2%	559 137	60.9% 15.1%	1397 356	56.3% 16.5%
	Very or moderately difficult	52	10.8%	225	24.0%	574	27.2%
	Very good or excellent	327	69.3%	554	61.2%	1244	52.6%
Self-Rated health	Good	114	23.7%	241	25.7%	684	29.6%
	Fair or poor	35	7.0%	127	13.1%	401	17.8%
		55	1.0/0	121	13.170	-+01	17.0/0

			ve Class 4/B	Reserv	ve Class C	Regul	ar Force
Variable	Category	n í	Wt%	n	Wt%	n	Wt%
Group Totals		476	100.0%	922	100.0%	2329	100.0%
Calf Datad	Very good or excellent	348	73.7%	618	67.2%	1499	61.6%
Self-Rated mental health	Good	97	19.9%	200	22.0%	485	22.6%
mentarmeann	Fair or poor	31	6.4%	103	10.8%	344	15.8%
	PCS, Mean		54.1		50.8		47.9
Liashih Delated	SF-12 0-9	X	F	Х	F	Х	F
Health-Related Quality of Life	SF-12 10-19	X	F	15	F	59	2.5%
PCS	SF-12 20-29	13	F	55	5.6%	197	8.3%
F03	SF-12 30-39	13	F	77	8.0%	310	12.8%
	SF-12 40-49	48	9.9%	145	15.3%	449	18.8%
	SF-12 50+	395	84.8%	623	69.5%	1289	57.5%
	MCS, Mean		52.6		51.1		51.3
Health-Related	SF-12 0-9	Х	F	Х	F	Х	F
Quality of Life	SF-12 10-19	X	F	18	F	33	1.5%
MCS	SF-12 20-29	6	F	45	4.8%	103	5.0%
	SF-12 30-39	34	7.1%	66	7.2%	195	9.8%
	SF-12 40-49	91	19.4%	172	18.8%	352	16.2%
	SF-12 50+	336	71.6%	612	66.8%	1619	67.2%
	No PHC or MHC	171	41.5%	267	30.5%	513	24.2%
Chronic Health	Any PHC	231	55.3%	616	68.1%	1719	73.7%
Conditions	Musculoskeletal	97	19.6%	368	38.7%	1083	43.4%
	Back problems	84	17.0%	297	31.5%	848	34.5%
	Arthritis	31	5.9%	158	16.1%	594	22.4%
	Cardiovascular	38 33	7.1% 6.1%	139 121	14.1%	540 484	19.3% 17.2%
	High blood pressure Heart disease	5 5	6.1% F	25	12.3% F	484	3.3%
-	Stroke	X	F	5	F	101	5.5 % F
condition,	Gastrointestinal	36	7.4%	77	8.5%	204	8.6%
gastrointestinal	Ulcers	13	F	30	3.4%	89	3.8%
condition,	Bowel disorders	24	F	50	5.3%	139	5.9%
respiratory	Respiratory	26	F	68	7.3%	174	7.2%
	Asthma	25	F	60	6.5%	129	5.6%
-	COPD	X	F	11	F	64	2.4%
	Central Nervous System	52	11.3%	117	12.4%	338	16.4%
	Dementia (> 35 years)	X	F	Х	F	5	F
	Migraine	45	9.8%	105	11.1%	296	14.1%
pain/disconnon)	TBI Effects (Yes and Maybe)	11	F	33	3.4%	89	4.1%
gastrointestinal condition, respiratory condition, urinary incontinence, diabetes, cancer, obesity, hearing problem or chronic pain/discomfort) (Any MHC = Mood Disorder, Anxiety	Urinary incontinence	5	F	21	F	69	2.8%
	Diabetes	8	F	50	4.9%	149	5.6%
(Any MHC = Mood	Cancer	Х	F	10	F	50	1.6%
Disorder, Anxiety	Any MHC	44	9.1%	160	17.1%	507	23.8%
Disorder, PTSD)	Mood disorder	29	F	114	12.1%	364	17.1%
	Anxiety Disorder	26	F	76	8.1%	230	11.1%
	PTSD	9	F	71	7.5%	280	13.1%
	Attribution to service, yes	63	13.0%	310	33.4%	1023	42.1%
Other Health	Not free of pain/discomfort	67	13.2%	268	28.1%	809	33.8%
Conditions	Pain/discomfort Mild	28	F	83	8.9%	164	6.8%
	Pain/discomfort Moderate	29	F	146	15.2%	503	20.8%
	Pain/discomfort Severe	8	F	39	4.0%	138	6.0%
	Able to hear in group no aid	464	98.0%	847	92.5%	2013	88.8%
	Hearing problem	7	<u> </u>	45	4.7%	237	8.5%
Body Mass Index	Underweight	Х	F	Х	F	11	F
	Normal weight	209	45.1%	301	33.5%	596	27.4%
	Overweight	172	36.1%	385	42.7%	1115	46.1%
	Obese	86	17.8%	219	23.5%	591	26.1%
	2-4 Possible PTSD DSM-IV	55	11.5%	174	18.8%	472	21.9%

			ve Class VB	Reserve Class C		Regular Force	
Variable	Category	n	Wt%	n	Wt%	n	Wt%
Group Totals		476	100.0%	922	100.0%	2329	100.0%
K10 Psychological Distress	Overall Score, Mean		3.8		5.1		5.6
	0-9 Likely well	422	89.8%	759	83.3%	1860	78.9%
	10-14 Likely mild mental disorder	33	6.8%	74	7.9%	196	8.5%
	15-19 Likely moderate disorder	8	F	26	F	105	5.0%
	20-40 Likely severe disorder	8	F	58	6.2%	151	7.6%
Comorbidity	PHC 0	245	52.4%	306	34.3%	610	29.1%
	PHC 1	126	26.4%	247	27.2%	542	23.7%
(PHC = as above)	PHC 2	52	10.7%	155	16.7%	436	17.0%
(MHC = as above)	PHC 3+	53	10.5%	214	21.9%	741	30.2%
	MHC 0	432	90.9%	762	83.0%	1822	76.3%
	MHC 1	28	E	85	9.1%	235	10.7%
	MHC 2+	16	F	75	7.9%	272	13.0%
	PHC and MHC	29	F	147	15.7%	464	21.6%
	Musculoskeletal + Pain/discomfort + MHC	7	F	76	7.7%	261	11.7%
Activity	No RALD or ADL need	360	76.5%	539	59.8%	1112	50.1%
Limitations	RALD: often or sometimes	112	22.7%	381	40.0%	1201	49.5%
	Never	364	77.3%	541	60.0%	1118	50.5%
	PAL: often or sometimes	148	30.0%	448	47.4%	1359	55.3%
	Never	328	70.0%	474	52.6%	968	44.7%
	Needs help with at least one ADL	25	F	122	12.6%	473	20.1%
	Pain/discomfort limitations: A few,	46	0.00/	224	23.2%	710	20 70/
	some or most activities	40	8.8%	224	23.2%	712	29.7%
K10 Interference	None	327	69.4%	557	61.3%	1393	58.9%
with activity	A lot, some, a little	147	34.4%	360	44.7%	923	46.7%
Suicidality	12-Month Ideation	18	F	49	5.2%	130	6.6%
Social	Social support, Mean (10-40)		35.7		35.1		34.1
Provisions Scale	Attachment, Mean (2-8)		7.2		7.1		6.9
	Guidance, Mean (2-8)		7.3		7.1		6.9
	Reliable Alliance, Mean (2-8)		7.3		7.2		7.0
	Social Integration, Mean (2-8)		6.9		6.8		6.6
	Reassurance of Worth, Mean(2-8)	070	7.5		6.8		6.8
Sense of Community	Very or somewhat strong	270	57.4%	551	60.0%	1375	57.5%
Belonging	Very or somewhat weak	203	42.6%	367	40.0%	938	42.5%
Mastery (score	Low <= 7	5	F	15	F	37	1.8%
ranges 0-28 low	Middle	290	60.8%	591	63.9%	1555	69.0%
to high)	High >= 23	178	38.2%	308	34.6%	712	29.2%
Satisfaction with	Satisfied or very satisfied	444	93.8%	812	88.7%	2027	85.7%
Life	Dissatisfied or very dissatisfied	30	6.2%	108	11.3%	299	14.3%
<b>.</b>	Not at all or not very stressful	157	33.2%	265	29.2%	877	36.4%
Stress most days	A bit stressful	235	49.8%	417	44.9%	938	41.1%
	Extremely or quite a bit stressful	84	17.0%	240	25.9%	510	22.5%
Work stress in	Not at all or not very stressful	125	28.7%	195	25.9%	532	32.8%
past year job or	A bit stressful	233	53.8%	356	45.7%	796	45.1%
business	Extremely or quite a bit stressful	78	17.5%	224	28.4%	406	22.2%
Satisfaction with	Satisfied or very satisfied	383	80.4%	692	75.3%	1803	75.0%
main activity	Neither satisfied nor dissatisfied	43	9.3%	100	11.0%	229	11.3%
-	Dissatisfied or very dissatisfied	50	10.3%	123	13.7%	290	13.7%
Smoker	Daily	49	10.3%	120	13.4%	324	16.5%
Heavy drinker	5 or more drinks on one occasion, 12 or more times a year	149	31.7%	244	27.8%	555	24.7%
Health Services	Prescription Drug Insurance	393	83.0%	814	88.2%	2192	92.0%
	Dental Insurance	358	75.3%	723	78.3%	2093	86.8%
	Eye Glasses Insurance	313	67.9%	663	72.9%	2005	84.2%

		Reserve Class A/B		Reserve Class C		Regular Force	
Variable	Category	n	Wt%	n	Wt%	n	Wt%
Group Totals		476	100.0%	922	100.0%	2329	100.0%
	Regular medical doctor	361	75.6%	733	78.4%	1967	80.7%
	Home care	18	F	37	3.8%	173	7.3%
	Unmet care need past year	56	11.6%	149	15.9%	333	15.8%
	Unmet needs: physical & injury	37	7.7%	111	11.8%	234	11.0%
	Unmet needs: mental health	7	F	23	F	70	3.4%
	Unmet needs: other	9	F	22	F	47	2.3%

F = Sample size <30 so estimate considered unreliable.

X =Sample size < 5. Proportions not adjusted for age, gender and other differences.

# Appendix Table 3. Prevalences<sup>27</sup> for Reserve Class C Veterans released in 2003-12 by client status.

Variable	Category	n C	lient Wt%	Nor n	n-Client Wt%	n T	otal Wt%
Group Totals		170	100.0%	752	100.0%	922	100.0%
Oliont Chatura	VAC Clients	170	100.0%	0	0.0%	170	16.9%
Client Status	Non Clients	0	0.0%	752	100.0%	752	83.1%
	Age, Mean (years)		47.8		38.6		40.2
	≤ 19 Years	Х	F	Х	F	Х	F
Age	20-29	6	F	129	19.8%	135	17.1%
Aye	30-39	31	19.3%	335	44.9%	366	40.6%
	40-49	55	31.3%	129	16.2%	184	18.7%
	50-59	50	28.9%	100	12.5%	150	15.2%
O a se al a se	60-69 Mala	28	F	59	6.7%	87	8.4%
Gender	Male	118	69.8%	585	78.0%	703	76.6%
	Female	52	30.2% F	166	21.9%	218	23.3%
	Less than high school graduation	8		20	F	28	F
Education at time	High school graduation	52	31.3%	182	24.8%	234	25.9%
of survey	Post-secondary grad < bachelors	78	45.7%	298	39.9%	376	40.9%
	University graduation ≥ bachelors	7	F	60	32.5%	67	30.1%
Marital status time	Married/Commonlaw	116	68.2%	557	72.5%	673	71.8%
of survey	Widowed/Separated/Divorced	21	F	39	4.9%	60	6.2%
-	Single/Never married	33	19.6%	156	22.6%	189	22.0%
Unemployment	Unemployment Rate		13.1%	007	4.3%		5.4%
	Employed	91	53.8%	637	85.1%	728	79.8
Labour Force	Unemployed	14	F	28	F	42	4.5%
Participation	Not in the workforce	50	29.3%	79	10.1%	129	13.3%
	Unable to work	15	F	8	F	23	F
Worked at job or		400	=0.00/		00 <b>5</b> 0/		05.00/
business in past	Worked at job/business past year	100	59.3%	677	90.5%	777	85.3%
year							
	Worked at a job or ran a business	86	51.0%	616	82.1%	702	76.9%
	Retired and not looking for work	20	F	41	4.7%	61	5.8%
Main activity 12	Attended school or training	20	F	33	4.9%	53	6.1%
months prior to	Looked for work	Х	F	11	F	14	F
survey	Caregiving	Х	F	21	F	21	F
	Was disabled or on disability	35	20.4%	18	F	53	5.3%
	Other	Х	F	12	F	15	F
Skills	Agree/strongly agree	83	54.7%	339	45.2%	422	46.7%
Transferability	Neither	27	F	118	15.8%	145	16.0%
	Disagree/strongly disagree	43	28.2%	284	39.0%	327	37.3%
With children	Persons ≤ age 18 in household		0.7		1.0	<u> </u>	1.0
Low Income Measure	Below LIM	12	F	54	7.8%	66	7.8%
Household	\$0 to <\$50,000	18	F	55	15.2%	73	15.9%
income not	\$50,000 to <\$100,000	53	59.5%	209	56.4%	262	57.0%
adjusted for LIM	\$100,000 to <\$150,000	15	F	85	23.1%	100	22.0%
	\$150,000+	Х	F	20	F	24	F
	< 2 years	Х	F	7	F	7	F
Length of Service	2 to 9 years	26	F	312	45.9%	338	41.1%
Length of Service	10 to 19 years	73	43.3%	279	34.9%	352	36.4%
	≥ 20 years	71	39.3%	154	18.1%	225	21.6%

<sup>&</sup>lt;sup>27</sup> Column sums to 100% within variables. Prevalences not adjusted for age, gender.

Variable	Category	n c	Client Wt%	Nor n	n-Client Wt%	n T	otal Wt%
Group Totals		170	100.0%	752	100.0%	922	100.0%
-	Medical	91	52.1%	37	4.4%	128	12.5%
	Voluntary	49	29.1%	552	71.8%	601	64.6%
Release Type	Retirement Age	15	F	41	4.7%	56	5.4%
	Involuntary	X	F	65	11.3%	69	9.9%
	Service Complete	11	F	57	7.8%	68	7.6%
	Senior Officer	16	F	62	7.1%	78	7.4%
	Junior Officer	15	F	75	9.9%	90	9.7%
	Cadet	Х	F	X	F	Х	F
Rank	Senior NCM	57	33.0%	147	17.9%	204	20.4%
	Junior NCM	81	48.7%	429	59.3%	510	57.5%
	Private	X	F	11	F	11	F
	Recruit	X	F	27	F	28	F
	1950's	X	F	X	F	X	F
	1960's	7	F	10		17	F
Enrolment Era	1970's	24		55	6.5%	79	7.7%
Enrolment Era	1980's 1990's	47 78	26.4% 47.4%	106 366	12.7%	153	15.0%
	2000's	78 14	47.4% F	212	48.2% 31.1%	444 226	48.0% 27.4%
	2000 s 2010's	14 X	F	×	51.1% F	220 X	27.4% F
	1998	X	F	X	F	X	F
	1999	x	F	x	F	x	F
	2000	x	F	X	F	x	F
	2001	x	F	x	F	X	F
	2002	x	F	x	F	X	F
	2003	7	F	53	7.1%	60	6.6%
	2004	10	F	65	8.9%	75	8.4%
Release Year	2005	10	F	71	9.8%	81	9.2%
	2006	16	F	73	10.0%	89	9.9%
	2007	10	F	64	8.3%	74	7.9%
	2008	19	F	80	10.3%	99	10.4%
	2009	20	F	101	13.3%	121	13.0%
	2010	33	18.9%	74	9.3%	107	10.9%
	2011	25	F	117	15.8%	142	15.5%
	2012	20	F	54	7.3%	74	8.0%
0	Air Force	26	F	41	5.1%	67	6.9%
Service Environment	Army	124	72.2%	614	82.1%	738	80.4%
Environment	Navy	20	F	97	12.8%	117	12.7%
Last Military	Combat arms	48	31.9%	234	47.0%	282	43.8%
Occupation	Communications	7	F	64	12.5%	71	10.8%
	Maritime	11	F	40	8.1%	51	8.0%
	Aviation	X	F	7	F	11	F
	Administration, Logistics, Security, Intelligence, Emergency services	66	42.6%	121	22.9%	187	27.0%
	Engineering/technical	11	F	16	F	27	F
	Medical	5	F	22	F	27	F
	General Officer Specialist	X	F	7	F	8	F
Adjustment to	Very or moderately easy	53	31.0%	506	67.0%	559	60.9%
Civilian Life	Neither difficult nor easy	23	F	114	15.5%	137	15.1%
	Very or moderately difficult	94	55.7%	131	17.5%	225	24.0%
	Very good or excellent	36	21.2%	518	69.3%	554	61.2%
Self-Rated health	Good	26	F	13	F	241	25.7%
	Fair or poor	71	41.3%	56	7.4%	127	13.1%
Self-Rated mental	Very good or excellent	61	35.4%	557	73.7%	618	67.2%
health	Good	48	28.7%	152	20.7%	200	22.0%
	Fair or poor	61	35.9%	42	5.6%	103	10.8%

			lient		n-Client	Total		
	Category	n	Wt%	n	Wt%	n	Wt%	
Group Totals	D00 M	170	100.0%	752	100.0%	922	100.0%	
	PCS, Mean	V	38.8	V	53.1	V	50.8	
	SF-12 0-9	X	F	X	F	X	F	
	SF-12 10-19	8	F	7	F	15	F	
PCS	SF-12 20-29	40	23.9%	15	F	55	5.6%	
	SF-12 30-39	39	23.8%	38	4.8%	77	8.0%	
	SF-12 40-49	46	27.4%	99	12.9%	145	15.3%	
	SF-12 50+	34	20.5%	589	79.3%	623	69.5%	
	MCS, Mean	V	44.8	V	52.4	V	51.1	
Quality of Life	SF-12 0-9	X	F	X	F	X	F	
	SF-12 10-19 SF-12 20-29	8 25	F	10 20	F	18 45	<b>⊢</b> 4.8%	
WC3	SF-12 20-29 SF-12 30-39	25	F	42	5.7%	45 66	4.8% 7.2%	
	SF-12 40-49	32	18.6%	140	18.9%	172	18.8%	
	SF-12 50+	76	45.6%	536	71.1%	612	66.8%	
	No PHC or MHC	6	F	261	36.3%	267	30.5%	
	Any PHC	161	94.9%	455	62.5%	616	68.1%	
<b>.</b>	Musculoskeletal	124	73.0%	244	31.7%	368	38.7%	
	Back problems	96	56.5%	201	26.4%	297	31.5%	
	Arthritis	76	44.5%	82	10.3%	158	16.1%	
	Cardiovascular	36	20.7%	103	12.8%	139	14.1%	
	High blood pressure	34	19.8%	87	10.8%	121	12.3%	
	Heart disease	7	F	18	F	25	F	
-	Stroke	X	F	Х	F	5	F	
	Gastrointestinal	28	F	49	6.8%	77	8.5%	
	Ulcers	12	F	18	F	30	3.4%	
condition,	Bowel disorders	17	F	33	4.4%	50	5.3%	
respiratory	Respiratory	29	F	39	5.3%	68	7.3%	
condition, urinary	Asthma	22	F	38	5.2%	60	6.5%	
incontinence,	COPD	9	F	X	F	11	F	
diabetes, cancer,	Central Nervous System	41	24.3%	76	10.0%	117	12.4%	
	Dementia (> 35 years)	X	F	Х	F	X	F	
	Migraine	35	20.4%	70	9.2%	105	11.1%	
pain/discomfort)	TBI Effects (Yes and Maybe)	19	F	14	<u> </u>	33	3.4%	
	Urinary incontinence	7	F	14	F	21	F	
	Diabetes	19	F	31	3.6%	50	4.9%	
(Any MHC - Mood	Cancer	Х	F	6	F	10	F	
	Any MHC	84	50.2%	76	10.4%	160	17.1%	
espiratory condition, urinary ncontinence,	Mood disorder	63	37.2%	51	7.0%	114	12.1%	
	Anxiety Disorder	38	22.0%	38	5.3%	76	8.1%	
	PTSD	52	31.0%	19	F	71	7.5%	
	Attribution to service, yes	137	82.1%	173	23.3%	310	33.4%	
	Not free of pain/discomfort	116	67.9%	152	20.0%	268	28.1%	
Conditions	Pain/discomfort Mild	17	F	66	8.7%	83	8.9%	
	Pain/discomfort Moderate	74 25	43.3% F	72 14	9.4% F	146	15.2% 4.0%	
Hearing	Pain/discomfort Severe					39		
	Able to hear in group no aid Hearing problem	125 27	74.6%	722 23	96.2%	847	92.5%	
	Underweight	×	F F	23 X	F F	45 X	<u>4.7%</u> F	
Rody Mass Index	Normal weight	42	۲ 24.7%	259	۲ 35.3%	301	33.5%	
Douy Mass much	Overweight	63	37.7%	322	43.7%	385	42.7%	
	Obese	62	37.1%	157	20.7%	219	23.5%	
PC-PTSD Screener	2-4 Possible PTSD DSM-IV	71	42.1%	103	14.1%	174	18.8%	
	3-4 Possible PTSD DSM-IV	50	29.1%	55	7.7%	105	11.3%	
	1 3-4 POSSIDIE P 1 3 0 1 3 W-W					100	11.5%	

Variable	Category	C n	lient Wt%	Nor n	n-Client Wt%	n T	otal Wt%
Group Totals	oategory	170	100.0%	752	100.0%	922	100.0%
K10 Psychological	Overall Score, Mean	170	10.6	102	3.9	522	5.1
Distress	0-9 Likely well	94	56.1%	665	88.8%	759	83.3%
Distrood	10-14 Likely mild mental disorder	27	F	47	6.3%	74	7.9%
	15-19 Likely moderate disorder	13	F	13	F	26	F
	20-40 Likely severe disorder	34	20.1%	24	F	58	6.2%
Comorbidity	PHC 0	9	F	297	40.2%	306	34.3%
-	PHC 1	28	F	219	29.3%	247	27.2%
	PHC 2	38	22.9%	117	15.5%	155	16.7%
(PHC = as above)	PHC 3+	95	55.5%	119	15.0%	214	21.9%
(MHC = as above)	MHC 0	86	50.4%	676	89.6%	762	83.0%
	MHC 1	34	20.4%	51	6.8%	85	9.1%
	MHC 2+	50	29.2%	25	F	75	7.9%
	PHC and MHC	81	48.5%	66	9.0%	147	15.7%
	Musculoskeletal + Pain/discomfort + MHC	51	29.4%	25	F	76	7.7%
	No RALD or ADL need	13	F	526	70.4%	539	59.8%
	RALD: Often or sometimes	157	92.5%	224	29.3%	381	40.0%
	Never	13	F	528	70.7%	541	60.0%
	PAL: Often or sometimes	160	94.2%	288	37.9%	448	47.4%
Activity	Never	10	F	464	62.1%	474	52.6%
Limitations	Needs help with at least one ADL	80	47.0%	42	5.6%	122	12.6%
	Pain/Discomfort Limitations: A few, some or most activities	111	64.8%	113	14.8%	224	23.2%
	K10 Interference with activity: None	52	30.1%	505	67.5%	559	61.3%
	A lot, some, a little	116	69.4%	244	32.5%	360	38.7%
Suicidality	12-Month Ideation	24	F	25	F	49	5.2%
	Social support, Mean (0-40)		32.5		35.6		35.1
	Attachment, Mean (2-8)		6.4		7.2		7.1
Social Provisions	Guidance, Mean (2-8)		6.7		7.2		7.1
Scale	Reliable Alliance, Mean (2-8)		6.8		7.3		7.2
	Social Integration, Mean (2-8)		6.2		6.9		6.8
<u> </u>	Reassurance of Worth, Mean(2-8)		6.2	170	6.9		6.8
Sense of	Very or somewhat strong	75	43.9%	476	63.3%	551	60.0%
Community	Very or somewhat weak	94	56.1%	273	36.7%	367	40.0%
Belonging Mastery (score	Low <= 7	10	F	5	F	15	F
ranges 0-28 low to	Niddle	134	۲ 80.5%	457	60.6%	<mark>15</mark> 591	63.9%
high)	High >= 23	22	F	286	38.8%	308	34.6%
Satisfaction with	Satisfied or very satisfied	113	66.8%	699	93.2%	812	88.7%
Life	Dissatisfied or very dissatisfied	57	33.2%	51	6.8%	108	11.3%
	Not at all or not very stressful	40	22.9%	225	30.5%	265	29.2%
Stress most days	A bit stressful	61	35.3%	356	46.8%	417	44.9%
	Extremely or quite a bit stressful	69	41.9%	171	22.7%	240	25.9%
Work stress in	Not at all or not very stressful	21	F	174	26.6%	195	25.9%
past year job or	A bit stressful	41	40.6%	315	20.0 <i>%</i> 46.3%	356	45.7%
business	Extremely or quite a bit stressful	38	38.9%	186	27.0%	224	28.4%
	Satisfied or very satisfied	103	61.8%	589	78.0%	692	75.3%
Satisfaction with	Neither satisfied nor dissatisfied	29	F	71	9.7%	100	11.0%
main activity	Dissatisfied or very dissatisfied	34	20.7%	89	12.3%	123	13.7%
Smoker	Daily	28	<u>20.770</u> F	92	12.8%	120	13.4%
Heavy drinker	5 or more drinks on one occasion,	28	F	216	30.0%	244	27.8%
-	12 or more times a year						
Health Services	Prescription Drug Insurance	164	96.9%	650 502	86.5%	814	88.2%
	Dental Insurance	131	77.4%	592	78.5%	723	78.3%
	Eye Glasses Insurance	135	81.5%	528	71.2%	663	72.9%
	Regular medical doctor	153	90.1%	580	76.0%	733	78.4%
	Home care	28	F	9	F	37	3.8%

		Client		Non-Client		Total	
Variable	Category	n	Wt%	n	Wt%	n	Wt%
Group Totals		170	100.0%	752	100.0%	922	100.0%
	Unmet care need past year	54	32.2%	95	12.6%	149	15.9%
	Unmet needs: physical & injury	45	27.1%	66	8.7%	111	11.8%
	Unmet needs: mental health	Х	F	19	F	23	F
	Unmet needs: other	9	F	13	F	22	F

F = Sample size <30 so estimate considered unreliable. X =Sample size < 5. Proportions not adjusted for age, gender and other differences.

TZ, by chefit st		C	lient	Nor	-Client	Total	
Variable	Category	n	Wt%	n	Wt%	n	Wt%
		170	16.9%	752	83.1%	922	100%
Client Status	VAC Clients	170	100.0%	0	0.0%	170	100%
	Non Clients	0	0.0%	752	100.0%	752	100%
Age	Age, Mean (years)		47.8		38.6		40.2
	≤ 19 Years	0	0.0%	0	0.0%	0	0%
	20-29	6	F	129	96.1%	135	100%
	30-39	31	8.0%	335	92.0%	366	100%
	40-49	55	28.2%	129	71.8%	184	100%
	50-59 60-69	50 28	32.0% F	100 59	68.0% 66.3%	150 87	100% 100%
Gender	Male	118	15.4%	585	84.6%	703	100%
Gender	Female	52	21.9%	166	78.1%	218	100%
Education at time	Less than high school graduation	8	F	20	F	210	F
of survey	High school graduation	52	20.3%	182	79.7%	234	100%
or our roy	Post-secondary grad < bachelors	78	20.3 <i>%</i> 18.8%	298	81.2%	376	100 %
	University graduation ≥ bachelors	70	F	60	89.9%	67	100%
Marital status	Married/Commonlaw	116	 16.1%	557	83.9%	673	100%
time of survey	Widowed/Separated/Divorced	21	F	39	66.6%	60	100%
time of Survey	Single/Never married	33	9.9%	156	90.1%	189	100%
Unemployment	Unemployment Rate		<u>9.9%</u> 13.1%	150	4.3%	109	5.4%
Labour Force	Employed	91	11.4%	637	88.6%	728	100%
Participation	Unemployed	91 14	F	28	68.0% F%	42	100%
rancipation	Not in the workforce	50	۲ 37.1%	79	г» 62.9%	42 129	100%
	Unable to work	50 15	57.1% F	79 8	62.9% F	23	100% F
GEN_Q08		10	Г	0	Г	23	Г
Worked at job or business in past year	Worked at job/business past year	100	11.8%	677	88.2%	777	100%
Main activity 12	Marked at a job or rep a business	86	11.2%	616	88.8%	702	100%
months prior to	Worked at a job or ran a business						
survey	Retired and not looking for work	20	F	41	66.7%	61	100%
-	Attended school or training	20 X	F	33 11	66.6%	53 14	100% F
	Looked for work	×	F		F		F
	Caregiving Was disabled or on disability	35		21 18	F	21 53	
	Other	35 X	64.4% F	10	F	53 15	100% F
Skills	Other			1			
Transferability	Agree/strongly agree	83	18.5%	339	81.5%	422	100.0%
ranororability	Neither	27	F	118	83.3%	145	100.0%
	Disagree/strongly disagree	43	11.9%	284	88.1%	327	100.0%
With children	Persons ≤ age 18 in household		0.7		1.0		1.0
Low Income Measure	Below LIM	12	F	54	83.7%	66	100%
Household	\$0 to <\$50,000	18	F	55	78.3%	73	100%
income not	\$50,000 to <\$100,000	53	18.6%	209	81.4%	262	100%
adjusted for LIM	\$100,000 to <\$150,000	15	F	85	86.5%	100	100%
-	\$150,000+	X	F	20	F	24	F
Lenath of			F	7	F	7	F
Service							
Length of Service	< 2 years 2 to 9 years 10 to 19 years ≥ 20 years	X 26 73 71					

## Appendix Table 4. Proportions<sup>28</sup> for Reserve Class C Veterans released in 2003-12, by client status.

<sup>&</sup>lt;sup>28</sup> Row sums to 100%. Proportions not adjusted for age, gender.

		C	lient	Non	-Client	То	otal
Variable	Category	n	Wt%	n	Wt%	n	Wt%
	-	170	16.9%	752	83.1%	922	100%
Release Type	Medical	91	70.4%	37	29.6%	128	100%
	Voluntary	49	7.6%	552	92.4%	601	100%
	Retirement Age	15	F	41	72.3%	56	100%
	Involuntary	X	F	65	94.7%	69	100%
	Service Complete	11	F	57	84.9%	68	100%
Rank	Senior Officer	16	F	62	79.4%	78	100%
Rank	Junior Officer Cadet	15 X	F	75 X	85.1% F	90 X	100% F
	Senior NCM	57	27.3%	147	72.7%	204	100%
	Junior NCM	81	14.3%	429	85.7%	510	100%
	Private	Х	F	11	F	11	F
	Recruit	Х	F	27	F	28	F
Enrolment Era	1950's	Х	F	Х	F	Х	F
	1960's	7	F	10	F	17	F
	1970's	24	F	55	70.4%	79	100%
	1980's	47	29.6%	106	70.4%	153	100%
	1990's	78	16.7%	366	83.3%	444	100%
	2000's	14	F	212	94.6%	226	100%
	2010's	Х	F	Х	F	Х	F
Release Year	1998	Х	F	Х	F	Х	F
	1999	Х	F	Х	F	Х	F
	2000	Х	F	Х	F	Х	F
	2001	Х	F	Х	F	Х	F
	2002	Х	F	Х	F	Х	F
	2003	7	F	53	88.7%	60	100%
	2004	10	F	65	87.6%	75	100%
	2005	10	F	71	88.5%	81	100%
	2006	16	F	73	83.6%	89	100%
	2007	10	F	64	87.3%	74	100%
	2008	19	F	80	81.7%	99	100%
	2009	20	F	101	85.0%	121	100%
	2010	33	29.2%	74	70.8%	107	100%
	2011	25	F	117	84.7%	142	100%
	2012	20	<u> </u>	54	75.2%	74	100%
Service	Air Force	26	F	41	61.4%	67	100%
Environment	Army	124	15.2%	614	84.8%	738	100%
Last Millions	Navy	20	F	97	83.9%	117	100%
Last Military Occupation	Combat arms	48	15.2%	234	84.8%	282	100%
Occupation	Communications Maritime	7 11	F	64 40	90.7% 79.9%	71 51	100% 100%
	Aviation	X	F	<del>7</del>	F	11	F
	Administration, Logistics, Security,						
	Intelligence, Emergency services	66	33.0%	121	67.0%	187	100%
	Engineering/technical	11	F	16	F	27	F
	Medical	5	F	22	F	27	F
	General Officer Specialist	Х	F	7	F	8	F
Adjustment to	Very or moderately easy	53	8.6%	506	91.4%	559	100%
Civilian Life	Neither difficult nor easy	23	F 20.20/	114	85.1%	137	100%
Colf Dated back	Very or moderately difficult	94	39.3%	131	60.7%	225	100%
Self-Rated health	Very good or excellent	36	5.9%	518	94.1%	554	100%
	Good Eair ar poor	63 71	24.6%	178	75.4%	241	100%
Oalf Data d	Fair or poor Very good or excellent	71	53.3% 8.9%	56 557	<u>46.7%</u> 91.1%	127 618	<u>100%</u> 100%
		61	8.9%	1 22/	91.1%	1 018	100%
Self-Rated mental health	Good	48	22.1%	152	77.9%	200	100%

		0	lient	Nor	-Client	Т	otal
Variable	Category	n	Wt%	n	Wt%	n	Wt%
		170	16.9%	752	83.1%	922	100%
Quality of Life	PCS, Mean		38.8		53.1		50.8
PCS	SF-12 0-9	Х	F	Х	F	Х	F
	SF-12 10-19	8	F	7	F	15	F
	SF-12 20-29	40	71.5%	15	F	55	100%
	SF-12 30-39	39	49.7%	38	50.3%	77	100%
	SF-12 40-49	46	29.8%	99	70.2%	145	100%
	SF-12 50+	34	4.9%	589	95.1%	623	100%
Quality of Life	MCS, Mean		44.8		52.4		51.1
MCS	SF-12 0-9	Х	E	X	F	X	F
	SF-12 10-19	8	F	10	-	18	F
	SF-12 20-29	25	F	20	F CF 20/	45	100%
	SF-12 30-39 SF-12 40-49	24 32	<del>٦</del> 16.5%	42 140	65.3% 83.5%	66 172	100% 100%
	SF-12 40-49 SF-12 50+	76	11.4%	536	88.6%	612	100%
Chronic Health	No PHC or MHC	6	F	261	98.0%	267	100%
Conditions	Any PHC	161	24.4%	455	75.6%	616	100%
(Any PHC = PHC	Musculoskeletal	124	32.0%	244	68.0%	368	100%
= Any one of:	Back problems	96	30.3%	201	69.7%	297	100%
musculoskeletal	Arthritis	76	46.8%	82	53.2%	158	100%
condition,	Cardiovascular	36	24.9%	103	75.1%	139	100%
cardiovascular	High blood pressure	34	27.3%	87	72.7%	121	100%
condition,	Heart disease	7	F	18	F	25	F
gastrointestinal	Stroke	Х	F	Х	F	5	F
condition,	Gastrointestinal	28	F	49	66.5%	77	100%
respiratory condition, urinary	Ulcers	12	E	18	F	30	100%
incontinence,	Bowel disorders	17	<u> </u>	33	68.6%	50	100%
diabetes, cancer,	Respiratory	29	F	39	60.7%	68	100%
obesity, hearing	Asthma COPD	22	F	38 ×	66.5% F	60 11	100% F
problem or chronic	COPD Central Nervous System	9 45	<del>٦</del> 34.2%	78	65.8%	123	<mark>٦</mark>
pain/discomfort)	Dementia (> 35 years)	45 X	54.270 F	X	05.6% F	123 X	100% F
	Migraine	35	31.1%	70	68.9%	105	100%
	TBI Effects (Yes and Maybe)	19	F	14	F	33	100%
	Urinary incontinence	7	F	14	F	21	F
(Any MHC = Mood Disorder, Anxiety	Diabetes	19	F	31	61.4%	50	100%
Disorder, PTSD)	Cancer	Х	F	6	F	10	F
	Any MHC	84	49.3%	76	50.7%	160	100%
	Mood disorder	63	52.0%	51	48.0%	114	100%
	Anxiety Disorder	38	45.7%	38	54.3%	76	100%
	PTSD	52	70.1%	19	F	71	100%
	Attribution to service, yes	137	42.0%	173	58.0%	310	100%
Other Health	Not free of pain/discomfort	116	40.9%	152	59.1%	268	100%
Conditions	Pain/discomfort Mild	17	F	66	80.8%	83	100%
	Pain/discomfort Moderate	74	48.2%	72	51.8%	146	100%
Hooring	Pain/discomfort Severe	25	F 12.5%	14 722	F 86.5%	39	100%
Hearing	Able to hear in group no aid Hearing problem	125 22	13.5% F	722 23	86.5% F	847 45	100% 100%
Body Mass Index	Underweight	X	F	23 X	F F	45 X	100 %
Douy mass much	Normal weight	42	12.5%	259	87.5%	301	100%
	Overweight	63	15.0%	322	85.0%	385	100%
	Obese	62	26.8%	157	73.2%	219	100%
PC-PTSD	2-4 Possible PTSD DSM-IV	71	37.7%	103	62.3%	174	100%
	3-4 Possible PTSD DSM-IV	50	43.5%	55	56.5%	105	100%

<b>W</b> . <b>1</b> .11	0.1		lient		-Client			
Variable	Category	n	Wt%	n 750	Wt%	n	Wt%	
K10 Developing	Overell Seere Meen	170	16.9%	752	83.1% 3.9	922	100%	
K10 Psychological Distress	Overall Score, Mean 0-9 Likely well	94	<u>    10.6</u> 11.3%	665	<u> </u>	759	<u>5.1</u> 100%	
Distress	10-14 Likely mild mental disorder	94 27	F	47	66.0%	759	100%	
	15-19 Likely moderate disorder	13	F	13	60.0 %	26	F	
	20-40 Likely severe disorder	34	54.6%	24	F	58	100%	
Comorbidity	PHC 0	9	F	297	97.5%	306	100%	
Comorbially	PHC 1	28	Ē	219	89.7%	247	100%	
	PHC 2	38	23.1%	117	76.9%	155	100%	
(PHC = as above)	PHC 3+	95	42.9%	119	57.1%	214	100%	
(MHC = as above)	MHC 0	86	10.3%	676	89.7%	762	100%	
	MHC 1	34	37.9%	51	62.1%	85	100%	
	MHC 2+	50	62.4%	25	F	75	100%	
	PHC and MHC	81	52.1%	66	47.9%	147	100%	
	Musculoskeletal + Pain/discomfort + MHC	51	64.4%	25	F	76	100%	
Activity	No RALD or ADL need	13	F	526	97.9%	539	100%	
Limitations	RALD: Often or sometimes	157	39.1%	224	60.9%	381	100%	
	Never	13	F	528	97.9%	541	100%	
	PAL: Often or sometimes	160	33.6%	288	66.4%	448	100%	
	Never	10	F	464	98.1%	474	100%	
	Needs help with at least one ADL	80	62.9%	42	37.1%	122	100%	
	Pain/Discomfort Limitations: A few, some or most activities	111	47.2%	113	52.8%	224	100%	
	K10 Interference with activity: None	52	8.4%	505	91.6%	557	100%	
	A lot, some, a little	116	30.1%	244	69.9%	360	100%	
Suicidality	12-Month Ideation	24	F	25	F	49	100%	
Social Provisions	Social support, Mean (0-40)		32.5		35.6		35.1	
Scale	Attachment, Mean (2-8)		6.4		7.2		7.1	
	Guidance, Mean (2-8)		6.7		7.2		7.1	
	Reliable Alliance, Mean (2-8)		6.8		7.3		7.2	
	Social Integration, Mean (2-8)		6.2 6.2		6.9 6.9		6.8	
Sense of	Reassurance of Worth, Mean(2-8)	75	12.3%	476	87.7%	551	<u>6.8</u> 100%	
Community	Very or somewhat strong Very or somewhat weak	75		470		551	100%	
Belonging	Very of somewhat weak	94	14.7%	273	85.3%	367	100%	
Mastery (score	Low <= 7	10	F	5	F	15	F	
ranges 0-28 low	Middle	134	20.9%	457	79.1%	591	100%	
to high)	High >= 23	22	F	286	93.5%	308	100%	
Satisfaction with Life	Satisfied or very satisfied	113	12.7%	699	87.3%	812	100%	
	Dissatisfied or very dissatisfied	57	50.0%	51	50.0%	108	100%	
Stress most days	Not at all or not very stressful	40	13.2%	225	86.8%	265	100%	
· · · · · · · · · · · · · · · · · · ·	A bit stressful	61	13.3%	356	86.7%	417	100%	
	Extremely or quite a bit stressful	69	27.3%	171	72.7%	240	100%	
Work stress in	Not at all or not very stressful	21	F	174	90.7%	195	100%	
past year job or	A bit stressful	41	10.5%	315	89.5%	356	100%	
business	Extremely or quite a bit stressful	38	16.1%	186	83.9%	224	100%	
Satisfaction with	Satisfied or very satisfied	103	13.6%	589	86.4%	692	100%	
main activity	Neither satisfied nor dissatisfied	29	F	71	73.5%	100	100%	
-	Dissatisfied or very dissatisfied	34	25.1%	89	74.9%	123	100%	
Smoker	Daily	28	F	92	79.3%	120	100%	
Heavy drinker	5 or more drinks on one occasion, 12 or more times a year	28	F	216	89.7%	244	100%	
Health Services	Prescription Drug Insurance	164	18.6%	650	81.4%	814	100%	
	Dental Insurance	131	16.6%	592	83.4%	723	100 %	
	Eye Glasses Insurance	135	18.7%	528	81.3%	663	100%	
	Regular medical doctor	153	19.4%	580	80.6%	733	100%	

			Client		Non-Client		otal
Variable	Category	n	Wt%	n	Wt%	n	Wt%
		170	16.9%	752	83.1%	922	100%
	Home care	28	F	9	F	37	100%
	Unmet care need past year	54	34.3%	95	65.7%	149	100%
	Unmet needs: physical & injury	45	38.6%	66	67.4%	111	100%
	Unmet needs: mental health	Х	F	19	F	23	F
	Unmet needs: other	9	F	13	F	22	F

F = Sample size <30 so estimate considered unreliable. X =Sample size < 5. Proportions not adjusted for age, gender and other differences.

## Appendix Table 5. Prevalences<sup>29</sup> for Regular Force Veterans released in 1998-2012 by client status.

		C	lient	Nor	n Client	Total	
Variable	Category	n	Wt%	n	Wt%	n	Wt%
Group Totals		898	100.0%	1431	100.0%	2329	100.0%
Client Status	VAC Clients	898	100.0%	0	0.0%	898	35.4%
	Non Clients	0	0.0%	1431	100.0%	1431	64.6%
Age	Age, Mean (years)		48.3		41.4		43.9
	≤ 19 Years	Х	F	Х	F	Х	F
	20-29	21	F	198	22.7%	219	16.2%
	30-39	71	12.5%	281	25.3%	352	20.8%
	40-49	275	33.8%	308	20.4%	583	25.1%
	50-59	378	37.9%	430	22.9%	808	28.2%
	60-69	153	11.2%	211	8.6%	364	9.5%
Gender	Male	803	88.5%	1236	85.6%	2039	86.6%
	Female	95	11.5%	195	14.4%	290	13.4%
Education at time	Less than high school graduation	63	7.5%	47	3.7%	110	5.1%
of survey	High school graduation	398	46.2%	519	40.6%	917	42.6%
	Post-secondary grad < bachelors	285	35.3%	422	36.2%	707	35.9%
	University graduation ≥ bachelors	52	11.0%	174	19.5%	226	16.5%
Marital status	Married/Commonlaw	712	74.1%	1127	73.6%	1839	73.8%
time of survey	Widowed/Separated/Divorced	116	14.9%	110	7.4%	226	10.0%
	Single/Never married	70	10.9%	194	19.0%	264	16.1%
Unemployment	Unemployment Rate		8.7%		6.1%		6.9%
Labour Force	Employed	499	56.0%	1107	80.6%	1606	71.9%
Participation	Unemployed	46	5.4%	63	5.3%	109	5.3%
	Not in the workforce	288	30.5%	244	13.1%	532	19.3%
	Unable to work	65	8.1%	15	F	80	3.5%
Worked at job or							
business in past	Worked at job/business past year	560	62.5%	1177	86.1%	1737	77.7%
year							
Main activity 12	Worked at a job or ran a business	482	53.5%	1067	77.5%	1549	69.0%
months prior to	Retired and not looking for work	203	19.2%	190	8.4%	393	12.2%
survey	Attended school or training	32	4.6%	60	5.3%	92	5.1%
	Looked for work	27	F	23	F	50	2.4%
	Caregiving	16	F	22	F	38	1.7%
	Was disabled or on disability	102	13.1%	26	F	128	6.2%
	Other	35	5.0%	39	2.3%	74	3.3%
Skills Transferability	Agree/strongly agree	429	49.0%	702	44.4%	1131	46.0%
	Neither	93	11.9%	180	13.9%	273	13.2%
	Disagree/strongly disagree	302	39.1%	503	41.7%	805	40.8%
With children	Persons ≤ age 18 in household		0.7		0.8		0.7
Low Income Measure	Below LIM	36	5.2%	85	8.8%	121	7.6%
Household	\$0 to <\$50,000	75	16.2%	120	19.1%	195	18.1%
income not	\$50,000 to <\$100,000	322	60.7%	398	55.9%	720	57.7%
adjusted for	\$100,000 to <\$150,000	90	20.1%	162	20.1%	252	20.1%
number in household or LIM	\$150,000+	20	F	51	4.8%	71	4.2%
Length of Service	< 2 years	10	F	326	32.0%	336	21.3%
	2 to 9 years	82	14.8%	222	22.3%	304	19.7%
	10 to 19 years	125	19.6%	103	7.1%	228	11.5%
	≥ 20 years	681	63.7%	780	38.6%	1461	47.5%

<sup>&</sup>lt;sup>29</sup> Column sums to 100% within variables. Prevalences not adjusted for age, gender.

		C	lient	Nor	Client	L 1	otal
Variable	Category	n	Wt%	n	Wt%	n	Wt%
Group Totals		898	100.0%	1431	100.0%	2329	100.0%
Release Type	Medical	403	49.3%	79	5.4%	482	21.0%
	Voluntary	293	30.0%	863	64.4%	1156	52.2%
	Retirement Age	70	4.8%	116	4.5%	186	4.6%
	Involuntary	25	F	75	7.7%	100	6.7%
	Service Complete	104	11.1%	293	17.9%	397	15.5%
Rank	Senior Officer	113	7.2%	217	7.9%	330	7.7%
	Junior Officer	92	6.1%	212	8.5%	304	7.6%
	Cadet	5	F	136	6.3%	141	4.2%
	Senior NCM	440	36.2%	404	18.9%	844	25.1%
	Junior NCM	218	43.6%	196	22.7%	414	30.1%
	Private	16	F	73	9.6%	89	7.4%
	Recruit	14	F	193	26.0%	207	17.9%
Enrolment Era	1950's	X	F	9	F	12	F
	1960's	71	5.2%	114	4.5%	185	4.7%
	1970's	309	26.6%	356	17.9%	665	21.0%
	1980's	353	41.0%	347	19.5%	700	27.1%
	1990's	90	13.6%	176	13.7%	266	13.6%
	2000's	71	13.1%	389	39.8%	460	30.3%
<b>.</b>	2010's	X	F	40	4.3%	41	2.9%
Release Year	1998	31	3.6%	95	6.7%	126	5.6%
	1999	38	4.2%	101	6.3%	139	5.5%
	2000	43	4.5%	97	6.2%	140	5.6%
	2001	45	5.2%	92	5.9%	137	5.6%
	2002	45	4.6%	60	4.0%	105	4.2%
	2003	44	4.6%	88	5.7%	132	5.3%
	2004	66	7.2%	98	6.9%	164	7.0%
	2005	77	9.3%	84	6.1%	161	7.2%
	2006	83	8.8%	116	7.8%	199	8.1%
	2007	71	7.7%	117	8.1%	188	8.0%
	2008	83	9.3%	145	10.7%	228	10.2%
	2009	79	8.7%	105	8.1%	184	8.3%
	2010	52	5.4%	95	7.6%	147	6.9%
	2011	76	8.7%	83	5.3%	159	6.5%
<u> </u>	2012	65	8.2%	55	4.6%	120	5.9%
Service	Air Force	292	29.1%	527	30.3%	819	29.9%
Environment	Army	465	56.6%	636	52.3%	1101	53.8%
Leat Military	Navy	141	14.4%	268	17.3%	409	16.3%
Last Military Occupation	Combat arms Communications	178 59	24.6% 7.1%	270 109	27.3% 8.3%	448 168	26.4% 7.8%
Occupation	Maritime	91	9.6%	179	0.3% 12.8%	270	7.8% 11.6%
	Aviation	111	12.0%	245	14.7%	356	13.8%
	Administration, Logistics, Security,						
	Intelligence, Emergency services	236	28.4%	303	22.0%	539	24.3%
	Engineering/technical	99	12.4%	135	9.9%	234	10.8%
	Medical	40	3.3%	75	4.5%	115	4.1%
	General Officer Specialist	29	F	12	F	41	1.2%
Adjustment to	Very or moderately easy	393	38.4%	1004	66.1%	1397	56.3%
Civilian Life	Neither difficult nor easy	130	15.0%	226	17.3%	356	16.5%
	Very or moderately difficult	375	46.6%	199	16.6%	574	27.2%
Self-Rated health	Very good or excellent	253	25.0%	991	67.7%	1244	52.6%
	Good	345	38.5%	339	24.8%	684	29.6%
	Fair or poor	300	36.5%	101	7.6%	401	17.8%

Variable	Category	C n	lient Wt%	Non n	Client Wt%	n T	otal Wt%
Group Totals		898	100.0%	1431	100.0%	2329	100.0%
Self-Rated mental	Very good or excellent	407	40.5%	1092	73.2%	1499	61.6%
health	Good	225	26.2%	260	20.6%	485	22.6%
	Fair or poor	265	33.2%	79	6.2%	344	15.8%
Quality of Life	PCS, Mean		39.4		52.6	-	47.9
PCS	SF-12 0-9	Х	F	Х	F	Х	F
	SF-12 10-19	48	5.3%	11	F	59	2.5%
	SF-12 20-29	160	19.0%	37	2.5%	197	8.3%
	SF-12 30-39	237	27.4%	73	5.0%	310	12.8%
	SF-12 40-49	217	25.1%	232	15.4%	449	18.8%
	SF-12 50+	217	23.1%	1072	76.2%	1289	57.5%
Quality of Life	MCS, Mean		47.3		53.5	1200	51.3
MCS	SF-12 0-9	X	F	Х	F	Х	F
	SF-12 10-19	25	Ē	8	F	33	1.5%
	SF-12 20-29	74	9.7%	29	Ē	103	5.0%
	SF-12 30-39	122	16.3%	73	6.3%	195	9.8%
	SF-12 40-49	169	20.3%	183	14.1%	352	16.2%
	SF-12 50+	488	49.9%	1131	76.6%	1619	67.2%
Chronic Health	No PHC or MHC	44	5.4%	469	35.0%	513	24.2%
Conditions	Any PHC	830	91.5%	889	63.4%	1719	73.7%
(Any PHC = PHC	Musculoskeletal	645	71.7%	438	27.9%	1083	43.4%
= Any one of:	Back problems	510	56.9%	338	22.2%	848	34.5%
musculoskeletal	Arthritis	398	43.1%	196	11.2%	594	22.4%
condition,	Cardiovascular	261	25.6%	279	15.8%	540	19.3%
cardiovascular	High blood pressure	238	23.4%	246	13.8%	484	17.2%
condition,	Heart disease	47	4.3%	54	2.8%	101	3.3%
gastrointestinal	Stroke	5	F	10	F	15	F
condition,	Gastrointestinal	121	13.3%	83	6.1%	204	8.6%
respiratory condition, urinary	Ulcers	58	6.5%	31	2.4%	89	3.8%
incontinence,	Bowel disorders	81	9.0%	58	4.3%	139	5.9%
diabetes, cancer,	Respiratory	101	11.5%	73	4.9%	174	7.2%
obesity, hearing	Asthma	69	8.3%	60	4.1%	129	5.6%
problem or chronic	COPD	45	4.8%	19	F	64	2.4%
pain/discomfort)	Central Nervous System	194	25.4%	144	11.6%	338	16.4%
p	Dementia (> 35 years)	5	F	X 100	F	5	F
	Migraine	167 58	21.2%	129	10.2%	296	14.1%
	TBI Effects (Yes and Maybe) Urinary incontinence	44	7.0%	31	2.6% F	89	4.1%
		80	4.9%	25	-	69	2.8%
	Diabetes		8.3%	69	4.1%	149	5.6%
	Cancer	30	2.4%	20	F	50	1.6%
(Any MHC = Mood	Any MHC	376	47.4%	131	10.9%	507	23.8%
Disorder, Anxiety	Mood disorder	271	33.8%	93	7.9%	364	17.1%
Disorder, PTSD)	Anxiety Disorder	164	21.2%	66	5.6%	230	11.1%
	PTSD	253	33.0%	27	F	280	13.1%
Hoalth	Attribution to service, yes	694	79.4%	329	21.3%	1023	42.1%
Health Conditions -	Not free of pain/discomfort	540	61.7%	269	18.4%	809	33.8%
Other	Pain/discomfort Mild Pain/discomfort Moderate	78	8.5%	86 157	5.9%	164 503	6.8%
	Pain/discomfort Noderate Pain/discomfort Severe	346 114	39.0% 14.0%	157 24	10.8% F	503 138	20.8% 6.0%
Hearing			14.0%		-		
ricanny	Able to hear in group no aid	656 185	76.4% 18.7%	1357	95.6% 3.3%	2013 237	88.8% 8.5%
Body Mass Index	Hearing problem		18.7%	52	3.3%		8.5% F
Doay Muss much	Underweight	X	F	9 424	F 21 10/	11 506	
	Normal weight	172	20.8%	424	31.1%	596	27.4%
	Overweight	440	47.0% 32.1%	675 310	45.5%	1115	46.1%
		281	32.1%	310	22.7%	591	26.1%
PC-PTSD Screen	2-4 Possible PTSD DSM-IV	325	39.2%	147	12.4%	472	21.9% 14.0%
	3-4 Possible PTSD DSM-IV	231	27.3%	77	6.8%	308	14.0%

Variable	Category	C n	lient Wt%	Non n	Client Wt%	T n	otal Wt%
Group Totals		898	100.0%	1431	100.0%	2329	100.0%
•	Overall Score, Mean		9.3		3.6		5.6
K10 Psychological	0-9 Likely well	567	59.9%	1293	89.3%	1860	78.9%
Distress	10-14 Likely mild mental disorder	129	15.3%	67	4.8%	196	8.5%
	15-19 Likely moderate disorder	76	9.5%	29	F	105	5.0%
	20-40 Likely severe disorder	116	15.3%	35	3.4%	151	7.6%
Comorbidity	PHC 0	68	9.1%	542	40.1%	610	29.1%
	PHC 1	139	14.8%	403	28.6%	542	23.7%
	PHC 2	193	20.6%	243	15.1%	436	17.0%
(PHC = as above)	PHC 3+	498	55.6%	243	16.3%	741	30.2%
(MHC = as above)	MHC 0	524	52.9%	1298	89.2%	1822	76.3%
	MHC 1	150	18.1%	85	6.6%	235	10.7%
	MHC 2+	226	29.0%	46	4.2%	272	13.0%
	PHC and MHC	354	44.1%	110	9.2%	464	21.6%
	Musculoskeletal + Pain/discomfort + MHC	228	28.1%	33	2.6%	261	11.7%
Activity	No RALD or ADL need	114	11.5%	998	71.3%	1112	50.1%
Limitations	RALD: Often or sometimes	781	88.2%	426	28.2%	1207	49.5%
	Never	116	11.8%	1002	71.8%	1118	50.5%
	PAL: Often or sometimes	825	92.2%	534	35.1%	1359	55.3%
	Never	72	7.8%	896	64.9%	968	44.7%
	Needs help with at least one ADL	388	46.0%	85	5.9%	473	20.1%
	Pain/Discomfort Limitations: A few, some or most activities	521	60.0%	191	13.1%	712	29.7%
	K10 Interference with activity: None	340	34.7%	1053	72.2%	1343	58.9%
	A lot, some, a little	552	65.3%	371	27.8%	923	41.1%
Suicidality	12-Month Ideation	88	11.9%	42	3.7%	130	6.6%
Social Provisions	Social support, Mean (0-40)		32.4		35.1		34.1
Scale	Attachment, Mean (2-8)		6.5		7.1		6.9
	Guidance, Mean (2-8)		6.6		7.1		6.9
	Reliable Alliance, Mean (2-8)		6.8		7.2		7.0
	Social Integration, Mean (2-8)		6.1		6.8		6.6
	Reassurance of Worth, Mean(2-8)		6.7		6.9		6.7
Sense of	Very or somewhat strong	460	46.8%	915	63.4%	1375	57.5%
Community Belonging	Very or somewhat weak	431	53.2%	507	36.6%	938	42.5%
Mastery (score	Low <= 7	32	4.1%	5	F	37	1.8%
ranges 0-28 low	Middle	682	79.1%	873	63.5%	1555	69.0%
to high)	High $\geq 23$	169	16.8%	543	35.9%	712	29.2%
Satisfaction with	Satisfied or very satisfied	689	73.9%	1338	92.2%	2027	85.7%
Life	Dissatisfied or very dissatisfied	206	26.1%	93	7.8%	299	14.3%
Stress most days	Not at all or not very strossful	292	29.9%	585	40.0%	877	36.4%
Sucas most days	Not at all or not very stressful						
	A bit stressful	360	40.4%	578	41.5%	938	41.1%
Wark atreas in	Extremely or quite a bit stressful Not at all or not very stressful	246	29.7%	264	18.5%	510	22.5%
		152	27.5%	380	34.8%	532	32.8%
	-		44.001	<b>F</b> 4 4	4 - 001		
Work stress in past year job or	A bit stressful	252	44.8%	544	45.2%	796	45.1%
past year job or business	A bit stressful Extremely or quite a bit stressful	252 154	27.6%	252	20.0%	406	22.2%
past year job or business Satisfaction with	A bit stressful Extremely or quite a bit stressful Satisfied or very satisfied	252 154 617	27.6% 65.5%	252 1186	20.0% 80.1%	406 1803	<u>22.2%</u> 75.0%
past year job or business	A bit stressful Extremely or quite a bit stressful Satisfied or very satisfied Neither satisfied nor dissatisfied	252 <u>154</u> 617 101	27.6% 65.5% 12.5%	252 1186 128	20.0% 80.1% 10.6%	406 1803 229	22.2% 75.0% 11.3%
past year job or business Satisfaction with main activity	A bit stressful Extremely or quite a bit stressful Satisfied or very satisfied	252 154 617 101 175	27.6% 65.5% 12.5% 22.0%	252 1186 128 115	20.0% 80.1% 10.6% 9.2%	406 1803	22.2% 75.0% 11.3% 13.7%
past year job or business Satisfaction with main activity Smoker	A bit stressful Extremely or quite a bit stressful Satisfied or very satisfied Neither satisfied nor dissatisfied	252 <u>154</u> 617 101	27.6% 65.5% 12.5%	252 1186 128	20.0% 80.1% 10.6%	406 1803 229	22.2% 75.0% 11.3%
past year job or business Satisfaction with main activity Smoker	A bit stressful Extremely or quite a bit stressful Satisfied or very satisfied Neither satisfied nor dissatisfied Dissatisfied or very dissatisfied Daily 5 or more drinks on one occasion,	252 154 617 101 175	27.6% 65.5% 12.5% 22.0%	252 1186 128 115	20.0% 80.1% 10.6% 9.2%	406 1803 229 290	22.2% 75.0% 11.3% 13.7%
past year job or business Satisfaction with main activity Smoker Heavy drinker	A bit stressful Extremely or quite a bit stressful Satisfied or very satisfied Neither satisfied nor dissatisfied Dissatisfied or very dissatisfied Daily 5 or more drinks on one occasion, 12 or more times a year	252 154 617 101 175 148 224	27.6% 65.5% 12.5% 22.0% 19.0% 25.8%	252 1186 128 115 176 331	20.0% 80.1% 10.6% 9.2% 15.0% 24.1%	406 1803 229 290 324 555	22.2% 75.0% 11.3% 13.7% 16.5% 24.7%
past year job or business Satisfaction with main activity Smoker	A bit stressful Extremely or quite a bit stressful Satisfied or very satisfied Neither satisfied nor dissatisfied Dissatisfied or very dissatisfied Daily 5 or more drinks on one occasion,	252 154 617 101 175 148	27.6% 65.5% 12.5% 22.0% 19.0%	252 1186 128 115 176	20.0% 80.1% 10.6% 9.2% 15.0%	406 1803 229 290 324	22.2% 75.0% 11.3% 13.7% 16.5%

		Client		Non Client		Total	
Variable	Category	n	Wt%	n	Wt%	n	Wt%
Group Totals		898	100.0%	1431	100.0%	2329	100.0%
	Regular medical doctor	798	87.0%	1169	77.2%	1967	80.7%
	Home care	151	17.4%	22	F	173	7.3%
	Unmet care need past year	199	24.9%	134	10.8%	333	15.8%
	Unmet needs: physical & injury	136	16.2%	98	8.1%	234	11.0%
	Unmet needs: mental health	51	6.7%	19	F	70	3.4%
	Unmet needs: other	32	4.3%	15	F	47	2.3%

F = Sample size <30 so estimate considered unreliable.

X =Sample size < 5.

Proportions not adjusted for age, gender and other differences.

by chefit state			Client	Non Client		Total	
Variable	Category	n	Wt%	n	Wt%	n	Wt%
		898	35.4%	1431	64.6%	2329	100%
Client Status	VAC Clients	898	100.0%	0	0.0%	898	100%
	Non Clients	0	0.0%	1431	100.0%	1431	100%
Age	Age, Mean (years)		48.3		41.4		43.9
	≤ 19 Years	Х	F	Х	F	Х	F
	20-29	21	F	198	90.1%	219	100%
	30-39	71	21.4%	281	78.6%	352	100%
	40-49 50-59	275 378	47.7% 47.6%	308 430	52.3% 52.4%	583 808	100% 100%
	60-69	153	41.5%	211	52.4 % 58.5%	364	100%
Gender	Male	803	36.2%	1236	63.8%	2039	100%
Gender	Female	95	30.6%	195	69.4%	290	100%
Education at	Less than high school graduation	63	52.3%	47	47.7%	110	100%
time of survey	High school graduation	398	38.4%	519	61.6%	917	100%
•	Post-secondary grad < bachelors	285	34.9%	422	65.1%	707	100%
	University graduation ≥ bachelors	52	23.6%	174	76.4%	226	100%
Marital status	Married/Commonlaw	712	35.6%	1127	64.4%	1839	100%
time of survey	Widowed/Separated/Divorced	116	52.7%	110	47.3%	226	100%
· · · · · <b>,</b>	Single/Never married	70	21.2%	194	78.8%	264	100%
Unemployment	Unemployment Rate		8.7%		6.1%	201	6.9%
Labour Force	Employed	499	27.6%	1107	72.4%	1606	100%
Participation	Unemployed	46	35.9%	63	64.1%	109	100%
•	Not in the workforce	288	56.1%	244	43.9%	532	100%
	Unable to work	65	81.1%	15	F	80	100%
Worked at job or business in	Worked at job/business past year	560	28.5%	1177	71.5%	1737	100%
past year							
Main activity 12	Worked at a job or ran a business	482	27.5%	1067	72.5%	1549	100%
months prior to survey	Retired and not looking for work	203	55.5%	190	44.5%	393	100%
Survey	Attended school or training	32	32.2%	60	67.8%	92	100%
	Looked for work	27	F	23	F	50	100%
	Caregiving	16	F	22	F	38	100%
	Was disabled or on disability	102	75.7%	26	F	128	100%
	Other	35	53.9%	39	46.1%	74	100%
Skills Transferability	Agree/strongly agree Neither	429 93	36.3% 30.6%	702 180	63.7% 69.4%	1131 273	100.0% 100.0%
	Disagree/strongly disagree	302	32.6%	503	67.4%	805	100.0%
With children	Persons ≤ age 18 in household		0.7		0.8		0.7
Low Income Measure	Below LIM	36	24.5%	85	75.5%	121	100%
Household	\$0 to <\$50,000	75	32.3%	120	67.7%	195	100%
income not	\$50,000 to <\$100,000	322	38.0%	398	62.0%	720	100%
adjusted for LIM	\$100,000 to <\$150,000	90	36.0%	162	64.0%	252	100%
	\$150,000+	20	F	51	74.1%	71	100%
Length of	< 2 years	10	F	326	96.8%	336	100%
Service	2 to 9 years	82	26.7%	222	73.3%	304	100%
	10 to 19 years	125	60.3%	103	39.7%	228	100%
	≥ 20 years	681	47.5%	780	52.5%	1461	100%

## Appendix Table 6. Proportions<sup>30</sup> for Regular Force Veterans released in 1998-2012 by client status.

<sup>&</sup>lt;sup>30</sup> Row sums to 100%. Proportions not adjusted for age, gender.

Variable	Category	n (	Client Wt%	Non n	Client Wt%	T o	otal Wt%
Vallable	Calegory	898	35.4%	1431	64.6%	2329	100%
Release Type	Medical	403	83.3%	79	16.7%	482	100%
	Voluntary	293	20.4%	863	79.6%	1156	100%
	Retirement Age	70	37.2%	116	62.8%	186	100%
	Involuntary	25	F	75	74.6%	100	100%
	Service Complete	104	25.4%	293	74.6%	397	100%
	Senior Officer	113	33.2%	217	66.8%	330	100%
Rank	Junior Officer	92	28.2%	212	71.8%	304	100%
	Cadet	5	3.0%	136	97.0%	141	100%
	Senior NCM	440	51.3%	404	48.7%	844	100%
	Junior NCM	218	51.3%	196	48.7%	414	100%
	Private	16	F	73	83.4%	89	100%
	Recruit	14	F	193	93.9%	207	100%
Enrolment Era	1950's	Х	F	9	F	12	F
	1960's	71	38.9%	114	61.1%	185	100%
	1970's	309	45.0%	356	55.0%	665	100%
	1980's	353	45.0%	347	55.0%	700	100%
	1990's	90	35.4%	176	64.6%	266	100%
	2000's	71	14.2%	389	85.8%	460	100%
	2010's	Х	F	40	96.9%	41	100%
Release Year	1998	31	23.0%	95	77.0%	126	100%
	1999	38	26.8%	101	73.2%	139	100%
	2000	43	28.6%	97	71.4%	140	100%
	2001	45	32.8%	92	67.2%	137	100%
	2002	45	38.9%	60	61.1%	105	100%
	2003	44	30.5%	88	69.5%	132	100%
	2004	66	36.5%	98	63.5%	164	100%
	2005	77	45.5%	84	54.5%	161	100%
	2006	83	38.1%	116	61.9%	199	100%
	2007	71	34.2%	117	65.8%	188	100%
	2008	83	32.2%	145	67.8%	228	100%
	2009	79	37.0%	105	63.0%	184	100%
	2010	52	28.1%	95	71.9%	147	100%
	2011	76	47.6%	83	52.4%	159	100%
	2012	65	49.3%	55	52.4 % 50.7%	120	100%
Service	Air Force	292	34.5%	527	65.5%	819	100%
Environment	Army	465	37.3%	636	62.7%	1101	100%
	Navy	141	31.3%	268	68.7%	409	100%
Last Military		178	33.4%		66.6%	409	100%
Occupation	Combat arms Communications	59	33.4 <i>%</i> 32.1%	270 109	67.9%	440 168	100%
Socupation	Maritime	91	29.5%	179	70.5%	270	100%
	Aviation	111	31.1%	245	68.9%	356	100%
	Administration, Logistics, Security,						
	Intelligence, Emergency services	236	41.8%	303	58.2%	539	100%
	Engineering/technical	99	41.1%	135	58.9%	234	100%
	Medical	40	28.9%	75	71.1%	115	100%
	General Officer Specialist	29	F	12	F	41	100%
Adjustment to	Very or moderately easy	393	24.2%	1004	75.8%	1397	100%
Civilian Life	Neither difficult nor easy	130	32.3%	226	67.7%	356	100%
	Very or moderately difficult	375	60.7%	199	39.3%	574	100%
Self-Rated	Very good or excellent	253	16.9%	991	83.1%	1244	100%
health	Good	255 345					
nçanı			46.0%	339	54.0%	684 401	100%
Calf Datad	Fair or poor	300	72.6%	101	27.4%	401	100%
Self-Rated	Very good or excellent	407	23.3%	1092	76.7%	1499	100%
mental health	Good Fair or poor	225 265	41.1% 74.7%	260 79	58.9% 25.3%	485 344	100% 100%

Variable	Category	n C	Client Wt%	Non n	Client Wt%	To n	otal Wt%
		898	35.4%	1431	64.6%	2329	100%
Quality of Life	PCS, Mean		39.4		52.6		47.9
PCS	SF-12 0-9	Х	F	Х	F	Х	F
	SF-12 10-19	48	74.9%	11	F	59	100%
	SF-12 20-29	160	80.7%	37	19.3%	197	100%
	SF-12 30-39	237	74.8%	73	25.2%	310	100%
	SF-12 40-49	217	46.8%	232	53.2%	449	100%
	SF-12 50+	217	14.1%	1072	85.9%	1289	100%
Quality of Life	MCS, Mean		47.3		53.5		51.3
MCS	SF-12 0-9	Х	F	Х	F	Х	F
	SF-12 10-19	25	F	8	F	33	100%
	SF-12 20-29	74	68.1%	29	F	103	100%
	SF-12 30-39	122	58.5%	73	41.5%	195	100%
	SF-12 40-49	169	43.8%	183	56.2%	352	100%
	SF-12 50+	488	26.1%	1131	73.9%	1619	100%
Chronic Health	No PHC or MHC	44	8.2%	469	91.8%	513	100%
Conditions (Any PHC = PHC	Any PHC Musculoskeletal	830	45.4% 58.4%	889	54.6%	1719	100%
= Any one of:		645 510	58.4% 58.4%	438 338	41.6%	1083 848	100% 100%
musculoskeletal	Back problems Arthritis	398	56.4 <i>%</i> 67.6%	336 196	41.6% 32.4%	040 594	100%
condition,	Cardiovascular	261	47.0%	279	53.0%	594 540	100%
cardiovascular	High blood pressure	238	47.0%	279	53.0 <i>%</i> 51.8%	484	100%
condition,	Heart disease	47	40.2 % 45.9%	240 54	54.1%	101	100%
gastrointestinal	Stroke	5	40.0 /0 F	10	64.170 F	15	F
condition,	Gastrointestinal	121	54.4%	83	45.6%	204	100%
respiratory	Ulcers	58	59.9%	31	40.1%	89	100%
condition, urinary	Bowel disorders	81	53.4%	58	46.6%	139	100%
incontinence,	Respiratory	101	56.3%	73	43.7%	174	100%
diabetes, cancer,	Asthma	69	52.6%	60	47.4%	129	100%
obesity, hearing	COPD	45	70.6%	19	F	64	100%
problem or chronic	Central Nervous System	194	54.4%	144	45.6%	338	100%
pain/discomfort)	Dementia (> 35 years)	5	F	Х	F	5	F
	Migraine	167	53.1%	129	46.9%	296	100%
	TBI Effects (Yes and Maybe)	58	60.0%	31	40.0%	89	100%
	Urinary incontinence	44	64.8%	25	F	69	100%
	Diabetes	80	52.6%	69	47.4%	149	100%
	Cancer	30	53.5%	20	F	50	100%
(Any MHC =	Any MHC	376	70.6%	131	29.4%	507	100%
Mood Disorder,	Mood disorder	271	70.1%	93	29.9%	364	100%
Anxiety Disorder,	Anxiety Disorder	164	67.7%	66	32.3%	230	100%
PTSD)	PTSD	253	88.9%	27	F	280	100%
	Attribution to service, yes	694	67.5%	329	32.5%	1023	100%
Other Health	Not free of pain/discomfort	540	64.8%	269	35.2%	809	100%
Conditions	Pain/discomfort Mild	78	44.4%	86	55.6%	164	100%
	Pain/discomfort Moderate	346	66.4%	157	33.6%	503	100%
Hooring	Pain/discomfort Severe	114	82.3%	24	F	138	100%
Hearing	Able to hear in group no aid	656 185	30.5%	1357	69.5% 25.0%	2013	100%
Body Mass Index	Hearing problem	185	75.0%	52	25.0%	237	100%
	Underweight	X	F 27.0%	9 424	F 73.0%	11 506	F 100%
	Normal weight	172	27.0% 36.4%	424 675	73.0% 63.6%	596 1115	100%
	Overweight Obese	440 281	36.4% 43.9%	675 310	63.6% 56.1%	591	100% 100%
PC-PTSD Screen	2-4 Possible PTSD DSM-IV	325					
	3-4 Possible PTSD DSM-IV	325 231	63.5% 68.9%	147 77	36.5% 31.1%	472	100%
	3-4 PUSSIDIE PI SU USIVI-IV	231	68.9%	77	31.1%	308	100%

		C	lient	Non	Client	Total		
Variable	Category	n	Wt%	n	Wt%	n	Wt%	
		898	35.4%	1431	64.6%	2329	100%	
K10	Overall Score, Mean		9.3		3.6		5.6	
Psychological	0-9 Likely well	567	26.8%	1293	73.2%	1860	100%	
Distress	10-14 Likely mild mental disorder	129	63.4%	67	36.6%	196	100%	
	15-19 Likely moderate disorder	76	67.2%	29	F	105	100%	
	20-40 Likely severe disorder	116	71.3%	35	28.7%	151	100%	
Comorbidity	PHC 0	68	11.1%	542	88.9%	610	100%	
	PHC 1	139	22.1%	403	77.9%	542	100%	
(PHC = as	PHC 2	193	42.8%	243	57.2%	436	100%	
above) (MHC = as	PHC 3+	498	65.2%	243	34.8%	741	100%	
above)	MHC 0 MHC 1	524 150	24.6% 60.2%	1298 85	75.4% 39.8%	1822 235	100% 100%	
above)	MHC 1 MHC 2+	226	60.2 <i>%</i> 79.1%	65 46	39.8% 20.9%	235 272	100%	
	PHC and MHC	354	72.6%	110	20.9 %	464	100%	
	Musculoskeletal + Pain/discomfort +	304	12.070	110	27.4%	404	100%	
	MUSCUIOSKEIEIai + Pain/disconnon +	228	85.5%	33	14.5%	261	100%	
Activity	No RALD or ADL need	114	8.1%	998	91.9%	1112	100%	
Limitations	RALD: Often or sometimes	781	63.3%	998 426	<u>91.9%</u> 36.7%	1207	100%	
Linnations	Never	116	8.3%	420	30.7% 91.7%	1207	100%	
	PAL: Often or sometimes	825	59.0%	534	41.0%	1359	100%	
	Never	72	6.2%	896	93.8%	968	100%	
	Needs help with at least one ADL	388	81.0%	85	<u>93.8 %</u> 19.0%	473	100%	
	Pain/Discomfort Limitations:	300	01.070	00	19.0%	473	100%	
	A few, some or most activities	521	71.6%	191	28.4%	712	100%	
	K10 Interference with activity: None	340	20.9%	1053	79.1%	1393	100%	
	A lot, some, a little	552	56.3%	371	43.7%	923	100%	
Suicidality	12-Month Ideation	88	63.7%	42	36.3%	130	100%	
Social	Social support, Mean (0-40)		32.4		35.1		34.1	
Provisions	Attachment, Mean (2-8)		6.5		7.1		6.9	
Scale	Guidance, Mean (2-8)		6.6		7.1		6.9	
	Reliable Alliance, Mean (2-8)		6.8		7.2		7.0	
	Social Integration, Mean (2-8)		6.1		6.8		6.6	
	Reassurance of Worth, Mean(2-8)		6.3	a / =	6.9		6.7	
Sense of	Very or somewhat strong	460	28.9%	915	71.1%	1375	100%	
Community Belonging	Very or somewhat weak	431	32.9%	507	67.1%	938	100%	
Mastery (score	Low <= 7	32	80.2%	5	F	37	100%	
ranges 0-28 low	Middle	682	40.3%	873	59.7%	1555	100%	
to high)	High >= 23	169	20.2%	543	79.8%	712	100%	
Satisfaction	Satisfied or very satisfied	689	30.5%	1338	69.5%	2027	100%	
with Life	Dissatisfied or very dissatisfied	206	64.6%	93	35.4%	299	100%	
Stress most	Not at all or not very stressful	292	29.2%	585	70.8%	877	100%	
days	A bit stressful	360	34.9%	578	65.1%	938	100%	
-	Extremely or quite a bit stressful	246	46.9%	264	53.1%	510	100%	
Work stress in	Not at all or not very stressful	152	23.9%	380	76.1%	532	100%	
past year job or	A bit stressful	252	28.3%	544	71.7%	796	100%	
business	Extremely or quite a bit stressful	154	35.5%	252	64.5%	406	100%	
Satisfaction	Satisfied or very satisfied	617	30.9%	1186	69.1%	1803	100%	
with main	Neither satisfied nor dissatisfied	101	30.9 <i>%</i> 39.1%	128	60.9%	229	100%	
activity	Dissatisfied or very dissatisfied	175	56.6%	120	43.4%	229	100%	
Smoker	Dissatistied of very dissatistied	148	41.0%	176	<u>43.4%</u> 59.0%	290 324	100%	
Heavy drinker	5 or more drinks on one occasion, 12 or			170		524	100%	
neavy urinker	s or more drinks on one occasion, 12 or more times a year	224	36.9%	331	63.1%	555	100%	

		Client		Client Non Client		lient Total	
Variable	Category	n	Wt%	n	Wt%	n	Wt%
		898	35.4%	1431	64.6%	2329	100%
Health Services	Prescription Drug Insurance	872	37.3%	1320	62.7%	2192	100%
	Dental Insurance	823	36.7%	1270	63.3%	2093	100%
	Eye Glasses Insurance	796	37.2%	1209	62.8%	2005	100%
	Regular medical doctor	798	38.2%	1169	61.8%	1967	100%
	Home care	151	84.4%	22	F	173	100%
	Unmet care need past year	199	55.7%	134	44.3%	333	100%
	Unmet needs: physical & injury	136	52.3%	98	47.7%	234	100%
	Unmet needs: mental health	51	71.0%	19	F	70	100%
	Unmet needs: other	32	66.2%	15	F	47	100%

F = Sample size <30 so estimate considered unreliable.

X =Sample size < 5. Proportions not adjusted for age, gender and other differences.

Variable			L 2010			2013	
	Category		1998-2007		1998-2007		8-2012
		n	Wt%	n	Wt%	n	Wt%
<u> </u>		3154	35.4%	1491	64.6%	838	100%
Client Status	VAC Clients	1795	33.6%	543	34.0%	355	37.8%
A	Non Clients	1359	66.4%	948	66.0%	483	62.2%
Age	Age, Mean (years)	X	43.7	× ×	46.6	× ×	39.3
	≤ 19 Years	X	F 15.8%	X	F	X	F
	20-29 30-39	304 437	15.8% 18.4%	65 233	7.1% 22.3%	154 119	31.3% 18.2%
	40-49	1252	33.7%	335	25.1%	248	25.3%
	50-59	896	24.2%	553	32.6%	255	21.0%
	60-69	265	7.9%	305	12.8%	59	4.1%
Gender	Male	2780	88.2%	1311	87.3%	728	85.5%
	Female	374	11.8%	180	12.7%	110	14.5%
Education at	Less than high school graduation	233	6.8%	78	5.1%	32	5.0%
time of survey	High school graduation	1347	40.7%	578	41.1%	339	45.0%
	Post-secondary grad < bachelors	991	31.8%	446	36.3%	261	35.2%
	University graduation ≥ bachelors	579	20.8%	162	17.5%	64	14.8%
Marital status	Married/Commonlaw	2450	75.6%	1230	79.9%	609	63.8%
time of survey	Widowed/Separated/Divorced	340	9.2%	150	10.5%	76	9.3%
	Single/Never married	363	15.3%	111	9.6%	153	26.9%
Unemployment	Unemployment Rate		7.6%		4.6%		10.7%
Labour Force	Employed	2159	73.9%	1040	74.0%	566	68.4%
Participation	Unemployed	185	6.1%	53	3.5%	56	8.2%
	Not in the workforce	673	17.5%	346	19.0%	186	19.7%
	Unable to work	135	2.5%	50	3.4%	30	3.7%
Main activity 12	Worked at a job or ran a business	2168	74.7%	1016	72.3%	533	63.5%
months prior to	Retired and not looking for work	328	9.1%	278	13.5%	115	10.2%
survey	Attended school or training	113	3.7%	29	F	63	10.1%
	Looked for work	77	2.4%	26	F	24	F
	Caregiving	61	1.9%	21	F	17	F
	Was disabled or on disability	325	6.1%	73	5.5%	55	7.2%
	Other	56	1.5%	45	3.4%	29	F
Skills	Agree/strongly agree	1924	71.7%	727	47.1%	404	44.1%
Transferability	Neither	252	9.6%	171	12.7%	102	14.1%
	Disagree/strongly disagree	510	18.7%	520	40.2%	285	41.8%
Low Income	Below LIM	162	6.3%	71	6.8%	50	8.8%
Measure							
Household	\$0 to <\$50,000	557	17.2%	123	16.9%	72	20.0%
income not	\$50,000 to <\$100,000	1250	40.1%	460	58.2%	260	56.8%
adjusted for LIM	\$100,000 to <\$150,000	744	25.5%	171	21.0%	81	18.7%
	\$150,000+	445	17.2%	38	3.9%	33	4.5%
Length of	< 2 years	327	17.5%	204	19.3%	132	24.6%
Service	2 to 9 years	414	16.5%	174	17.5%	130	23.2%
	10 to 19 years	494	13.2%	156	12.8%	72	9.4%
	≥ 20 years	1919	52.8%	957	50.3%	504	42.8%
Release Type	Medical	1126	24.4%	287	20.0%	195	22.6%
	Voluntary	1466	57.0%	694	49.0%	462	57.6%
	Retirement Age	228	7.0%	110	4.4%	76	5.0%
	Involuntary	108	4.6%	61	5.4%	39	8.9%
	Service Complete	225	7.0%	336	21.3%	61	5.9%

## Appendix Table 7. Prevalences<sup>31</sup> for Regular Force Veterans, 2010 and 2013.

<sup>&</sup>lt;sup>31</sup> Column sums to 100% within variables. Prevalences not adjusted for age, gender.

			L 2010			2013	
Variable	Category		1998-2007		1998-2007		3-2012
		n	Wt%	n	Wt%	n	Wt%
Demk	Opening Officer	3154	35.4%	1491	64.6%	838	100%
Rank	Senior Officer Junior Officer	253 214	8.0% 7.9%	215 176	8.0% 7.1%	115 128	7.1%
	Cadet	214 86	7.9% 4.5%	102	4.8%	39	8.5% 3.2%
	Senior NCM	1045	4.5 <i>%</i> 28.2%	565	4.0 <i>%</i> 27.0%	279	21.9%
	Junior NCM	1129	30.1%	260	30.1%	154	30.1%
	Private	136	6.5%	52	6.8%	37	8.4%
	Recruit	291	14.7%	121	16.2%	86	20.8%
Enrolment Era	1950's			12	F	Х	F
	1960's	260	7.6%	160	6.5%	25	F
	1970's	883	24.3%	481	25.2%	184	14.1%
	1980's	1173	31.6%	429	28.5%	271	24.8%
	1990's	382	14.6%	175	15.5%	91	10.7%
	2000's	456	21.9%	234	23.8%	226	41.1%
	2010's		_1.070		_0.070	41	7.6%
Release Year	1998	270	9.3%	126	9.0%	~ 1	1.070
	1999	255	8.7%	139	8.9%		
	2000	271	9.1%	140	9.0%		
	2001	243	8.0%	137	9.1%		
	2002	243	9.1%	105	5.1 <i>%</i> 6.8%		
	2002	290	9.1 <i>%</i> 9.2%	132	0.8 <i>%</i> 8.5%		
	2003	337	9.2 <i>%</i> 9.7%	164	0.5 <i>%</i> 11.2%		
	2005	336	10.6%	161	11.6%		
	2006	448	13.0%	199	13.1%		
	2007	433	13.3%	188	12.8%	000	07.40/
	2008					228	27.1%
	2009					184	22.1%
	2010					147	18.2%
	2011					159	17.1%
<u> </u>	2012					120	15.6%
Service	Air Force	1004	31.1%	562	32.7%	257	25.3%
Environment	Army	1570	48.8%	669	51.3%	432	58.0%
	Navy	473	15.7%	260	16.0%	149	16.7%
Last Military	Combat arms	681	26.1%	284	24.9%	164	29.2%
Occupation	Communications	159	5.8%	119	8.0%	49	7.5%
	Maritime	284	11.0%	188	11.8%	82	11.4%
	Aviation	440	16.4%	254	14.7%	102	12.0%
	Administration, Logistics, Security, Intelligence, Emergency services	681	21.7%	364	23.9%	175	25.0%
	Engineering/technical	355	11.3%	171	11.9%	63	8.6%
	Medical	161	5.5%	69	3.6%	46	5.1%
	General Officer Specialist	67	2.1%	28	5.070 F	13	5.170 F
Adjustment to	Very or moderately easy	1722	61.8%	914	58.1%	483	53.3%
Civilian Life	Neither difficult nor easy	413	12.9%	224	15.9%	132	17.4%
	Very or moderately difficult	1014	25.3%	352	26.1%	222	29.2%
Self-Rated	Very good or excellent	1416	55.8%	784	50.6%	460	55.7%
health	Good	935	26.7%	73	31.3%	38	26.9%
	Fair or poor	801	17.5%	255	18.1%	146	17.4%
Self-Rated	Very good or excellent	1841	66.5%	978	62.6%	521	60.1%
mental health	Good	663	19.3%	303	22.6%	182	22.6%
	Fair or poor	646	14.2%	209	14.8%	135	17.3%

Variable	Catagony		L 2010	LASS 2013 1998-2007 2008-2012				
	Category		1998-2007		1998-2007 n Wt%			
		n	Wt%	n		n	Wt%	
Quality of Life	DCS Maan	3154	35.4% 47.3	1491	64.6% 47.5	838	100%	
PCS	PCS, Mean	V		V		V	48.7	
FC3	SF-12 0-9	X	F	X	F	X	F	
	SF-12 10-19	77	1.6%	36	2.6%	23	F	
	SF-12 20-29	491	9.5%	126	8.4%	71	8.1%	
	SF-12 30-39	619	14.2%	201	13.8%	109	11.3%	
	SF-12 40-49	611	18.4%	287	19.7%	162	17.4%	
	SF-12 50+	1353	56.3%	821	55.5%	468	61.0%	
Quality of Life	MCS, Mean		52.0		51.7		50.7	
MCS	SF-12 0-9	Х	F	Х	F	Х	F	
	SF-12 10-19	36	0.8%	20	F	13	F	
	SF-12 20-29	240	5.5%	62	4.4%	41	5.9%	
	SF-12 30-39	372	8.6%	119	9.4%	76	10.4%	
	SF-12 40-49	435	12.6%	206	14.9%	146	18.4%	
	SF-12 50+	2068	72.5%	1062	69.4%	557	63.7%	
(Any PHC = Back	No PHC or MHC	655	28.9%	360	26.0%	189	28.9%	
problems,	Any PHC	2432	69.3%	1132	70.6%	540	68.2%	
arthritis, high	Musculoskeletal	1863	48.7%	713	46.1%	370	38.9%	
blood pressure,	Back problems	1546	40.1%	557	36.9%	291	30.6%	
heart disease,	Arthritis	993	23.4%	395	24.2%	199	19.6%	
stroke, ulcers,	Cardiovascular	789	21.1%	374	21.3%	166	15.9%	
bowel disorders,	High blood pressure	685	18.4%	329	18.7%	155	14.7%	
asthma, COPD,	Heart disease	154	4.1%	80	4.4%	21	F	
diabetes, cancer,	Stroke	32	0.7%	12	F	Х	F	
obesity)	Gastrointestinal	448	11.0%	131	9.0%	73	8.1%	
	Ulcers	244	5.9%	55	4.1%	34	3.4%	
	Bowel disorders	277	6.9%	92	6.2%	47	5.4%	
	Respiratory	280	8.9%	116	7.9%	58	6.0%	
	Asthma	201	5.8%	84	6.0%	45	4.9%	
	COPD	109	3.2%	46	2.8%	18	F	
	Diabetes	214	5.5%	112	6.8%	37	3.6%	
	Cancer	43	1.2%	36	1.8%	14	F	
Hearing	STCL 2010	1140	27.8%					
Problems*	LASS 2013			156	8.8%	81	8.1%	
Chronic Pain or	Pain/discomfort always/reoccur	2350	64.2%					
Discomfort*	Not free of pain/discomfort			526	35.5%	283	30.9%	
Body Mass Index	Underweight	9	F	8	F	Х	F	
(BMI)	Normal weight	769		380	26.4%	216	29.1%	
( )	Overweight	1363	43.0%	718	46.5%	397	45.3%	
	Obese	974	28.3%	375	26.6%	216	25.2%	
(Any MHC =	Any MHC	747	16.0%	326	24.3%	181	23.0%	
Mood, Anxiety,	Mood disorder 2010**	144	3.2%					
PTSD)	Mood disorder 2013			236	17.4%	128	16.6%	
	Anxiety Disorder	452	10.0%	146	11.0%	84	11.2%	
	PTSD	568	11.0%	172	13.1%	108	13.0%	
Comorbidity	PHC 0	722	30.7%	455	32.7%	295	41.8%	
	PHC 1	1081	34.6%	499	33.2%	272	29.4%	
(PHC = as	PHC 2	761	20.8%	304	19.4%	166	18.0%	
above)	PHC 3+	590	13.9%	233	14.7%	105	10.8%	
(MHC = as	MHC 0	2407	84.0%	1165	75.8%	657	77.1%	
above)	MHC 1	389	9.1%	155	11.0%	80	10.1%	
•	MHC 2+	358	6.9%	171	13.2%	101	12.8%	
	Both PHC and MHC	680	14.2%	280	20.5%	156		
		000	14.2%	200	20.3%	100	19.8%	

			L 2010	LASS 2013				
Variable	Category	1998	8-2007	1998-2007		2008-2012		
		n	Wt%	n	Wt%	n	Wt%	
		3154	35.4%	1491	64.6%	838	100%	
Activity	No RALD or ADL need	930	43.2%	712	48.6%	400	52.6%	
Limitations	RALD: Often or sometimes	1998	49.4%	772	51.0%	435	47.0%	
	Never	1138	50.6%	716	49.0%	402	53.0%	
	PAL: Often or sometimes	2192	56.1%	868	57.1%	491	52.5%	
	Never	943	43.9%	622	42.9%	346	47.5%	
	Needs help with at least one ADL	835	17.1%	303	20.9%	170	18.9%	
Suicidal	12-Month Ideation	244	5.8%	71	5.8%	59	7.9%	
Ideation								
Sense of	Very or somewhat strong	1736	58.9%	888	57.6%	487	57.3%	
Community	Very or somewhat weak	1376	41.1%	593	42.4%	345	42.7%	
Belonging								
Mastery (score	Low <= 7	103	2.1%	29	F	8	F	
ranges 0-28 low	Middle	2198	67.5%	970	68.1%	585	70.5%	
to high)	High >= 23	824	30.4%	474	29.9%	238	28.2%	
Satisfaction	Satisfied or very satisfied	2528	84.9%	1299	86.2%	728	85.0%	
with Life	Dissatisfied or very dissatisfied	317	7.0%	191	13.8%	108	15.0%	
	Not at all or not very stressful	1049	36.8%	550	35.0%	327	38.8%	
Stress most	A bit stressful	1331	42.0%	593	41.1%	345	41.0%	
days	Extremely or quite a bit stressful	767	21.2%	345	23.9%	165	20.2%	
Work stress in	Not at all or not very stressful	2237	75.8%	1181	77.1%	622	71.5%	
past year job or	A bit stressful	348	10.4%	130	10.0%	99	13.4%	
business	Extremely or quite a bit stressful	553	13.8%	175	12.9%	115	15.1%	
Satisfaction	Satisfied or very satisfied	618	19.0%	220	17.7%	104	14.4%	
with main	Neither satisfied nor dissatisfied	767	25.6%	350	23.5%	205	26.6%	
activity	Dissatisfied or very dissatisfied	553	13.8%	175	12.9%	115	15.1%	
Smoker	Daily	618	19.0%	220	17.7%	104	14.4%	
Heavy drinker	5 or more drinks on one occasion, 12 or	767	25.6%	350	23.5%	205	26.6%	
	more times a year							
Health Services	Prescription Drug Insurance	2963	92.0%	1422	93.9%	770	88.9%	
	Dental Insurance	2813	87.0%	1357	89.0%	736	83.1%	
	Eye Glasses Insurance	2710	84.4%	1316	86.8%	689	79.6%	
	Regular medical doctor	2689	82.0%	1308	85.3%	659	73.2%	

\*Different questions used in STCL 2010 and LASS 2013. See text for discussion. \*\*In STCL 2010 the word "depression" was not used in describing mood disorders to respondents. F = Sample size <30 so estimate considered unreliable.

X = Sample size < 5.

Proportions not adjusted for age, gender and other differences.

End Sheet