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## **Veterans in Canada released since 1998: A Sex-disaggregated Profile**

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September 24<sup>th</sup>, 2018

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ISBN: 978-0-660-28142-1  
V32-400/2018E-PDF

Published by:  
Veterans Affairs Canada  
161 Grafton Street  
Charlottetown, Prince Edward Island  
C1A 8M9  
Email: vac.research-recherche.acc@canada.ca

Citation: MacLean MB, Clow B, Ralling A, Sweet J, Poirier A, Buss J, Pound T, and Rodd B. Veterans in Canada released since 1998: A Sex-disaggregated Profile, Veterans Affairs Canada, Research Technical Report, 24 September 2018.

*Acknowledgements: The authors would like to thank Allan MacKinnon, Heather Morrison, Susan Howarth, Laura Kelly, and Ryan Murray for their contributions to the initial development and review of this report.*



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# **Executive Summary**

## **Introduction**

In Canada, females account for 14% of the estimated Veteran population of 670,000. Recent data on Veterans has not been disaggregated by sex, the last time such an analysis was conducted was in 2013 using the 2003 Canadian Community Health Survey. The goal of this technical report is to create a sex-disaggregated profile of the Veteran population captured in the Life After Service Studies and to provide a reference for future work in the area of sex and gender in the Canadian Veteran population.

## **Method**

This study uses the Life After Service Studies (LASS) 2010, 2013, and 2016 surveys and income tax record linkage data to disaggregate demographic, service and well-being characteristics by sex and three service components. LASS covers Veterans released since 1998, which account for an estimated 11% of the total Canadian Veteran population. Over 40 indicators were examined across seven domains of well-being: health, purpose, finances, life skills, social integration, housing and physical environment, and culture and social environment.

## **Findings**

Almost one-quarter (23%) of reserve force C Veterans were female. There was a smaller proportion of females among reserve force A/B Veterans (19%) and regular force Veterans (13%). While there were many differences between males and females in each of the three service components, the following were found across all components:

- Females were more likely to: have served in the air force; have served 10-19 years; be in administrative, medical, and transferable occupations at release; and to have been medically released.
- Males were more likely to: serve in the army; and to have been in combat arms, engineering and technical, and non-transferable occupations at release.
- Females were more likely than males to have seen their family doctor in the past 12 months.
- Females differed from males in the domains of health, purpose, and finances.
  - Health: Females were more likely to report that they experienced an activity limitation and needed help as a result of an activity limitation.
  - Purpose: Females were less likely to report that work was their main activity.
  - Finances: Females were more likely to experience low income and have larger reductions in income post-release.
- There were no differences detected between males and females across all service components in the domains of social integration, life skills, and housing and physical environment.

## **Conclusion**

Male and female Veterans are similar in many demographic, military service, and well-being characteristics. However, female Veterans differed from males in some indicators of health, purpose, and finances and across each of the service components.

## **Sommaire**

### **Introduction**

Au Canada, les femmes représentent 14 % de la population des vétérans estimée à 670 000 personnes. Les données récentes sur les vétérans n'ont pas été ventilées selon le sexe; la dernière analyse de ce type a été réalisée en 2013 au moyen de l'Enquête sur la santé dans les collectivités canadiennes de 2003. Le but du présent rapport technique est de créer un profil ventilé selon le sexe de la population des vétérans qui a été présenté dans les études sur la vie après le service et de fournir des données de référence pour les travaux futurs dans le domaine du sexe et du genre dans la population des vétérans canadiens.

### **Méthode**

La présente étude utilise les sondages menés dans le cadre des études sur la vie après le service militaire (EVASM) de 2010, 2013 et 2016 et les données liées aux déclarations du revenu pour ventiler les caractéristiques démographiques, de service et de bien-être selon le sexe et les trois composantes du service. Les EVASM portaient sur les vétérans libérés depuis 1998, qui représentent environ 11 % de la population totale des vétérans canadiens. Plus de 40 indicateurs ont été examinés dans sept domaines du bien-être : la santé, le but, les finances, les aptitudes à la vie quotidienne, l'intégration sociale, le logement et l'environnement physique, ainsi que la culture et l'environnement social.

### **Résultats**

Près du quart (23 %) des vétérans de la Force de réserve C étaient des femmes. Il y avait une plus faible proportion de femmes parmi les vétérans de la Force de réserve A/B (19 %) et les vétérans de la Force régulière (13 %). Bien qu'il existe de nombreuses différences entre les hommes et les femmes dans chacune des trois composantes du service militaire, les constatations suivantes ont été faites pour toutes les composantes :

- Les femmes étaient plus susceptibles que les hommes d'avoir servi dans l'Aviation, d'avoir servi de 10 à 19 ans, d'occuper des postes administratifs, médicaux et transférables à leur libération et d'avoir été libérées pour raisons médicales.
- Les hommes étaient plus susceptibles que les femmes d'avoir servi dans l'armée et d'avoir occupé des postes dans les domaines des armes de combat, du génie et des techniques, ainsi que des emplois non transférables à leur libération.
- Les femmes étaient plus susceptibles que les hommes d'avoir consulté leur médecin de famille au cours des 12 derniers mois.
- Les femmes différaient des hommes dans les domaines de la santé, du but et des finances.
  - Santé: Les femmes étaient plus susceptibles de déclarer avoir subi une limitation d'activité et avoir eu besoin d'aide en raison d'une limitation d'activité.
  - But: Les femmes étaient moins susceptibles de déclarer que le travail était leur principale activité.
  - Finances: Les femmes étaient plus susceptibles d'avoir un faible revenu et de voir leur revenu diminuer davantage après leur libération.

- Aucune différence n'a été décelée entre les hommes et les femmes dans toutes les composantes du service militaire dans les domaines de l'intégration sociale, des aptitudes à la vie quotidienne, du logement et de l'environnement physique.

### **Conclusion**

Les hommes et les femmes vétérans ont des caractéristiques démographiques, militaires et de bien-être semblables. Toutefois, les femmes vétérans diffèrent des hommes vétérans en ce qui a trait à certains indicateurs de la santé, du but et des finances, et ce, pour chacune des composantes du service militaire.

## Introduction

The Canadian military population keeps changing and evolving and, as a result, so too does the Veteran population. Veterans were identified in the Canadian Community Health Survey in 2003 and account for 3% of the adult Canadian population. This was the most recent survey to identify Veterans who served after the Korean War and prior to 2003 (MacLean et al, 2013). Recent data on Canadian Veterans has not been disaggregated by sex across service, demographic and well-being characteristics; as a result, there are many knowledge gaps regarding female Veterans and what differences exist between males and females within the Canadian Veteran population.

In Canada, females account for 14% of the estimated Veteran population of 670,000; this population includes Veterans who served in WWII, the Korean War, and after the Korean War (Veterans Affairs Canada, 2016). In the 2003 Canadian Community Health survey, females and males were found to differ from their Canadian population counterparts in many areas of well-being and health care service utilization, including: life satisfaction, chronic conditions, mental health conditions, disability, health care coverage, and use of health services (MacLean et al, 2013).

Among more recent Veterans, females accounted for 13% of regular force Veterans released since 1998 and 17% of reserve force Veterans released since 2003 (Van Til et al, 2014b). The proportion of females in the Veteran population is unlikely to change much in the near future as females accounted for 14% of the Canadian Armed Forces (CAF) serving population in 2016, up from 11% in 2001. While the Department of National Defence has declared the intention to increase the percentage of serving women to 25.1% by 2026, it is uncertain whether this will be achieved (National Defence and CAF, 2018)

The goal of this technical report is to create a sex-disaggregated profile of the Veteran population captured in the Life After Service Studies and to provide a reference for future work in the area of sex and gender in the Canadian Veteran population.

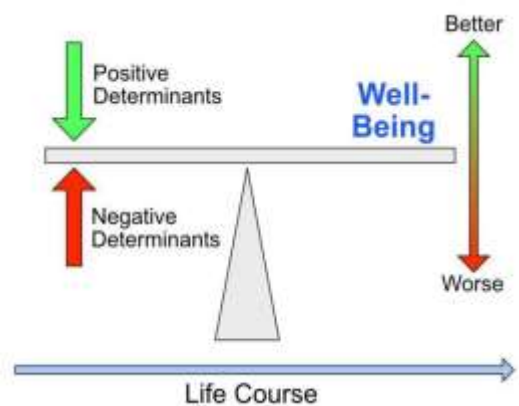
## Background

### *Well-being Framework*

In 2016, VAC released a new conceptual framework of well-being to support research, policy, and planning in the department (Thompson et al., 2016). Well-being is influenced by determinants in each of the seven, interrelated domains: purpose, finances, health, life skills, social integration, housing and physical environment, and culture and social environment (Figure 1).

The conceptual framework further defines an approach to measuring well-being, using a combination of indicators in each of the

Figure 1. Theory of well-being





domains. A person’s well-being at a point in time is “measured” by combining indicators that both describe well-being (descriptors) and assess factors influencing well-being (determinants). Some of these indicators can also be used as outcome measures to assess the effectiveness of interventions, policies, and programs.

In order to monitor the well-being of the Veteran population, VAC has developed a surveillance framework that identifies an accepted set of high-level indicators (Table 1; VAC, 2017a). Many of the indicators chosen are widely used in Canadian health monitoring and are typically captured for all Canadians, allowing for comparison between the Veteran population and the general population. Of the 21 indicators in this framework, 17 were examined in this study using LASS data. Indicators under the culture and social environment domain were not available in LASS, but partially captured via the sex and service component disaggregation. Several additional indicators were included in this study, such as satisfaction with housing and satisfaction neighbourhood available in LASS 2010.

**Table 1: Well-being Domain Descriptions and Indicators**

Domain of Well-Being	Description of Domain	Indicators
1. Health	Health is a state of physical, mental, social and spiritual functioning, broader than the presence or absence of disease.	A. Self-rated health B. Self-rated mental health C. Activity Limitation D. Need for assistance with activities of daily living
2. Purpose	Purpose is the sense of meaning attained by participation in fulfilling activities, such as employment.	A. Employment rate B. Satisfaction with main activity C. Satisfaction with life
3. Finances	Finances includes household income and financial security.	A. Rate of low income B. Satisfaction with finances
4. Social Integration	Social integration is engagement in mutually supportive relationships (friends, family & community).	A. Sense of belonging B. Social support scale C. Adjustment to civilian life
5. Life Skills	Life skills enable the management of life and contribute to resilience; they include personal health practices, coping skills and education.	A. Education level B. Daily smoking C. Heavy drinking D. Obesity E. Mastery
6. Housing and Physical Environment	Housing and physical environment includes the built environment as well as the natural environment.	A. Veteran rate among homeless
7. Culture and Social Environment	Culture and Social Environment is the impact of the dominant values, beliefs and attitudes of society on the well-being of a population.	A. Canadians’ attitudes towards Veterans B. Employers’ attitudes towards Veterans C. Veteran sex, component, rank and branch at release (by domain)

## ***Sex, Gender, and Sex- and Gender-Based Analysis***

Often the terms “sex” and “gender” are confused or conflated in research and policy, and the relationship between sex and gender can make it challenging to find the dividing line between the two concepts (Status of Women Canada, 2017). However, the impact of sex and gender should be addressed in research, policy, and planning (Government of Canada, 2015). The terms ‘sex’ and ‘gender’, although overlapping in concept, refer to two different traits and, therefore, are not used interchangeably in this profile.

The term ‘sex’ is used to refer to the biological characteristics of being female or male, essentially an individual’s anatomical category. The term ‘gender’ refers to the non-physiological characteristics of being female or male, directly referencing the socially constructed roles, behaviours, activities, and attributes that societies ascribe to females and males (Health Canada, 2009; Status of Women Canada, 2017; World Health Organization, 2018). Gender “can also refer to the gender that a person internally feels ('gender identity' along the gender spectrum) and/or the gender a person publicly expresses ('gender expression') in their daily life, including at work, while shopping or accessing other services, in their housing environment or in the broader community” (Statistics Canada, 2018). Very often, an individual’s sex informs their gender identity and expression but this cannot be assumed to be true for all individuals (Statistics Canada, 2018; Status of Women Canada, 2017).

This profile has been guided by the Gender-Based Analysis+ framework, championed by the Status of Women Canada and committed to by the Government of Canada, which includes multiple identity factors. For example, the intersection of characteristics such as: age, race, ethnicity, geography, sex, and gender; make individuals who they are (Status of Women Canada, 2017). However, this profile uses the term sex- and gender-based analysis to describe our approach. While these terms, GBA and GBA+, refer to the same analysis process; SGBA, also used by Health Canada, emphasizes sex in addition to gender as part of the analysis process (Health Canada, 2009). As such, the goal of this report is to create a sex-disaggregated profile of Veterans and VAC clients.

## ***Service components and Classes***

This technical report is a sex-disaggregated profile of Veterans but it also disaggregates by service component. These three service component groupings; regular force, reserve force class C, and reserve force class A/B, were used in LASS 2013 reports and will also be used in this technical report. They are defined as:

- **Regular Force** is one type of military service. It is full-time, usually on long-term contracts of three to nine years, and involves all military occupations and routine operations both domestic and international.
- **The Reserve Force** is another type of military service, which is divided into three classes: A, B, and C.
  - **Reserve Class A** service involves part-time employment, generally associated with a training level of about one evening a week and one weekend a month.
  - **Reserve Class B** service is full-time, for 13 or more consecutive days, but not operational. An example of Class B service might be employment as training staff for cadets or members of the Reserve Force.

- **Reserve Class C** is also full-time, usually for contingency or routine operations, whether international or domestic. Examples of Class C service might include evacuation of Canadians overseas, disaster relief, and providing assistance to federal or provincial law enforcement.

## Methods

This profile of Veterans is based on data from the Life After Service Studies (LASS) program of research, which includes the survey of health and well-being and the record linkage of pre- and post-release income trends. There have been three cycles of data collection to date: 2010, 2013, and 2016. This profile mainly relies on LASS 2013, as it includes reserve force Veterans, whereas only regular force Veterans were included in LASS 2010 and 2016. In some instances, LASS 2010 and 2016 were used to augment our understanding of the Veteran population as additional indicators were available on families, housing and main activity.

The LASS 2010, 2013, and 2016 surveys were computer-assisted telephone interview surveys conducted by Statistics Canada for Veteran Affairs Canada (VAC) and the Department of National Defence (DND). The sample for the LASS survey is a proportional, stratified sample drawn from the population frame. The LASS population frame captures all Veterans released from 1998 forward and is topped up every year. The LASS 2013 population frame (N=76,296) represents approximately 11% of the total population of Veterans in Canada. While this population accurately reflects recently released Veterans, it does not reflect the entire Canadian Veteran population.

Service and demographic characteristics from the LASS 2013 population frame (N=76,296) and survey sample (n=3,727) and about 40 well-being indicators from both the survey sample and the income tax record linkage were examined. Seventeen well-being indicators available in LASS and included in VAC's well-being surveillance framework were organized under five of the seven domains: health (4), purpose (3), finances (2), social integration (3), and life skills (5). More than 20 additional indicators from LASS related to these domains, as well as the domain of housing and physical environment, were also included in the profile. The seventh domain, culture and social environment, was measured through the sex and service component disaggregation of demographic and military service characteristics.

The LASS 2010 survey captured regular force Veterans released from 1998 to 2007, N=36,638, which produced a sample of n=3,154. Female Veterans represented 13% of the population, males 87% (Thompson et al, 2011). The LASS 2013 survey included Veterans of the reserve force class A/B (N= 16,698, n=514) and C personnel (N= 3,469, n=1,013) who released between 2003 and 2012, and regular force personnel (N= 56,129, n=2,622) who released between 1998 and 2012. Female Veterans represented 19% of the reserve force class A/B, 23% of the reserve force class C, and 13% of the regular forces in the population, males were 81%, 77%, and 87% respectively (Van Til et al, 2014a; Thompson et al, 2014). The LASS 2016 survey included regular force personnel

(N=56,419, n=2,755) who released between 1998 and 2015. Female Veterans represented 12% of the population, males 88% (Van Til et al, 2017).

Weighted population 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. Males and females were compared across indicators from the LASS surveys using 95% confidence intervals to test for significant differences.

The LASS 2013 Income Study describes the pre- and post-release income trends of CAF Veterans. Statistics Canada linked DND's release data with income data from tax files available up to 2011. Statistics Canada derived aggregate tables from this data for 51,990 regular force Veterans released from 1998 to 2011 using income data for the 1997 to 2011 tax years; and reserve class C (3,185) and A/B (15,596) released from 2003 to 2011 using income data for the 2002 to 2011 tax years. The overall linkage rates for the regular force and reserve force study populations were over 90%. The incomes of regular force Veterans were followed for up to 13 years post-release and up to eight years for reserve force Veterans. For the analysis of pre- and post-release income by demographic and service characteristics, a cohort who linked to the tax file in the pre-release year and all of the first three years post-release was followed (n= 32,540 for the regular force and n=8,985 for the primary reserve force). Among the cohort 13% of regular force Veterans, 23% of reserve force C and 19% of reserve force A/B were female.

## Interpretation Guidelines

- A) **‘Confidence Interval’**: Reflects the level of uncertainty in an estimate and indicates the expected range of values that an estimate might have. This allows for the determination of whether two estimates are significantly (statistically) different from each other. The smaller the sample size the larger the confidence interval, essentially reflecting the level of uncertainty of the estimate.

For example, 74% of male regular force Veterans in the 2013 LASS survey responded that they were married or in a common-law relationship. This is not significantly different from female regular force Veterans, 70% reported that they were married, from the same survey. We know that they were not significantly different because the range of values possible for the two estimates overlap, 72.0 to 76.7 for males and 63.5 to 75.8 for females, indicating that they are not significantly different. However, this does not mean that male and female regular force Veterans had the same frequency of being married or in common-law relationships only that a significant difference could not be detected between the two.

- B) This is an example of a non-overlapping set of confidence intervals; we can conclude from these estimates that female regular force Veterans were significantly more likely to be widowed, separated, or divorced at the time of the survey than male regular force Veterans. These will be highlighted throughout the report for ease of interpretation.
- C) The **“F”** symbolizes that the sample from which the estimate is calculated is too small to produce a reliable estimate. The VAC Research Directorate considers this to be a sample of <30 individuals. In this example, we could not make any conclusions about whether or not male and female reserve force A/B Veterans were similar or different in reporting that they were single at the time of the survey.
- D) The **population frame, “N”**, refers to the population that the survey sample is drawn from, in this context all Veterans released between 1998 and 2012 (LASS 2013). Population frame and income study data do not require confidence intervals because they are not samples. Therefore, when interpreting these values any difference between two estimates could be considered statistically significant.
- E) A **survey sample, “n”**, means that data was not collected from all individuals in a population, but from a representative sample of individuals from a population. For example, in the LASS 2013 survey the sample is representative of the population frame, which is all Veterans released between 1998 and 2012.

	Regular Force		Reserve Force C		Reserve Force A/B		E
	Male	Female	Male	Male	Male	Female	
	86.6% n= 2,039	13.4% n= 290	76.6% n= 703	23.4% n= 219	81.5% n= 387	18.5% <b>n= 89</b>	
Married/ Common-Law	74.4% <b>(72.0-76.7)</b>	70.0% <b>(63.5-75.8)</b>	70.9% (67.3-74.2)	74.7% (68.4-80.1)	54.4% (49.3-59.4)	64.8% (54.1-74.2)	
Widowed/ Separated/ Divorced	9.3% <b>(7.9-10.8)</b>	15.0% <b>(10.9-20.2)</b>	5.1% (3.7-6.9)	F	F	F	
Single-never married	16.3% (14.3-18.5)	15.0% (10.6-20.9)	24.0% (20.9-27.5)	15.6% (11.3-21.2)	42.5% <b>(37.6-47.6)</b>	F	C

		Regular Force		Reserve Force C		Reserve Force A/B	
		Male	Female	Male	Male	Female	Male
		86.5% <b>N=49,104</b>	12.5% N=7,024	78.7% N=2,731	86.5% N=49,104	12.5% N=7,024	78.7% N=2,731
Years of Service	<2 years	20.1%	24.4%	0.7%	0.5%	24.8%	20.3%

## Veterans & Well-Being

### Demographic and Service Characteristics

Overall, Veterans of the reserve force A/B are the youngest and most likely to be under 30 and regular force Veterans are the oldest and most likely to be over 40. This is true for male and female Veterans across service components, except for reserve force C female Veterans, who are slightly more likely to be over 60 compared to other female Veterans. Across service components male Veterans are more likely to be under 30 and above 60, while female Veterans are more likely to be between 30 and 59, except for regular force Veterans where males and females were equally likely to be in their 50s. On average, male regular force Veterans were older than female Veterans by 2 years. The reverse was true for reservists, where female Veterans were on average older than male Veterans by 1 to 2 years. Notable differences were found in regular force Veterans, males were two times more likely to be over 60 compared to females; and between reserve force C Veterans, where males were more than two times more likely to be under 30 and almost two times more likely to be over 60.

**Table 2: Age at time of survey, LASS 2013 Population Frame**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male 86.5% N=49,104	Female 12.5% N=7,024	Male 78.7% N=2,731	Female 21.2% N=736	Male 82.8% N=13,818	Female 17.2% N=2,869
<30	16.2%	14.7%	17.9%	10.1%	59.8%	45.9%
30-39	20.0%	22.6%	41.9%	44.3%	26.8%	35.0%
40-49	24.5%	30.3%	19.3%	23.4%	6.9%	11.2%
50-59	28.4%	28.1%	11.6%	17.3%	3.5%	6.4%
60 +	10.8%	4.2%	9.3%	5.0%	2.9%	1.5%
Average Age	44.7	43.3	40.1	41.3	31.2	33.2

Total population frame N= 76,296

Female regular force Veterans were more likely to be widowed/separated or divorced compared to males, 15% versus 9%. There was no significant difference in the marital status for reserve force C and A/B males and females.

**Table 2: Age and Marital Status, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male 86.6% n= 2,039	Female 13.4% n= 290	Male 76.6% n= 703	Female 23.4% n= 219	Male 81.5% n= 387	Female 18.5% n= 89
Married/ Common-Law	74.4% (72.0-76.7)	70.0% (63.5-75.8)	70.9% (67.3-74.2)	74.7% (68.4-80.1)	54.4% (49.3-59.4)	64.8% (54.1-74.2)
Widowed/ Separated/ Divorced	9.3% (7.9-10.8)	15.0% (10.9-20.2)	5.1% (3.7-6.9)	F	F	F
Single-never married	16.3% (14.3-18.5)	15.0% (10.6-20.9)	24.0% (20.9-27.5)	15.6% (11.3-21.2)	42.5% (37.6-47.6)	F

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females. Total survey sample n=3,727, all % are based on sample weights

A higher percentage of males served in senior ranks than females among regular force Veterans. 8% of male regular force Veterans released as a senior officer compared to 5% of female regular force Veterans. Additionally, 26% of male regular force Veterans were senior Non-Commissioned Members (NCMs) compared to 19% for females. For reservists, the proportion of male senior officers among reserve force C Veterans (8%) was double that of females (4%) but that same was not true for reserve force A/B Veterans (both approximately 1%). The proportion of male senior NCMs was the same as female (20%) for reserve force C Veterans and slightly less than female reserve force A/B Veterans, where males represented 4% of senior NCMs and females represented 5%.

Males served for longer than females among regular force Veterans but the reverse was true for reserve force Veterans. Among regular force Veterans, a higher percentage of males had served 20 or more years compared to females, 49% compared to 39%. However, male reserve force Veterans were less likely to have served 20 years or more, 19% versus 21% for reserve C and 4% versus 5% for reserve A/B.

Across all service components, most male Veterans released from the Army. For female Veterans, regular force females were more likely to release from the Air Force, while female reservists were more likely to release from the Army. When comparing male and female Veterans across service components, males were more likely than females to have served in the Army, and females were more likely than males to have served in the Air Force and the Navy (although for regular force Veterans this difference was not as substantial).

Across all service components, female veterans were more likely to have been released medically. Medical releases accounted for 29% of female regular force Veterans compared to 20% of male regular force Veterans. Among female reserve force C Veterans and reserve force A/B, the proportion of medical releases was double and triple that of males, 19% compared to 9% and 6% compared to 2%.

Across all service components the most common occupation for male Veterans was combat arms, for female veterans it was administration. When female Veterans were compared to male Veterans across service components, females were more likely to have served in administrative and medical occupations and males were more likely to serve in combat occupations. For all service components, female Veterans were more likely to be have been in military occupations that were transferable (i.e. administration and medical) to a comparable civilian occupation than male Veterans.

About one-third of both male and female regular force Veterans were clients of VAC. Regular force Veterans were more likely to be clients compared to reservists; however, females were more likely to be clients than males among reservists, 19% versus 14% for reserve force C and 6% versus 2% for reserve force A/B.



**Table 3: Military Service Characteristics and Client Status, LASS 2013 Population Frame**

		Regular Force		Reserve Force C		Reserve Force A/B	
		Male	Female	Male	Female	Male	Female
Rank at Release	Senior Officer	8.2%	4.7%	8.3%	3.8%	1.4%	0.9%
	Junior Officer	7.4%	11.2%	9.3%	10.3%	7.2%	8.5%
	Officer Cadets	3.6%	7.0%	0.1%	0.1%	2.5%	2.0%
	Senior NCM	25.9%	19.1%	19.7%	19.8%	3.7%	4.8%
	Junior NCM	55.0%	58.0%	62.6%	65.9%	85.2%	83.7%
Years of Service	<2 years	20.1%	24.4%	0.7%	0.5%	24.8%	20.3%
	2 to 9 years	19.9%	20.9%	42.5%	30.0%	62.2%	59.0%
	10 to 19 years	10.9%	15.7%	37.4%	48.6%	9.1%	15.5%
	20+ years	49.1%	39.0%	19.4%	20.8%	3.9%	5.1%
Branch at release	Army	55.1%	39.0%	84.4%	65.8%	85.7%	70.2%
	Navy	17.0%	18.4%	11.1%	20.7%	12.4%	24.8%
	Air Force	27.9%	42.6%	4.5%	13.6%	1.9%	5.0%
Release Type	Involuntary	7.8%	8.6%	13.4%	5.2%	21.0%	10.6%
	Medical	19.8%	29.2%	9.3%	19.3%	2.0%	5.7%
	Voluntary	72.5%	62.2%	77.2%	75.5%	77.0%	83.7%
Occupation	Combat Arms	29.9%	5.9%	54.6%	12.3%	64.5%	29.5%
	Communications	8.3%	7.6%	9.9%	8.6%	5.5%	5.6%
	Maritime	12.4%	8.5%	8.4%	13.2%	9.4%	14.1%
	Aviation	14.2%	10.5%	1.9%	1.3%	0.7%	0.3%
	Administration <sup>1</sup>	19.3%	46.8%	17.3%	53.5%	11.9%	31.8%
	Engineering & Technical	11.6%	3.3%	4.0%	0.4%	3.1%	1.2%
	Medical	3.0%	15.3%	2.5%	8.5%	2.9%	11.6%
	General Officer Specialist	1.3%	2.1%	1.5%	2.2%	1.9%	5.8%
	Transferable <sup>2</sup>	63.9%	88.4%	41.3%	83.1%	31.8%	66.1%
Non-Transferable <sup>2</sup>	36.1%	11.6%	58.7%	16.9%	68.2%	33.9%	
Non-Client		67.3%	68.0%	86.0%	81.1%	97.7%	94.1%
Client		32.7%	32.0%	14.0%	18.9%	2.3%	5.9%

<sup>1</sup> Administration includes logistics, security, intelligence and emergency services.

<sup>2</sup> Comparable civilian occupation is based on the matching of Military Occupation Codes (MOCs) to National Occupation Codes (NOCs). See MacLean et al., 2015a for details.

## ***Well-being Indicators***

### Health

VAC's well-being surveillance framework describes health as a state of physical, mental, social and spiritual functioning, broader than the presence or absence of disease. Health is monitored through four indicators available in LASS: self-rated health, self-rated mental health, activity limitation(s), and need for assistance with activities of daily living. This section includes these measures from LASS 2013 as well as other indicators of health, including: chronic conditions, probable post-traumatic stress disorder, distress, and suicidal ideation. While not necessarily indicators of population health, health care coverage, access, and use are also examined in this section.

The majority of both male and female Veterans reported “very good or excellent” health. There were no statistically significant differences in perceived health between male and female Veterans across the three service components. The majority of both male and female Veterans reported “very good or excellent” mental health as well. Male reserve force A/B Veterans were more likely to report “very good or excellent” mental health compared to females. For regular force and reserve force C Veterans, there was no significant difference in perceived mental health between male and female Veterans.

About half of both male and female regular force Veterans had activity limitations at home, school, work, or other activities (such as transportation or leisure) “often or sometimes” but there was no significant difference in their rates. Female reserve force Veterans had higher rates of having activity limitations compared to male reserve force Veterans, 49% compared to 37% for reserve force C and 35% compared to 20% for reserve force A/B.

A smaller proportion of both male and female Veterans needed help with one or more tasks due to activity limitations. Examples of such tasks include preparing meals, getting to appointments/errands, housework, personal care, moving about inside the house, and personal finances. Female regular force and reserve force C Veterans had about double the rates of needing help compared to males. Sample sizes were too small for reliable estimates of reserve force A/B.

**Table 4: Self-rated Health, Self-rated Mental Health and Activity Limitations, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
<b>Self-rated Health</b>						
Very good or excellent	52.8% (50.3-55.3)	51.1% (44.6-57.6)	62.0% (58.3-65.5)	58.5% (51.9-64.9)	70.9% (66.2-75.3)	62.5% (51.8-72.0)
Good	29.9% (27.6-32.2)	28.3% (22.9-34.5)	26.0% (22.9-29.4)	24.8% (19.5-31.0)	23.2% (19.2-27.7)	F
Fair or poor	17.4% (15.6-19.3)	20.6% (15.8-26.5)	12.0% (9.8-14.6)	16.7% (12.3-22.2)	F	F
<b>Self-rated Mental Health</b>						
Very good or excellent	62.2% (59.7-64.6)	58.1% (51.5-64.4)	69.3% (65.7-72.6)	60.5% (53.8-66.8)	76.8% (72.3-80.7)	60.2% (49.6-70.0)
Good	22.8% (20.7-25.0)	21.3% (16.5-27.0)	21.2% (18.3-24.5)	24.6% (19.3-30.9)	18.3% (14.7-22.5)	F
Fair or poor	15.0% (13.3-16.9)	20.6% (15.8-26.5)	9.5% (7.6-11.9)	14.9% (10.7-20.2)	F	F
<b>Activity Limitations</b>						
Activity Limitations (Often or sometimes) <sup>1</sup>	49.4% (46.9-51.9)	50.1% (43.5-56.6)	37.3% (33.8-41.0)	48.7% (42.1-55.4)	19.9% (16.2-24.2)	34.7% (25.5-45.2)
Needs help with at least one task <sup>2</sup>	18.6% (16.7-20.6)	30.3% (24.8-36.4)	9.5% (7.6-11.9)	22.9% (17.9-29.0)	F	F

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

<sup>1</sup> Activity limitation at home, school, work, leisure, or transportation ranked as none, sometimes, or often.

<sup>2</sup> Six questions that list basic and instrumental activities of daily living, any help with any activity.

Musculoskeletal conditions and chronic pain were quite common among both male and female regular force and reserve force C Veterans, affecting a quarter to almost one half of the Veteran population. Female reserve force C Veterans had higher rates of musculoskeletal conditions and chronic pain than their male counterparts, 47% vs. 36% and 36% vs. 26%, respectively. There were no further differences in rates of musculoskeletal conditions and chronic pain between male and female Veterans.

Female regular force Veterans (30%) had double the prevalence of central nervous system conditions compared to male regular force Veterans (15%). There were no significant differences between male and female reserve force Veterans for central nervous system conditions. There were also no significant differences between male and female regular force Veterans for gastrointestinal conditions and sample sizes were too small for reliable estimates for reserve force Veterans. Comparisons could not be made for cardiovascular and respiratory conditions across all service components due to insufficient sample sizes.

**Table 5: Chronic Health Condition Categories**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
<b>Musculoskeletal</b> (back problems & arthritis)	43.6% (41.2-46.1)	41.9% (35.7-48.4)	36.2% (32.7-39.8)	46.9% (40.3-53.6)	17.5% (14.1-21.6)	F
<b>Cardiovascular</b> (high blood pressure, heart disease & stroke)	20.8% (19.0-22.7)	F	14.9% (12.5-17.7)	F	F	F
<b>Gastrointestinal</b> (ulcers & bowel disorders)	8.3% (7.1-9.8)	10.5% (7.2-15.0)	7.6% (5.8-9.8)	F	F	F
<b>Respiratory</b> (asthma & COPD)	7.0% (5.9-8.3)	F	7.0% (5.3-9.2)	F	F	F
<b>Central Nervous System</b> (dementia, traumatic brain injury & migraines)	15.1% (13.4-17.1)	29.9% (24.2-36.4)	11.9% (9.7-14.6)	16.2% (11.9-21.7)	8.2% (5.7-11.5)	F
<b>Chronic Pain</b> (mild, moderate & severe)	33.0% (32.7-35.3)	39.2% (33.1-45.7)	25.7% (22.6-29.1)	35.7% (29.6-42.3)	10.8% (8.1-14.3)	F

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

Most males and female Veterans had at least one diagnosed physical health condition among conditions captured in LASS 2013. Arthritis, back problems and obesity were the most common conditions, especially among regular force and reserve force C Veterans. There were no statistically significant differences between males and females across all service components in rates of arthritis, back problems, obesity, and diabetes. Given the low number of female Veterans in the sample, a comparison could not be made to male Veterans.

**Table 6: Physical Health Conditions, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Arthritis	22.5% (20.6-24.5)	22.0% (17.3-27.6)	14.3% (11.9-17.0)	22.1% (17.0-28.0)	F	F
Back Problems	34.7% (32.4-37.1)	33.4% (27.5-39.7)	29.8% (26.6-33.4)	37.1% (30.9-43.8)	14.8% (11.6-18.7)	F
Obesity	26.6% (24.4-28.9)	22.8% (17.5-29.0)	23.6% (20.6-26.9)	23.0% (17.8-29.3)	19.0% (15.3-23.2)	F
Diabetes	6.0% (5.0, 7.1)	F	5.0% (3.7, 6.8)	F	F	F
Hearing Problems <sub>1</sub>	9.2% (8.0-10.6)	F	4.8% (3.4-6.6)	F	F	F
Any Physical Health Condition <sup>2</sup>	73.8% (71.5-76.1)	73.0% (66.8,78.5)	66.2% (62.5-69.8)	74.3% (67.9-79.8)	52.2% (46.7-57.6)	68.3% (57.3-77.6)

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

<sup>1</sup> Difficulty hearing in a group or without a hearing aid

<sup>2</sup> Includes musculoskeletal condition, cardiovascular condition, gastrointestinal condition, respiratory condition, urinary incontinence, diabetes, cancer, obesity, hearing problem or chronic pain/discomfort.

Overall, female regular force Veterans (31%) were more likely to have a mental health condition compared to male regular force Veterans (23%). Female regular force and reserve force C Veterans (25% and 18%) had higher rates of diagnosed mood disorders compared to their male counterparts (16% and 10%). There was no significant difference between males and females for anxiety disorders across all service components. Other comparisons between males and females could not be made given low sample sizes for females.

LASS 2013 included a post-traumatic stress disorder (PTSD) screener which includes 4 items covering key symptoms, including: re-experiencing trauma, numbing, avoidance, and hyper-arousal. Based on the responses, 15% of male regular force Veterans and 12% of male reserve force C Veterans screened positive for probable PTSD. Comparisons between males and females could not be made given low sample sizes for females.

**Table 7: Mental Health Conditions, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Mood Disorder	15.9% (14.1-17.9)	24.8% (19.6-31.0)	10.3% (8.2-12.8)	18.2% (13.7-23.8)	F	F
Anxiety Disorder	10.3% (8.8-12.0)	16.4% (11.9-22.1)	7.9% (6.1-10.1)	F	F	F
PTSD	14.1% (12.4-15.9)	F	7.4% (5.7-9.6)	F	F	F
Any Mental Health Condition <sup>1</sup>	22.7% (20.6-24.9)	31.3% (25.5-37.7)	16.3% (13.7-19.2)	19.9% (15.1-25.6)	F	F
<b>Probable PTSD<sup>2</sup></b>	14.5% (12.9-16.4)	F	11.5% (9.3-14.2)	F	F	F

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

<sup>1</sup> Includes mood disorder, anxiety disorder and PTSD

<sup>2</sup> DSM-IV criteria, score 3+

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. In LASS 2013, the rates of 12 month suicidal ideation were measured. Suicidal ideation is defined by the questions: “Have you ever seriously considered committing suicide or taking your own life? Has this happened in the past 12 months?” 6% of male regular force Veterans and 6% of male reserve force C Veterans reported suicidal ideation over the previous 12 months. Comparisons between males and females could not be made given low sample sizes.

The K10 Psychological Distress measure is frequently used in population health surveys to screen for anxiety and major depression disorders. The scale categorizes the responses into the following groups of psychological distress: likely well, mild distress, moderate distress, and severe distress. Based on the results of this tool, male reserve force A/B Veterans were more likely to be “well” compared to female reserve force A/B Veterans. The results also found that there was no statistically significant difference between regular force and reserve force C males and females who were “well” or showed “mild” distress. Other comparisons between males and females could not be made due to insufficient sample size of females.

**Table 8: Suicide Ideation & Psychological Distress, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Suicidal Ideation (12 Month)	6.3% (5.2-7.7)	F	5.6% (4.1-7.6)	F	F	F
<b>Psychological Distress</b>						
Likely Well (0-9)	79.6% (77.5-81.6)	74.7% (68.6-79.9)	84.4% (81.5-86.9)	79.6% (73.7-84.4)	92.5% (89.4-94.8)	77.7% (67.7-85.3)
Mild Distress (10-14)	8.6% (7.3-10.1)	8.1% (5.5-11.8)	7.6% (5.8-9.8)	F	F	F
Moderate Distress (15-19)	4.8% (3.8-6.1)	F	F	F	F	F
Severe Distress (20-40)	7.0% (5.8-8.4)	F	5.5% (4.0-7.5)	F	F	F

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

The majority of both male and female Veterans had insurance coverage for prescription drugs, dental and eye glasses. There were no significant differences between males and females in coverage rates across the service components.

The majority of both male and female Veterans had a regular medical doctor. A higher proportion of female reserve force C Veterans (88%) had a regular medical doctor compared to males (76%). There were no significant differences between male and female regular force and reserve force A/B Veterans in having a regular medical doctor.

Unmet needs for health care can include care not available locally, not available when needed, excessive wait times for services and cost. Less than a quarter of male and female Veterans reported unmet needs. Female reserve force C Veterans (22%) had higher rates of unmet care needs during the past year compared to male reserve force C Veterans (14%).

Less than 15% of both male and female Veterans had been hospitalized over the 12 months prior to the survey. Female regular force Veterans (13%) were more likely to have been hospitalized compared to males (7%). No further difference could be detected in the rate of hospitalization for reserve force Veterans due to insufficient sample size.

The majority of both male and female Veterans had contact with a doctor during the 12 months prior to the survey. Female Veterans across all service components were more likely than male Veterans to have contact, 81% compared to 71% for regular force, 83% compared to 68% for reserve force C and 79% compared to 57% for reserve force A/B.



**Table 9: Health Services Coverage; Use and Access, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Prescription Drug Insurance	92.1% (90.4-93.6)	91.5% (86.4-94.8)	86.7% (83.9-89.1)	93.2% (88.8-96.0)	82.1% (77.8-85.7)	87.2% (77.9-93.0)
Dental Insurance	86.7% (84.6-88.5)	87.5% (81.8-91.6)	77.2% (73.9-80.2)	82.1% (76.3-86.7)	75.4% (70.8-79.6)	74.8% (64.5-82.9)
Eye Glasses Insurance	83.7% (81.5-85.7)	87.0% (81.4-91.2)	71.1% (67.5-74.4)	78.8% (72.7-83.9)	68.5% (63.6-73.2)	65.2% (54.2-74.8)
Regular medical doctor	79.8% (77.5-81.9)	86.8% (81.5-90.8)	75.6% (72.1-78.7)	87.6% (82.4-91.5)	74.5% (69.9-78.7)	80.4% (70.7-87.5)
Home care – funded by gov't	6.9% (5.7-8.2)	10.3% (7.0-14.8)	F	F	F	F
Home care – not funded by gov't	7.3% (6.2-8.7)	9.3% (6.3-13.4)	8.4% (6.5-10.7)	F	F	F
Unmet care need past year	15.4% (13.7-17.4)	18.1% (13.6-23.7)	14.1% (11.7-16.8)	21.9% (16.9-27.9)	10.5% (7.8-13.9)	F
Been patient overnight in past year	6.9% (5.7-8.3)	12.7% (8.8-18.0)	5.9% (4.4-8.0)	F	F	F
Past 12 month contact with family doctor	71.2% (68.7-73.5)	81.0% (75.0-85.8)	67.6% (64.0-71.1)	82.6% (76.8-87.2)	56.9% (51.8-61.8)	79.4% (69.6-86.7)

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

## Purpose

VAC's well-being surveillance framework describes purpose as the sense of meaning attained by participation in fulfilling activities, such as employment. Purpose can be monitored through three indicators available in LASS: employment rate, satisfaction with main activity, and satisfaction with life. This section includes these measures from LASS 2010 and 2013 as well as other indicators of purpose, such as part-time work, work stress, and skills transferability.

Overall, most Veterans were engaged in the workforce at the time of the survey; between 73%-86% of male Veterans and 67%-76% of female Veterans reported that they were employed in the week prior to survey. However, female regular force Veterans were more likely to have been employed part-time, 25%, at more than double the rate for male regular force Veterans (9%). For other service components, given sample size, a difference could not be detected between males and females for part-time employment. Reserve force C females were less likely to be employed compared to males, 68% compared to 83%, and twice as likely to report that they are not in the workforce, 22% versus 11%. Across all service components, the unemployment rate was not significantly different between male and female Veterans. Comparisons between males and females, for 'unemployed' and 'unable to work,' could not be made given low sample sizes for females.

**Table 10: Labour Force Participation, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Employed	72.6% (70.3-74.7)	66.8% (60.5-72.6)	83.4% (80.5-86.0)	68.0% (61.4-73.9)	85.9% (82.0-89.0)	76.4% (66.5-84.1)
Part-time <sup>1</sup>	9.3% (7.7-11.2)	24.8% (17.9-33.3)	F	F	F	F
Unemployed	5.6% (4.5-7.0)	F	4.8% (3.4-6.7)	F	F	F
Not in the workforce	18.4% (16.7-20.3)	24.9% (19.8-30.8)	10.8% (8.7-13.2)	21.7% (16.7-27.7)	7.9% (5.6-11.0)	F
Unable to work	3.3% (2.5-4.3)	F	F	F	F	F
Unemployment Rate	7.2% (5.8-8.9)	4.7% (2.1-9.8)	5.5% (3.9-7.6)	5.0% (2.5-9.7)	6.3% (4.1-9.5)	4.0% (1.3-11.8)

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

<sup>1</sup> represents a subset of those who identified as 'employed'

Main activity in the year prior to survey was captured in LASS 2013. On average, at the time of the survey Veterans had released from military service seven years prior. There were clear differences between male and female Veterans and their rates of working at the time of the survey. For regular force Veterans males were 1.4 times more likely to report working as their main activity compared to female Veterans; for reserve force Veterans males were 1.3 times more likely for both reserve force C and A/B. Female regular force Veterans were more than twice as likely to report they were disabled or on disability compared to male regular force Veterans, 12% versus 5%. Due to small samples, no differences could be detected between males and females in other main activities.

**Table 11: Main Activity Over Past Year, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Worked	71.8% (69.6-73.9)	52.2% (45.6-58.7)	81.9% (78.9-84.6)	61.3% (54.6-67.6)	80.8% (76.5-84.5)	62.0% (51.4-71.5)
Retired	12.0% (10.7-13.4)	13.9% (10.3-18.6)	5.2% (3.8-6.9)	F	F	F
Attending School/Training	4.7% (3.7-6.0)	F	5.6% (4.0-7.7)	F	14.3% (11.0-18.2)	F
Disabled	5.2% (4.2-6.5)	12.1% (8.3-17.2)	4.2% (2.9-5.8)	F	F	F
Looked for work	2.2% (1.5-3.1)	F	F	F	F	F
Caregiving	F	F	F	F	F	F
Other	3.4% (2.6-4.4)	F	F	F	F	F

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

LASS 2010 captured both main activity in the year after release and in the year prior to the survey for regular force Veterans. As in LASS 2013, there was an average of 7 years between military release and the survey. In the year after release, 39% of females reported that their main activity was working compared to 59% of males. While, the employment rate among females rose to 63% in the year prior to the survey, it rose to 77% among males.

In the year after release, females had significantly higher rates of attending school (22%) and being on disability (10%) compared to males, 14% and 6% respectively. In the year before the survey, females were much more likely than males to report that their main activity was caregiving (9% compared to 1%) and were again more likely to report being on disability (10% compared to 6%). There were no more significant differences between males and females and sample sizes were too small for reliable estimates for other categories of main activities.

**Table 12: Main Activity, Regular Force, LASS 2010**

	Year After Release		Year Prior to Survey	
	Male	Female	Male	Female
Worked	58.9% (56.9-61.0)	38.7% (33.4-44.4)	77.1% (75.4-78.7)	63.0% (57.6-68.2)
Retired	10.2% (9.1-11.4)	11.0% (7.9-15.0)	8.8% (7.8-9.9)	10.9% (7.9-14.8)
Attending School/Training	14.0% (12.5-15.5)	22.3% (18.0-27.2)	3.7% (3.0-4.7)	F
Disabled/On Disability	6.0% (5.3-6.8)	10.2% (7.6-13.5)	5.6% (4.9-6.3)	10.0% (7.5-13.3)
Looked for work	8.0% (6.8-9.2)	F	2.4% (1.9-3.2)	F
Caregiving	1.0% (0.7-1.5)	F	1.0% (0.6-1.4)	8.5% (5.8-12.2)
Other	2.0% (1.5-2.7)	F	1.4% (1.0-1.9)	F

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

In LASS 2013, most Veterans reported that they were satisfied or very satisfied with their main activity. However, female regular force Veterans reported lower rates of being satisfied or very satisfied with their main activity than male Veterans, 68% compared to 76%. There were no significant differences in satisfaction rates between male and female reserve force Veterans.

**Table 13: Satisfaction with main activity, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Satisfied or very satisfied	76.1% (73.8-78.2)	67.8% (61.3-73.7)	75.0% (71.6-78.2)	76.5% (70.3-81.7)	81.5% (77.2-85.1)	75.5% (65.3-83.4)
Neither satisfied or dissatisfied	10.5% (9.0-12.3)	16.3% (11.9-21.8)	11.1% (8.9-13.7)	F	8.5% (6.1-11.8)	F
Dissatisfied or very dissatisfied	13.4% (11.8-15.2)	15.9% (11.5-21.6)	13.9% (11.5-16.7)	F	10.0% (7.4-13.4)	F

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

There were no significant differences observed between employed male and female Veterans when examining work stress. Both female and male Veterans of all service components rated their work stress as a bit stressful; however, for female regular force Veterans the next most common response was ‘not at all or not very stressful’ (30%) but for female reserve force C Veterans the next most common response was ‘extremely or quite a bit stressful’ (36%).

**Table 14: Work stress in past year job or business, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Not at all or not very stressful	33.1% (30.4-35.9)	30.1% (23.0-38.2)	27.2% (23.7-30.9)	21.0% (15.3-28.1)	29.3% (24.8-34.3)	F
A bit stressful	45.1% (42.2-47.9)	45.1% (37.3-53.2)	46.3% (42.3-50.3)	43.3% (35.7-51.1)	55.8% (50.6-60.9)	43.7% (32.6-55.5)
Extremely or quite bit stressful	21.8% (19.6-24.2)	24.8% (18.6-32.2)	26.6% (23.2-30.2)	35.8% (28.7-43.5)	14.9% (11.6-19.0)	F

F sample size too small for reliable estimate

When Veterans who were employed were asked whether they agreed 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,” most were split between agree and disagree. Female regular force Veterans were less likely than males to agree that their skills transferred, 36% compared to 47%. However, this finding is in contrast to the finding that females were more likely to have had a transferable military occupation, 88% versus 64% (see Table 3).

**Table 15: Skill Transferability, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Agree/strongly agree	47.4% (44.0-50.0)	36.4% (30.3-43.1)	48.3% (44.5-52.1)	41.1% (34.5-48.0)	32.9% (28.3-37.8)	F
Neither	12.3% (10.6-14.1)	19.6% (14.8-25.6)	16.0% (13.4-19.0)	16.0% (11.7-21.7)	16.2% (12.8-20.3)	F
Disagree/strongly disagree	40.3% (37.8-42.9)	43.9% (37.3-50.8)	35.7% (32.1-39.4)	42.9% (36.2-49.8)	50.9% (45.8-56.0)	55.2% (44.6-65.4)

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

The majority of both male and female Veterans reported that they are either satisfied or very satisfied with life. There was no significant difference in the satisfaction rate between male and female regular force and reserve force C Veterans. However, female reserve force A/B Veterans were less likely to be satisfied than their male reserve force counterparts, 84% compared to 96%.

**Table 16: Satisfaction with Life, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Very satisfied or satisfied	86.1% (84.3-87.8)	83.4% (77.6-87.9)	90.3% (87.9-92.3)	83.5% (78.0-87.9)	96.0% (93.5-97.6)	84.1% (75.1-90.3)
Neither satisfied nor dissatisfied	6.8% (5.6-8.2)	F	4.3% (3.1-6.1)	F	F	F
Dissatisfied or very dissatisfied	7.1% (5.9-8.5)	F	5.3% (3.9-7.3)	F	F	F

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

## Finances

VAC's well-being surveillance framework describes finances as including household income and financial security. Finances are a component of well-being monitored by low income and satisfaction with finances that can be captured through two indicators available in LASS: rate of low income and satisfaction with finances. This section includes these measures from LASS 2013, suggested by the surveillance framework, as well as pre-and post-release total income levels and change.

The Low Income Measure (LIM), used in LASS, is a measure of family income that accounts for family size. A minority of both female and male Veterans experienced low income at least one year post-release. Female Veteran families were more likely to experience low income across all three service components, 20% compared to 16% for regular force, 14% compared to 12% for reserve force C and 27% compared to 25% for reserve force A/B.

Satisfaction with finances captures the whole financial situation of an individual or family, not just income level, and includes: savings, debt, and future prospects. Most male and female Veterans report being satisfied or very satisfied with their finances. There were no significant differences between male and female Veterans across the types of services in satisfaction with finances.

Female Veterans had lower incomes than males across all three service components and both pre- and post-release. Female regular force Veterans also experienced large declines in income post-release (21%) while males enjoyed a slight increase in income post-release (0.4%). Female reserve force Veterans experienced a smaller increase in income post-release, (11%) compared to (15%) for reserve force C and 31% compared to 45% for reserve force A/B.

**Table 17: Finance Indicators, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
<b>Low income</b> <sup>1, 2</sup>	16%	20%	12%	14%	25%	27%
<b>Satisfaction with finances</b>						
Satisfied or very satisfied	70.3% (67.8-72.6)	69.3% (62.8-75.2)	68.9% (65.3-72.2)	66.2% (59.6-72.3)	66.1% (61.2-70.7)	65.3% (54.6-74.6)
Neither satisfied nor dissatisfied	11.6% (10.1-13.4)	F	11.6% (9.4-14.2)	F	11.9% (9.0-15.6)	F
Dissatisfied or very dissatisfied	18.1% (16.1-20.3)	20.5% (15.5-26.6)	19.6% (16.7-22.8)	22.9% (17.8-29.1)	22.0% (18.1-26.4)	F
<b>Total income</b> <sup>2</sup>						
Pre-Release Year	\$70,400	\$62,100	\$63,500	\$50,700	\$33,000	\$31,500
Post-Release (average of 3 yrs)	\$70,700	\$48,800	\$73,100	\$56,200	\$47,800	\$41,400
Change	0.4%	-21%	15%	11%	45%	31%

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

<sup>1</sup> At least one year post release

<sup>2</sup> Source, Income Study. Total income is the before tax income of the Veteran expressed in 2011 constant dollars.

## Social Integration

Social Integration is described as engagement in mutually supportive relationships either with friends, family, or in the community. The three indicators for this domain are sense of community belonging, social support, and adjustment to civilian life. This section includes these measures from LASS 2013 and LASS 2016, which includes parental type and family composition.

The majority of male and female Veterans rated their adjustment to civilian life as “very or moderately easy” regardless of their service component or sex. There was no significant difference in the rates of adjustment to civilian life between male and female Veterans of all service components.

In general, the majority of male and female Veterans rated their sense of community belonging as “very or somewhat strong” regardless of their service component or sex. There were no significant differences detected between male and female Veterans in their sense of community belonging.

**Table 18: Social Integration Indicators, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
<b>Adjustment to Civilian Life</b>						
Very or moderately easy	57.0% (54.5-59.4)	52.0% (45.4-58.5)	61.7% (58.0-65.3)	58.2% (51.5-64.6)	75.2% (70.6-79.3)	68.9% (58.5-77.8)
Neither difficult nor easy	16.3% (14.5-18.2)	17.8% (13.2-23.6)	14.9% (12.4-17.8)	15.9% (11.6-21.4)	15.9% (12.6-20.0)	F
Very or moderately difficult	26.8% (24.6-29.1)	30.2% (24.5-36.6)	23.4% (20.4-26.7)	25.9% (20.6-32.1)	8.9% (6.4-12.2)	F
<b>Sense of Community Belonging</b>						
Very or somewhat strong	58.3% (55.8-60.8)	52.2% (45.6-58.7)	61.5% (57.8-65.1)	55.1% (48.4-61.6)	57.9% (52.8-62.9)	55.4% (44.9-65.6)
Very or somewhat weak	41.7% (39.2-44.2)	47.8% (41.4-54.4)	38.5% (34.9-42.2)	44.9% (38.4-51.7)	42.1% (37.2-47.2)	44.6% (34.5-55.1)

F sample size too small for reliable estimate



In LASS 2016, regular force Veterans were asked to rate their adjustment to civilian life as well as their family members' adjustment. The majority of male and female Veterans reported that their own, their spouse's, and their children's adjustment to civilian life was "very or moderately easy". There was no significant difference in the reporting between males and females of their own or their family members' adjustment to civilian life.

**Table 19: Adjustment to Civilian Life, LASS 2016**

		Regular Force	
		Male	Female
Veteran	Very or Moderately Easy	52.4% (49.7-55.1)	52.2% (44.9-59.3)
	Neither difficult nor easy	15.6% (13.7-17.8)	12.4% (8.8-17.2)
	Very or moderately difficult	32.0% (29.5-34.5)	35.4% (28.8-42.7)
Spouse/Partner	Very or Moderately Easy	57.4% (54.5-60.3)	50.5% (42.0-58.9)
	Neither difficult nor easy	14.8% (12.8-17.1)	22.3% (16.2-29.9)
	Very or moderately difficult	27.8% (25.3-30.5)	27.2% (20.2-35.6)
Children	Very or Moderately Easy	59.8% (56.5-63.0)	63.1% (53.2-72.1)
	Neither difficult nor easy	22.7% (20.0-25.8)	21.9% (15.0-30.9)
	Very or moderately difficult	17.5% (15.1-20.1)	F

F sample size too small for reliable estimate

The Social Provisions Scale (SPS) ranges from 10 to 40 (low to high) and is derived from 10 questions covering 5 dimensions: guidance (advice or information); reliable alliance (assurance that one can count on others in times of stress); reassurance of worth (recognition of one's competence); attachment (emotional closeness); and social integration (sense of belonging to a group of friends). A minority of both male and female Veterans had low social support. There was no significant difference between males and females in social support across the service components and for each subscale.

**Table 20: Social Provisions Scale, LASS 2013**

Mean Scores (2-8)	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Attachment	6.8 (6.8-6.9)	7.0 (6.9-7.2)	7.1 (7.0-7.2)	7.1 (6.9-7.3)	7.1 (7.0-7.2)	7.3 (7.1-7.5)
Guidance	6.9 (6.8-7.0)	7.0 (6.9-7.2)	7.1 (7.0-7.2)	7.2 (7.0-7.3)	7.2 (7.1-7.3)	7.4 (7.1-7.6)
Reliable Alliance	7.0 (7.0-7.1)	7.2 (7.0-7.3)	7.2 (7.1-7.3)	7.2 (7.1-7.4)	7.3 (7.2-7.4)	7.3 (7.0-7.6)
Social Integration	6.6 (6.5-6.6)	6.6 (6.5-6.8)	6.8 (6.7-6.9)	6.8 (6.6-7.0)	6.9 (6.8-7.0)	7.0 (6.7-7.3)
Reassurance of Worth	6.7 (6.6-6.7)	6.7 (6.6-6.9)	6.8 (6.7-6.9)	6.9 (6.7-7.0)	6.9 (6.8-7.0)	6.9 (6.6-7.1)
Social support (10-40)	34.1 (33.8-34.3)	34.8 (34.1-35.4)	35.1 (34.7-35.4)	35.4 (34.6-36.1)	35.6 (35.2-36.1)	36.1 (35.0-37.2)
Low Social Support <sup>1</sup>	15.8% (14.0-17.8)	14.5% (10.3-20.1)	10.1% (8.1-12.6)	11.3% (7.6-16.4)	6.9% (4.8-9.9)	5.9% (2.4-13.7)

<sup>1</sup> Those scoring <30 and >=30 were considered low and high support, respectively.

The majority of both male and female regular force Veterans were not parents (68% and 66%) at time of survey. However, the LASS 2016 survey oversampled recent releases, those who released between 2012 and 2015, and this might explain lower numbers of parents. There were no differences in family composition detected in LASS 2016 between male and female Veterans. Both males and females were more likely to be living with a partner, without children, than any other living arrangement.

**Table 21: Parental Type and Family Composition, Regular Force, LASS 2016**

	Male	Female
<b>Parental Type</b>		
Single Parent	2.7% (1.8-3.9)	F
Parent	29.7% (27.2-32.3)	29.2% (22.7-36.6)
Non-Parent	67.7% (65.0-70.2)	65.9% (58.4-73.0)
<b>Family composition</b>		
Veteran Living Alone	13.3% (11.5-15.3)	17.3% (12.6-23.3)
Veteran living with Partner - no kids	45.7% (43.1-48.3)	40.7% (33.9-47.8)
Veteran living with children - 18 and under	29.7% (27.2-32.3)	29.9% (23.4-37.4)
Veteran living with extended family	11.3% (9.7-13.2)	12.2% (8.1-17.9)

F sample size too small for reliable estimate

## Life Skills

VAC's well-being surveillance framework characterizes life skills as enabling management of life and contributing to resilience including personal health practices, coping skills and education. There are five indicators included in the framework: highest education level, daily smoking, heavy drinking, obesity and mastery which are examined in this section.

The highest level of education obtained by CAF Veterans was captured at the time of survey. It is notable that between release and the survey interview, some Veterans may have augmented their level of education. However, there was no significant difference in education between male and female Veterans of the same service component.

**Table 22: Education at time of survey, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Less than high school graduation	5.2% (4.2-6.4)	F	F	F	F	F
High school graduation	43.3% (40.8-45.8)	38.3% (32.1-45.0)	27.4% (24.1-30.9)	21.3% (16.3-27.4)	26.1% (21.9-30.9)	F
Post-secondary Certification	51.5% (49.0-54.0)	57.6% (51.0-64.0)	69.7% (66.1-73.0)	75.1% (68.8- 80.4)	71.8% (67.0-76.2)	78.6% (68.7-86.0)
Post-secondary graduation	35.5% (33.1-38.1)	37.9% (31.7-44.6)	40.7% (37.1-44.4)	41.5% (35.1-48.2)	39.0% (34.2-44.1)	35.9% (26.5-46.5)
University degree	16.0% (14.5-17.5)	19.7% (15.8-24.2)	29.0% (25.7-32.5)	33.6% (27.6-40.2)	32.8% (28.3-37.7)	42.7% (32.7-53.3)

F sample size too small for reliable estimate

Health behaviours are personal health practices that affect a Veteran’s health. Three practices which have been shown to affect an individual’s health include smoking, drinking and eating leading to obesity. Regular force males more than double the rate of heavy drinking compared to females, 27% versus 11%. However, there were no statistically significant differences between male and female regular force Veterans in rates of smoking and obesity. No difference was seen in the rate of obesity between male and female reserve force C Veterans and no further differences could be detected in male and female reservists’ rate of smoking, heavy drinking, and obesity due to insufficient sample size.

**Table 23: Smoking, Drinking and Obesity, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Daily smoker	16.8% (14.9-18.9)	14.2% (10.3-19.3)	14.3% (11.8-17.2)	F	10.6% (7.9-14.1)	F
Heavy drinker (5+ per occasion ≥ 12 times a year)	26.9% (24.7-29.2)	10.5% (7.2-15.1)	32.4% (29.0-36.1)	F	35.2% (30.6-40.2)	F
Obesity	26.6% (24.4-28.9)	22.8% (17.5-29.0)	23.6% (20.6-26.9)	23.0% (17.8-29.3)	19.0% (15.3-23.2)	F

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

Mastery is conceived as a personality characteristic that serves as a psychological resource individuals use to help them withstand stressors in their environment (Van Til et al, 2014a). Mastery is the feeling that a situation can be controlled or changed, and that one has the skills and ability to influence the situation. The *Mastery Scale* is a seven-item measure answered with a five-point Likert scale. It is a widely used indicator of the extent to which people see themselves as being in control of forces that affect their lives. As confidence intervals overlapped, no difference was detected between male and female CAF Veterans in mastery scores.

**Table 24: Mastery Scale, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Low (≤ 7)	1.8% (1.2-2.5)	F	F	F	F	F
Middle	69.0% (66.7-71.3)	68.8% (62.3-74.6)	63.3% (59.6-66.9)	65.7% (59.0-71.8)	60.4% (55.4-65.3)	62.7% (52.0-72.2)
High (≥ 23)	29.2% (27.0-31.5)	29.2% (23.6-35.6)	35.9% (32.3-39.6)	30.4% (24.6-37.0)	39.0% (34.2-44.0)	34.8% (25.5-45.4)

F sample size too small for reliable estimate

Stress has been shown to be related to a number of negative health outcomes, including heart disease, stroke, high blood pressure, suicide, as well as immune and circulatory complications. Exposure to stress can also contribute to behaviours such as smoking, over-consumption of alcohol, and less-healthy eating habits. Stress was categorized into five levels including ‘Not at all stressful’, ‘Not very stressful’ or ‘A bit stressful’, to ‘Quite a bit stressful’ and ‘Extremely stressful’. These were split into two categories for analysis described as ‘Low Stress Level’ and ‘High Stress Level’.

The majority of both male and female Veterans reported low stress. Male reserve force C Veterans were more likely to report low stress than female reserve force C Veterans, 77% compared to 66%, correspondingly female reserve force C Veterans were more likely to report high stress, 34% compared to males 24%. Similarly, males of reserve force A/B were more likely to report low stress than female reserve force A/B Veterans, 86% compare to 69%.

**Table 25: Stress in your life, LASS 2013**

	Regular Force		Reserve Force C		Reserve Force A/B	
	Male	Female	Male	Female	Male	Female
Low Stress (Not at all, a bit or not very stressful)	77.9% (75.8-79.9)	74.9% (68.8-80.2)	76.5% (73.2-79.5)	66.2% (59.7-72.2)	86.3% (82.5-89.4)	68.6% (58.3-77.4)
High Stress (Quite a bit or extremely stressful)	22.1% (20.1-24.2)	25.1% (19.8-31.2)	23.5% (20.5-26.8)	33.8% (27.8-40.3)	13.7% (10.7-17.5)	F

F sample size too small for reliable estimate and cells highlighted indicate a significant difference between males and females.

## Housing and Physical Environment

VAC's well-being surveillance framework describes housing and physical environment as including the built environment (e.g., housing), including its social and psychological features, as well as the natural environment (e.g., water and air quality). Housing is a major contributor to well-being and quality of life. It is the foundation for healthy living and more than simply the provision of shelter, it is a building block for success in many other areas - education, the labour market, personal relationships and community engagement.

Only one indicator is currently associated with housing and physical environment in the well-being framework: Veteran rate among homeless from an annual survey of shelters conducted by Employment and Skills Development Canada that includes a Veteran identifier. However, as the LASS survey is a household survey it does not capture homeless Veterans. This section instead examines three additional indicators available in LASS 2010: dwelling type, satisfaction with housing, and satisfaction with neighbourhood.

The majority of both male and female regular force Veterans live in a single detached dwelling (78% - 76%) and the majority of both male and female regular force Veterans were satisfied with their housing (90%). There was no significant difference in dwelling type or satisfaction with housing between male and female Veterans.

Satisfaction with neighbourhood measures many things, of which the quality of the house or home the Veteran lives is just one component. This indicator can be used to complete a picture of how the Veterans view where they live. The majority of both male and female regular force Veterans were either satisfied or very satisfied with their neighborhood. There were no significant differences in satisfaction with neighbourhood between male and female Veterans.

**Table 26: Type of Dwelling and Satisfaction with Housing & Neighbourhood, LASS 2010**

	Regular Force	
	Male	Female
<b>Dwelling Type</b>		
Single Detached	77.8% (76.0-79.6)	75.8% (70.6-80.4)
Double	2.0% (1.5-2.7)	F
Row or Terrace	4.5% (3.7-5.5)	F
Duplex	4.0% (3.2-5.0)	F
Low-rise <5 stories	7.4% (6.3-8.7)	F
High-Rise >/=5 stories	2.0% (1.5-2.8)	F
Hotel, Rooming/Lodging house, Camp	F	F
Mobile Home	F	F
Other	F	F
<b>Satisfaction with Housing</b>		
Very Satisfied	49.1% (47.0-51.2)	51.7% (46.1-57.2)
Satisfied	41.1% (39.1-43.2)	38.2% (33.0-43.7)
Neither	4.8% (4.0-5.9)	F
Dissatisfied	3.7% (3.0-4.6)	F
Very Dissatisfied	1.2% (0.9-1.8)	F
<b>Satisfaction with Neighbourhood</b>		
Very Satisfied	47.8% (45.7-49.9)	47.5% (42.0-53.1)
Satisfied	43.3% (41.2-45.3)	41.6% (36.2-47.2)
Neither	4.8% (4.0-5.8)	F
Dissatisfied	3.1% (2.4-3.9)	F
Very Dissatisfied	1.1% (0.7-1.6)	F

F sample size too small for reliable estimate



## **Summary**

The highest proportion of females was among reserves force C Veterans (23%), followed by reserve force A/B Veterans (19%) and regular force Veterans (13%).

### **Across all service components:**

- Female Veterans were more likely than males to be age 30 to 59 when surveyed and males were more likely to be under 30 and over 60.
- Females were more likely to: have served in the air force; have served 10-19 years; be in administrative, medical, and transferable occupations at release; and to have been medically released.
- Males were more likely to: serve in the army; and to have been in combat arms, engineering and technical, and non-transferable occupations at release.
- Females were more likely than males to have seen their family doctor in the past 12 months.
- Females differed from males in the domains of health, purpose, and finances.
  - Health: Females were more likely to report that they experienced an activity limitation and needed help as a result of an activity limitation.
  - Purpose: Females were less likely to report that work was their main activity.
  - Finances: Females were more likely to experience low income and have larger reductions in income post-release.
- There was no statistical difference between males and females across all service components in the domains of social integration, life skills, and housing and physical environment.

### **Regular force Veterans:**

- The average age of males and females differed by 2 years, males were notably more likely to be over 60 when surveyed. A similar proportion of males and females were clients of VAC. Females were more likely to have been widowed, separated, or divorced than their male counterparts.
- Females were more likely to: be Officer Cadets, Junior NCMs, and Junior Officers at release; have served in the air force; have served less than 20 years; be in administrative, medical, and transferable occupations at release; and to have been medically released.
- Males were more likely to: have been Senior Officers and Senior NCMs; serve in the army; serve for 20 years or more; to have been in maritime, combat arms, aviation, engineering and technical, and non-transferable occupations at release; and to have voluntarily released.
- There was no statistical difference between males and females in the domains of social integration and housing and physical environment.
- Females were more likely to have seen their family doctor in the past year.
- Females differed from males in the domains of health, purpose and finances.
  - Health: Females were more likely to need help due to activity limitations, be hospitalized, and have been diagnosed with a mood disorder or any mental health condition.
  - Purpose: Females were more likely to work part-time; less likely to report their main activity was working (due to higher rates of being on disability, attending

school or training post-release, and caregiving); less likely to be satisfied with their main activity; and less likely to agree that their military skills were transferable to their civilian work.

- Finances: Females were more likely to experience low income and larger reductions in income post-release.
- Males differed from females in one of the five indicators of life skills; males were more likely to meet the criteria for heavy drinking.

### **Reserve force C Veterans:**

- There average age of males and females differed by 1 year, males were notably more likely to be under 30 and over 60 when surveyed. Females were more likely to be clients of VAC. In the survey sample, female and male Veterans did not differ in marital status.
- Females were more likely to; be Junior NCMs at release; have served in the air force and the navy; have served for more than 10 years; be in administrative, medical, maritime, and transferable occupations at release; and to have been medically released.
- Males were more likely to: to be Senior Officers at release; serve in the army; have served for less than 10 years; to have been in combat arms, engineering and technical, and non-transferable occupations at release; and to have been involuntarily released.
- There was no statistical difference between males and females in the domains of social integration and housing and physical environment.
- Females were more likely to report having a regular medical doctor and were more likely to have seen their family doctor in the past year.
- Females differed from males in the domains of health, purpose, finances and life skills.
  - Health: Females were more likely to have activity limitations, need help as a result of these activity limitations, report having an unmet health care need, have a musculoskeletal condition, report having chronic pain, and to report a diagnosed mood disorder.
  - Purpose: Females were less likely to report that they were working and that work was their main activity in the past year. Correspondingly, females were more likely to report that they were not in the workforce.
  - Finances: Females were more likely to experience low income and larger reductions in income post-release.
  - Life Skills: Females were less likely to report low stress and more likely to report high stress in their lives.

### **Reserve force A/B Veterans:**

- There average age of males and females differed by 1 year, male Veterans were notably more likely to be under 30. Females were more likely to be clients of VAC.
- Females were more likely to: be Junior Officers at release; have served in the air force and the navy; have served 10 years or more; be in maritime, administrative, medical, and transferable occupations at release; and to be voluntarily or medically released.

- Males were more likely to: serve in the army; serve for less than 10 years; to be in combat arms, engineering and technical, and non-transferable occupations at release; and to be involuntarily released.
- Females were more likely to have seen their family doctor in the past year.
- There was no statistical difference between males and females in the domains of social integration and housing and physical environment.
- Females differed from males in the domains of health, purpose, finances and life skills.
  - Health: Females were less likely to report their mental health as very good or excellent, less likely to score 'likely well' for psychological distress, and more likely to have activity limitations.
  - Purpose: Females were less likely to report their main activity was working and that they were satisfied with life.
  - Finances: Females were more likely to experience low income and larger reductions in income post-release.
  - Life Skills: Females were less likely to report low stress in their lives.

## Discussion

This study found many similarities, and a few select differences, between male and female Veterans. The most notable differences were in service characteristics and three of the seven domains of well-being; health, purpose, and finances. Female and male Veterans were found to differ in rank at release, duration of service, service environment, and release category. One of the greatest differences was in military occupation, with females being more likely to have served in administrative and medical occupations. This could be related to historical policy, such as the exclusion of women from combat roles prior to the 1989 Human Rights Tribunal decision; and individual characteristics, such as education and skills prior to military service; as well as personal preferences. Additionally, service characteristics may impact a Veteran's health, labour-market participation, pension levels, and eligibility for VAC programs.

Overall, this study found that females were more likely to experience activity limitations, need help related to these activity limitations, and to have certain chronic physical and mental health conditions. Therefore, it was not surprising to find that female Veterans were more likely than males to be medically released and to report their main activity as disabled or on disability. This appears to be consistent with the Canadian population, where females are more likely than males to have activity limitations (Burlock, 2017). Female Veterans were also more likely to have seen a family doctor in the past year, to have been hospitalized, and to have unmet care needs. All this could be related to a greater need for health services among females, but may also be related to an unwillingness to seek help among males, which is a well-established phenomenon (Caddick et al., 2015; Seidler et al., 2016; Yousaf, Papat, & Hunter, 2015). Notably, male regular force Veterans were more likely to report heavy drinking; however, this is not surprising since males in Canada are also more likely than females to report heavy drinking (Statistics Canada, 2017). Not only is this difference similar to Canadians, this gender difference appears to be an international, cross-cultural finding. More drinking, and heavy drinking more frequently, occurs among men; while more long-term abstinence occurs among women, and no cultural differences or historical changes have entirely erased these differences (Wilsnack et al., 2009). While heavy drinking appears to be gendered, it's unclear whether this reflects a biological difference or differences in psycho-socio-cultural factors (Wilsnack et al., 2009; Erol & Karpyak, 2015; Statistics Canada, 2017). Further research is needed to distinguish between need, use and demand for health care in male and female Veterans and compared to Canadians.

On the whole, most Veterans were employed at the time of the survey and reported being satisfied with their main activity. However, female Veterans were more likely to report their main activity as being disabled, attending school, caregiving, or working part-time, and less likely to report employment as their main activity. Canadian women are also less likely to participate in the labour market than males (Moysen, 2017; Burlock, 2017). Furthermore, male Veterans had higher military incomes compared to female Veterans, and female Veterans were more likely to experience low income post-release. Moreover, females experienced a substantial drop in post-release income while males had a slight increase. This drop in income is related to both lower earnings and

lower pensions among females compared with males (MacLean et al., 2018) and is consistent with other research in the United States (National Center for Veterans Analysis and Statistics, 2016; Kleykamp, 2013).<sup>1</sup>

This is the first time that LASS data has been disaggregated by sex across service and demographic characteristics and across the domains of well-being and compiled into a single report. The findings of this study are representative of recently released Veterans (1998 to 2012) and, therefore, cannot be generalized to the entire Veteran population. Due to insufficient sample sizes of females in the LASS survey, it was not possible to detect differences for many indicators of well-being. Additionally, male and female Veterans differed in important service and demographic characteristics that were not controlled for, and these differences could explain some of the observed differences in indicators of well-being. However, within each of the service components the average age and age distribution of males and females was similar.

While this study succeeds in describing similarities and differences in this population, further research is needed to improve our understanding of the experiences of female and male Veterans; including:

- Comparing male and female Veterans to the Canadian general population;
- Controlling for service and demographic characteristics, for example military occupation and age, of female and male Veterans in examining well-being differences;
- Reviewing the literature on the nature and causes of differences between female and male Veterans and Canadians;
- Gathering more data on Veterans and disaggregating by sex, for example client data to aid in our understanding of the relationship between need, demand and use of programs and service and;
- Investigating the impact of other identity factors, such as race/ethnicity, sexual orientation, and rurality, on the well-being of Veterans.

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<sup>1</sup> For a more thorough discussion of the purpose and financial domain of well-being, see: “Examining Income Disparities between Female and Male Veterans: A Gender Analysis of Income and Labour Market Outcomes” by MacLean et al., 2018 (submitted)

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## Appendix A – Service and Demographic Characteristic Summary

† Mean values, not percentages; **ψ** Indicators from the survey sample; statistically significant differences are highlighted  
 All other indicators in this table are from the population frame, they are not a sample and, therefore, differences are valid and direction indicated with </>.

	Indicator	Regular Force	Reserve Force C	Reserve Force A/B
		Male – Female %	Male – Female %	Male – Female %
Age at survey	<30	16 > 15	18 > 10	60 > 46
	30-39	20 < 23	42 < 44	27 < 35
	40-49	25 < 30	19 < 23	7 < 11
	50-59	28 = 28	12 < 17	4 < 6
	>60	11 > 4	9 > 5	3 > 2
	Average Age †	45 > 43	40 < 41	31 < 33
Occupation	Combat Arms	30 > 6	55 > 12	65 > 30
	Communications	8 = 8	10 > 9	6 = 6
	Maritime	12 > 9	8 < 13	9 < 14
	Aviation	14 > 11	2 > 1	1 > 0.3
	Administration	19 < 47	17 < 54	12 < 32
	Engineering & Technical	12 > 3	4 > 0.4	3 > 1
	Medical	3 < 15	3 < 9	3 < 12
	General Officer Specialist	1 < 2	2 = 2	2 < 6
Transferable occupation	Transferable	64 < 88	41 < 83	32 < 66
	Non-Transferable	36 > 12	59 > 17	68 > 34
Client Status	Non-Client	67 < 68	86 > 81	98 > 94
	Client	33 > 32	14 < 19	2 < 6
Marital Status <b>ψ</b>	Married/Common-Law	74-70	71-75	54-65
	Widowed, Separated, or Divorced	9-15	5-10	3-9
	Single-never married	16-15	24-16	42-26
Rank at release	Senior Officer	8 > 5	8 > 4	1 = 1
	Junior Officer	7 < 11	9 < 10	7 < 9
	Officer Cadets	4 < 7	0 = 0	3 > 2
	Senior NCM	26 > 19	20 = 20	4 < 5
	Junior NCM	55 < 58	63 < 66	85 > 84
Length of service	<2 years	20 < 24	1 = 1	25 > 20
	2 to 9 years	20 < 21	43 > 30	62 > 59
	10 to 19 years	11 < 16	37 < 49	9 < 16
	20+ years	49 > 39	19 < 21	4 < 5
Branch at Release	Army	55 > 39	84 > 66	86 > 70
	Navy	17 < 18	11 < 21	12 < 25
	Air Force	28 < 43	5 < 14	2 < 5
Release Type	Involuntary	8 < 9	13 > 5	21 > 11
	Medical	20 < 29	9 < 19	2 < 6
	Voluntary	73 > 62	77 > 76	77 < 84

## Appendix B – Well-being Indicator Summary

† Mean values, not percentages;  $\Phi$  Income linkage indicators, differences are valid and direction indicated with </>. All other indicators in this table are from the survey sample, statistically significant differences are highlighted.

Domain	Indicator	Indicator Details	Regular Force	Reserve Force C	Reserve Force A/B
			Male – Female %	Male – Female %	Male – Female %
Health	Self-Perceived Health	Very good or Excellent	53-51	62-59	71-63
		Good	30-28	26-25	23-26
		Fair or poor	17-21	12-17	6-12
	Self- Perceived Mental Health	Very good or Excellent	62-58	69-60	77-60
		Good	23-21	21-25	18-27
		Fair or poor	15-21	10-15	5-13
	Activity Limitations	RALD (RACDIMP): Often or sometimes	49-50	37-49	20-35
		ADL Need: Needs help with $\geq 1$ task	19-30	10-23	2-19
	Health Services	Regular Medical Doctor	80-87	76-88	75-80
		Prescription Drug Insurance	92-92	87-93	82-87
		Dental Insurance	87-87	77-82	75-75
		Eye Glasses Insurance	84-87	71-79	69-65
		Home care – funded by gov.	7-10	3-6	2-9
		Home care – not funded by gov.	7-9	8-11	4-11
	Unmet Needs	Past year	15-18	14-22	11-17
	Hospitalization	Past year	7-13	6-9	5-17
	Doctor Contact	Past year	71-81	68-83	57-79
	Chronic Conditions	MSK	44-42	36-47	18-29
		CNS	15-30	12-16	8-26
		Chronic Pain	33-39	26-36	11-23
		Cardio	21-10	15-12	7-9
		Gastro	8-11	8-11	5-17
		Respiratory	7-8	7-8	4-11
	Physical Health Conditions (PHC)	Arthritis	23-22	14-22	5-8
		Back problems	35-33	30-37	15-27
		Obesity	27-23	24-23	19-13
		Diabetes	6-3	5-4	1-2
		Hearing Problems	9-4	5-5	1-2
		Any PHC	74-73	66-74	52-68
	Mental Health Conditions (MHC)	Mood Disorder	16-25	10-18	4-14
Any MHC		23-31	16-20	7-19	
Anxiety Disorder		10-16	8-9	4-12	

Domain	Indicator	Indicator Details	Regular Force	Reserve Force C	Reserve Force A/B
			Male – Female %	Male – Female %	Male – Female %
		PTSD	14-7	7-8	1-7
	Distress	Well (0-9)	80-75	84-80	93-78
		Mild (10-14)	9-8	8-9	6-12
		Moderate (15-19)	5-6	3-3	1-4
		Severe (20-40)	7-11	6-8	0-7
	Suicide Ideation	Past year	6-9	6-4	3-8
PTSD Screen	Probable (3+)	15-11	12-11	5-11	
Purpose	Labour Force	Employed	73-67	83-68	86-76
		Part-time	9-25	3-20	19-9
		Not in the work force	18-25	11-22	8-19
		Unemployed	6-3	5-4	6-3
		Unable to work	3-5	1-7	0-1
	Satisfaction with Life	V. Satisfied or satisfied	86-83	90-84	96-84
		Neither	7-8	4-7	2-6
		Dissatisfied or v. dissatisfied	7-8	5-9	2-10
	Main Activity – past year	Worked	72-52	82-61	81-62
		Disabled	5-12	4-9	0-6
		Retired	12-14	5-8	2-3
		Attending School/Training	5-8	6-8	14-10
		Looked for work	2-4	2-0	2-2
		Caregiving	1-8	1-8	0-7
		Other	3-3	1-5	1-10
	Main Activity – year after release (LASS 2010)	Worked	59-39	-	-
		Attending School/Training	14-22	-	-
		Caregiving	1-7	-	-
		Disabled	6-10	-	-
		Looked for work	8-6	-	-
		Other	2-5	-	-
		Retired	10-11	-	-
	Main Activity – past year (LASS 2010)	Worked	77-63	-	-
		Attending School/Training	4-4	-	-
		Caregiving	1-9	-	-
		Looked for work	2-2	-	-
		Other	1-2	-	-
Retired		9-11	-	-	
Was disabled or on disability		6-10	-	-	

Domain	Indicator	Indicator Details	Regular Force	Reserve Force C	Reserve Force A/B
			Male – Female %	Male – Female %	Male – Female %
	Satisfaction with main activity	V. Satisfied or Satisfied	76-68	75-76	81-75
		Neither	11-16	11-11	9-13
		Dissatisfies or V. dissatisfied	13-16	14-13	10-12
	Work Stress	Not at all or not very stressful	33-30	27-21	29-26
		A bit stressful	45-45	46-43	56-44
		Extremely or quite bit stressful	22-25	27-36	15-31
	Skill Transfer	Agree/strongly agree	47-36	48-41	33-27
		Neither	12-20	16-16	16-18
		Disagree/strongly disagree	40-44	36-43	51-55
Finances	Satisfaction with finances	Satisfied or very satisfied	70-69	69-66	66-65
		Neither satisfied nor dissatisfied	12-10	12-11	12-14
		Dissatisfied or very dissatisfied	18-20	20-23	22-21
	LIM $\phi$	At least 1 year post release	16 < 20	12 < 14	25 < 27
	Total income change $\phi$		0.4 > -21	15 > 11	45 > 31
Social Integration	Adjustment to civilian life	Very or moderately easy	57-52	62-58	75-69
		Neither	16-18	15-16	16-12
		Very or moderately diff.	27-30	23-26	9-19
	SoCB	Very or somewhat strong	58-52	62-55	58-55
		Very or somewhat weak	42-48	38-45	42-45
	SPS	Attachment †	7-7	7-7	7-7
		Guidance †	7-7	7-7	7-7
		Reliable Alliance †	7-7	7-7	7-7
		Social Integration †	7-7	7-7	7-7
		Reassurance of Worth †	7-7	7-7	7-7
		Social support (10-40) †	34-35	35-35	36-36
		Low Social Support - Yes	16-15	10-11	7-6
	Parental Type (LASS 2016)	Single Parent	3-5	-	-
		Parent	30-30	-	-
		Non-Parent	68-66	-	-
	Adjustment by family member (Very or Moderately Easy) (LASS 2016)	Veteran	52-52	-	-
Spouse		57-51	-	-	
Children		60-63	-	-	
	Veteran Alone	13-17	-	-	

Domain	Indicator	Indicator Details	Regular Force	Reserve Force C	Reserve Force A/B
			Male – Female %	Male – Female %	Male – Female %
	Family Composition (LASS 2016)	Veteran & Partner (no kids)	46-41	-	-
		Veteran & children - ≤ 18 yrs	30-30	-	-
		Veteran & extended family	11-12	-	-
Life Skills	Education	Less than high school graduation	5-4	3-4	2-1
		High school graduation	43-38	27-21	26-20
		Post-secondary Certification	52-58	70-75	72-79
		Post-secondary graduation	36-38	41-41	39-36
		University degree	16-20	29-34	33-43
	Health Behaviours	Daily Smoking	17-14	14-11	11-9
		Heavy Drinking	27-10	32-13	35-16
	Mastery	Low	2-2	1-4	1-3
		Middle	69-69	63-66	60-63
		High	29-29	36-30	39-35
	Life Stress	Low	78-75	77-66	86-67
		High	22-25	24-34	14-31
Housing/ Physical Environment	Dwelling type (LASS 2010)	Single Detached	78-76	-	-
		Double	2-5	-	-
		Row or Terrace	5-4	-	-
		Duplex	4-5	-	-
		Low-rise <5 stories	7-7	-	-
		High-Rise ≥5 stories	2-3	-	-
		Hotel, Rooming/Lodging house, Camp	0-0	-	-
		Mobile Home	1-1	-	-
		Other	1-0	-	-
	Satisfaction with Housing (LASS 2010)	Very Satisfied	49-52	-	-
		Satisfied	41-38	-	-
		Neither	5-6	-	-
		Dissatisfied	4-3	-	-
		Very Dissatisfied	1-2	-	-
	Satisfaction with Neighbourhood (LASS 2010)	Very Satisfied	48-48	-	-
		Satisfied	43-42	-	-
		Neither	5-7	-	-
		Dissatisfied	3-3	-	-
		Very Dissatisfied	1-2	-	-