

Towards a Healthy, Resilient and Engaged Workforce A Comprehensive Wellness Strategy for the Ottawa Police Service

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A Message from the Chief of Police

OPS members are our organization's most valued resource. A 2015 Statistics Canada report showed that our service consistently ranks high in community satisfaction surveys, and that's because of you.

For many of us, the decision to join a police organization – whether as a sworn officer or a civilian member – was made out of a desire to serve our community. But policing is also a profession that exposes our members to difficult and challenging situations. This exposure may affect members' physical, mental, emotional, spiritual, and familial health and wellness; often in significant ways.



The OPS has experienced hardships and tragedies in the workplace. We recognize that we have members that are affected by physical and mental illnesses like fatigue, cancer, depression, anxiety and PTSD. We also know that you were hired for your skills and abilities but that resilience is a concept that is multidimensional and fluid; it can fluctuate over the span of a career and it requires both individual and community effort to strengthen and maintain. The bottom line is that we know we can do better when it comes to our members' health and wellness.

We care about you and your well-being. We know that you need to feel your best in order to do your best for this city. This OPS *Wellness Strategy* represents our commitment to you. It has a holistic approach, recognizing that wellness encompasses the whole person on multiple levels.

We all must do our part to create a positive message around wellness so that people aren't reluctant to speak up, speak out and seek support when needed. We must ensure our culture is accepting and that the proper supports are in place – not only in times of crisis.

At every level of the organization, the commitment to Wellness needs to be seen and heard. Over the next three years, we will enhance and expand the wellness resources available to you and improve your awareness and access to them.

It's the right thing to do.

Charles Bordeleau

Chief of Police

What is Wellness?

"Wellness" represents a whole-person, balanced approach to being in good mental and physical health. It includes occupational, emotional, social, spiritual, intellectual, mental, physical, and familial wellness – all of which impact each other. Achieving a "well" state is not only life-affirming, but it allows people to reach their full potential.

Why Wellness?

Policing is a unique profession. It is both physically and mentally demanding, highly visible, unpredictable, and requires a great deal of resilience. Given our mandate in policing and the evidence supporting the First Responders First Act, we understand that our work realities expose us to critical incident stress. This exposure may, potentially, have significant impact on the wellbeing of our members.

As First Responders, if wellness is not properly managed, the challenging job of policing can lead to health issues that can affect an employee's overall wellbeing, impacting not only the individual employee but also the workplace, their families and the community (Arsenault, 2012).

It is well documented that shift work can increase the risk of certain injuries, illnesses, or disorders (McIntosh, 2016) while routine exposure to traumatic events can also lead to a variety of Operational Stress Injuries (OSI) (Marin, 2012). For this reason, policing is among the professions considered at high risk of experiencing a broad range of physical and mental health issues (Pietrantoni and Prati, 2008).

Burnout is among the most common initial reactions for First Responders under stress (Arsenault, 2012) however, according to the Canadian Mental Health Association (CMHA), depression and anxiety also affects one in five Canadian employees, and one in four will experience a mental health issue in their lifetime (CMHA, 2016). Due to the risk of routine exposure to traumatic stressors, evidence shows that First Responders are at least twice as likely compared to the general population to suffer Post-Traumatic Stress Disorder (PTSD)(Ontario Ministry of Labour, 2016).

Tragically, of those people suffering, only one in three will seek help (Carter & Golant, 2011). We need to change that type of thinking and let members know they are fully supported in their desire to not only be physically fit, but mentally fit as well.

Further data from Canada's Ministers of Health underscores the need for employer's to support health promotion. When employers do more to focus on prevention through health promotion and wellness-related initiatives, their employees' quality of life improves. This, in turn, reduces the impact of poor health as well as the costs associated with chronic disease.

The Ottawa Police Service (OPS) has been working jointly with the Ottawa Police Association (OPA) and experts since 2013 to gather data and determine our own baseline regarding the health and wellbeing of our members, including occupational stress injuries (OSI) and their impact on our members. In this work OSI includes, but is not limited to, full

and partial PTSD, fatigue and other occupational health related issues. Shiftwork and exposure to traumatic material in the course of police employment are key issues that have emerged from the study. Helping members manage these factors throughout their careers will lead to better overall wellness of our members and in turn help to improve overall organizational performance.

Background

In February 2002, the Ombudsman released a report on Post-Traumatic Stress in the Canadian military which found many "issues of stigma and a culture of denial" (Marin, 2012).

In 2012, the Ombudsman published a comprehensive review of how the Ontario Provincial Police (OPP) and the Ministry of Community Safety and Correctional Services addressed OSI. The Ombudsman stressed the lack of information previously available on this important topic and remarked that this report, titled *In the Line of Duty*, was the most extensive investigation completed, and largest report published, by the Ombudsman's office (Marin, 2012). The report includes 34 recommendations and is intended to help police services understand the issues around mental health and wellness in policing as well create much needed dialogue to "eliminate the stigma that [remains] the core of the problem" (Marin, 2012).

Following the review of the Ombudsman's Report, the Ottawa Police formed a Working Group, to review the Ombudsman's recommendations on how to best address OSI in our organization. The OPS Working Group evolved into the Resiliency and Performance Group (RPG) and in 2017, was renamed as the Wellness Committee. It is comprised of sworn and civilian members from all ranks and is co-chaired by an Executive/Senior Officer and the Ottawa Police Association President, Matt Skof.

In 2013, the OPS Business Plan for 2013-2015 outlined a strategic priority of "Engaging and Investing in our People" with a goal of having "a workplace that puts a priority on the health and well being of its members" (2013-2015 Business Plan, p.18-19).

In the fall of 2014, RPG entered into a working relationship with Queen's University to conduct a member survey with a section on health and wellbeing. The survey was sent to 2,400 active and retired OPS members. The response rate was 52.7% (1,265 members) and provided the RPG with invaluable information about operational and personal stressors. This information guided further efforts of the Resiliency and Performance Group in helping determine our organizational priorities when it comes to operational stress and wellness.

A review of best practices among partner agencies, also led the RPG to recommend two full time Sergeant positions for Peer Support and Resiliency Coordination. They have been approved and are part of the additional 25 positions the Board supported in the 2017 Budget.

In the fall of 2015, a joint study with OPS and Carleton University began. The study consisted of interviews with 81 OPS members (25 frontline officers, 21 sergeants and staff sergeants, 16 senior officers and executives, and 19 civilians) and concentrated on awareness of the OPS Wellness initiative, causes of job-related stress, and perception of culture as it relates to employee wellness. The study found numerous barriers to implementing a successful wellness strategy ranging from budgetary restrictions to internal issues. (Duxbury, 2015)

On January 25, 2016, the OPS 2016-2018 Business Plan was approved and supported by the Ottawa Police Service Board (OPSB) and wellness of our members was declared a top priority.

On April 5, 2016, Bill 163, Ontario's Supporting First Responders Act, was passed enforcing a presumption that PTSD diagnosed in First Responders is work-related (Ontario Ministry of Labour, 2016). This act is part of the province's strategy to help keep our First Responders healthy by providing them with better access to information and treatment (Ontario Ministry of Labour, 2016). Following that, employers of workers covered under the PTSD presumption were directed to provide the Ministry of Labour with a PTSD Prevention Plan by April 23, 2017.

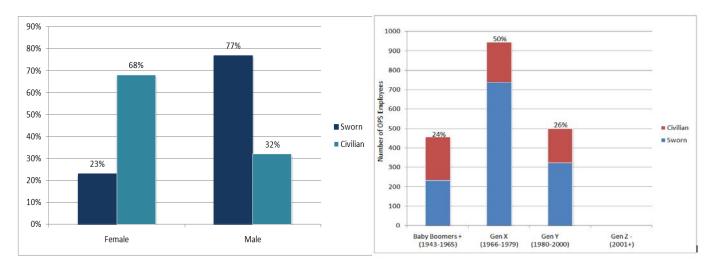
The Ottawa Police presented its PTSD Prevention Plan to the Police Services Board, as endorsed by the HR Committee, and was approved on March 27th, 2017.

Current State

It's important for OPS to be aware and sensitive to its changing workplace demographics.

OPS Gender Demographics (Oct 2016)

OPS Age Demographics (Dec 2016)



Gender is an important lens through which to view wellness. Male and female OPS members experience different work/family responsibilities and health issues throughout their lives. They manage many external and internal demands simultaneously. Creating an equitable approach to wellness will be key to supporting members as they age, progress through the family cycle, take on different family responsibilities and cope with the pressure of organizational demands.

The Ombudsman's report (2012) stated that "from January 1989 through May 2012, there were 23 [OPP] suicides, involving 16 active and 7 retired officers. All but two were men." (Marin, 2012, p. 26) Upon further analysis of this data, all cases of suicide were between the ages of 31-88, with the majority of cases (36%) being in their 40s.

For the first time, we are also now seeing more Millennials (Generation Y) than Baby Boomers in our workforce. Having a multigenerational workforce with varied health and wellness needs will influence our approach and continue to challenge us to provide varied solutions as the demographic evolves.

Data

Based on absenteeism data, comprised of sick leave, long term disability is growing or has remained the same over the past few years:

- The average days lost for all members (sworn and civilian) have increased from 8.3 in 2010 to 12.6 in 2015.
- The percentage of members that have been absent for 0 − 2 days/ year due to illness has remained essentially the same over the past 6 years for both sworn (about 30%) and civilians (about 20%).
- The LTD experience for OPA members has increased from 7.0 incidences in 2011 to 13.3 in 2016. From this, one can infer that the type of illness has required greater length of absence for treatment and recovery when the member requires LTD before returning to work.

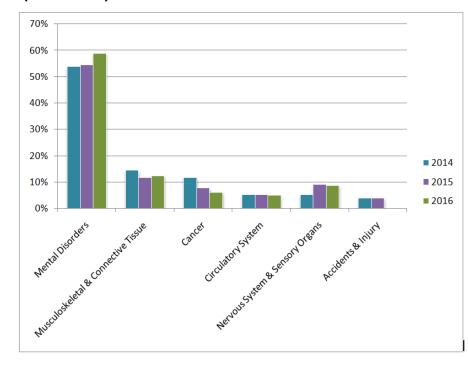
Upon review of occupational injury/illness data, an upward trend has been noticed since 'The First Responders First Act' was adopted in 2016. In 2015, OPS had four lost time claims for the Traumatic Event category. In 2016, OPS had 20 lost time claims for the Traumatic Event category.

We recognize that this increase may be a reflection of multiple issues, from the reduction of the barriers to submit such claims, to increased self-awareness; However, it could also indicate other realities we need to examine further, such as the state of member health.

The majority of LTD claims in 2016 (59%) were mental health related.

Long Term Disability Percentage of open Claims & Top 6 Diagnoses (2014-2016)

Given our membership gender and demographics, one would expect the majority of LTD claims to come from middle aged men however; research shows that women are more likely than men to disclose and seek help for mental health problems (WHO. 2017). This may



explain why approximately 60% of OPS LTD claims (of which the majority are mental health claims) are made by women.

OPS Research

In January 2015, the RPG entered into a working relationship with Queen's University to conduct a member survey with a section on health and wellbeing. The survey revealed that 100% (1265 participants) reported inadequate quality of sleep.

The results of the survey were independently reviewed by Dr. Douglass, MD a sleep expert, Director of the Sleep Research Laboratory at the University of Ottawa's Institute of Mental Health Research and the Director of the Sleep Disorders Clinic with the Royal Ottawa Hospital. Among his findings, of perhaps greatest significance is that a very high percentage of survey participants have disordered breathing compared to the general population. Many other responses suggest insomnia due to shiftwork or to worrying about the job while trying to sleep. The PTSD/OSI screening questionnaires (PCL, PSQ-Op and CAPS) showed that a substantial number of OPS survey participants have high scores, suggesting wide-spread exposure to traumatic material in the course of police employment.

Dr. Douglass also shares in his findings that sleep deprivation has immediate effects on performance in complex stressful situations such as pursuit driving, apprehending suspects, or situations that recall previous trauma in PTSD sufferers. Further to this, fatigue effects of biological sleep disorders such as sleep apnea are additive to sleep deprivation and also additive to sedating substances like alcohol. All three are likely

occur in some members, leading to greatly increased risk of accidents and behavioural abnormalities. (Douglass, 2016)

In September 2015, OPS partnered with Carleton University, Sprott School of Business MBA class to conduct research on implementing a Wellness Strategy, highlighting the importance of organizational culture. The study revealed a lack of awareness among most members and 46 respondents (57%) said the fear of being stigmatized was the most significant barrier to wellness within the current culture of the OPS.

These research results highlight the importance of addressing fatigue, awareness about health issues and culture in our overall Wellness Strategy.

Analysis

Strengths

The most recent Public and Member Surveys outline some of OPS' strengths:

In 2015, nearly 73% of the public considered OPS to be good at ensuring Ottawa's safety and security. This was an improvement by 6% since 2012. Also, about 82% said they were satisfied with the OPS and the level of dissatisfaction was extremely low at 3%. Historical trends over the past decade also show little change in these numbers (Ottawa Police, 2015).

In 2015, members said they were engaged because of the pride they felt in serving the community; the high level of respect for their immediate supervisors; and a strong degree of camaraderie and teamwork within working units (Talent Map, 2015).

Teamwork is a strong element in a first responders' culture. And their immediate formation of a familial bond is further demonstrated in times of need, either on duty or off duty, when they undoubtedly work as a team and rally together to support each other. This strong cultural practice is one which shows great potential as a community for change in terms of developing an overall strong wellness culture.

Another strength for OPS is its motivation and desire to do the right thing for its members. The OPS already has several programs and services available to its members and has also begun to examine a number of ways to better serve its membership. This includes a commitment in our business plans, long term funding, resourcing, studies, and new programs.

Challenges

In 2015, member engagement was said to be in decline. And according to the member survey, morale was poor and OPS was likely to feel the consequences in the form of grievances, absenteeism and poor work culture (Talent Map, 2015). There was also a noted mistrust of the executive and senior officers and a genuine feeling among many that the executives were not aware of the difficulties being faced by the front-line staff (Talent Map, 2015). It was stated that "The Constables would like to see the organization shift to a culture where officers are trusted and treated as individuals." (Talent Map, 2015)

First Responders are expected to possess a high level of emotional strength and high value is placed on the importance of resiliency. But the topic of resiliency and wellness can get lost in the stigma of our culture. Research shows that there is a significant relationship between shame and neglecting to obtain treatment (Corrigan, 2004). This shame can be attributed to the cultural concepts of public stigma (public perception of police or stereotypes) and self-stigma (which is what happens when members of a group internalize public stigma)(Corrigan, 2004). It is therefore the underlying subcultures in policing which remain one of the most significant threats to the health and wellness of its members (Malmin, 2012).

Over time, levels of resilience can fluctuate for an individual. The culture must support our wellness values and remove stigma from seeking help at a time of need.

Opportunities

Ottawa Police understands that it requires both an individual and a community effort to maintain first responders' health and wellness (Newman, 2005). Engagement in organizational wellness programs has been linked to a reduction in absenteeism as well as an increase in employee performance, satisfaction, retention and feelings of work-dedication (Goetzel, 2011; Hutchinson & Wilson, 2011; Williams & Day, 2011, Brown et al., 2011; and Nöhammer et al., 2011). Without engagement, a wellness strategy cannot be fully realized.

Engagement is said to be highest among our newest and youngest employees (Talent Map, 2015). This creates an opportunity to foster early engagement in order to continue member involvement and awareness throughout their career and into their retirement.

The wellness of our members impacts the community and as such, the OPS believes our Wellness Strategy should include partnerships for collaboration. These partnerships provide us with an opportunity to better understand some of our barriers (namely fatigue and culture) and implement some of our strategy steps (collect data and engage members).

Culture around wellness remains a concern however; various community awareness campaigns are openly challenging the stigma that surrounds wellbeing, including self-care and mental health issues. This provides opportunities for OPS to be a community leader and engage in dialogue that helps to reduce stigma about these important issues that are affecting the community and our members.

Other opportunities to assist OPS in the development of its Wellness Strategy include support from legislation such as the First Responders First Act and direction from the Ministry of Labour to produce a PTSD Prevention plan.

Strategy

Mission

Position OPS employees to optimally manage their wellness throughout their career and into their retirement.

Vision

A healthy, resilient and engaged workforce.

Values

Honour Courage Service

Purpose

The purpose of the OPS Wellness Strategy is to set out a clear, consistent and achievable strategy to create a system of health and wellness through cultural change, education, recognition, resiliency, and support **from pre-hire to post-retire**. The OPS aims to have a well-rounded, highly capable membership that has opportunities for growth, while balancing the needs of the organization with those of individual members.

Guiding Wellness Strategy Principles

Be Inclusive and Responsive:

Adjust to the needs of the changing workforce.



Be Impactful: Real change on three levels

(Environment, Culture, and Individual).

Goals

The following goals will help deliver real change to support our mission in achieving our vision:

- 1. Develop an **environment** that is led strategically with dedicated resources, and improved policies and programs that support our organization's wellness vision.
- Foster a culture with increased trust, reduced stigma, and improved practices around wellness.
- Support individuals in their wellness journey to be more aware, engaged and motivated.

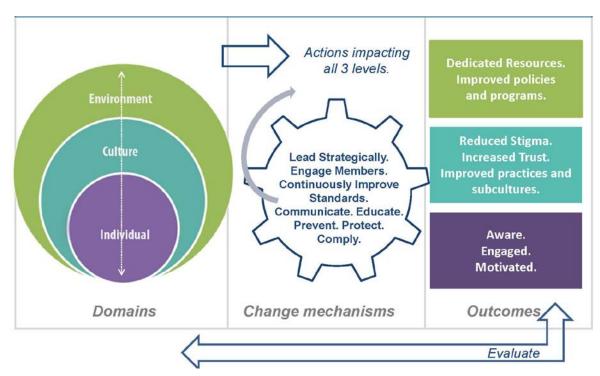
Method

Three factors have been shown to have an impact on the wellness of first responders: organizational elements (the environment), social elements (culture) and personal care (or individual self-care) (Kleim & Westphal, 2011).

The goals in this strategy will be achieved through the adoption of a model called the Ecological Intervention Model which focuses on using coordinated resources and real change on these three domains:

- 1. The Environment
- 2. The Culture
- 3. The Individual

Figure 1



Research shows that, to date, society has generally focused on personal accountability and individual interventions (Spring, 2016) however, the Ecological Intervention Model depicted in the above, Figure 1, suggests that a multilevel approach can influence wellbeing and achieve greater momentum in workplace health and wellness (Spring, et al, 2015).

Action Plan

Environment

0-6 months – Establish:

- Strategic leadership including commitment to goals and expanded leadership champions at all levels.
- Organizational expectations about wellness.
- Needs assessment for resiliency based programming.
- Peer support teams.
- Programmatic elements for a formal early intervention programs.
- Operational support including resources (staff and committees), training, and communications support such as visible messaging throughout physical spaces.
- Benchmark data for occupational and non-occupational claims.
- Framework for Fatigue Management

6-18 months – Implement:

- A peer support program.
- A formal early intervention program.
- A Fatigue Management Program
- A review of policies and standards to support and align with Wellness Strategy.
- New communication modalities for health promotion/resiliency programming.

18-36 months - Measure and Evaluate:

- The change in occupational and non-occupational data.
- The impact of the various wellness initiatives on the full adoption of the National Standard for Psychological Health and Safety in the Workplace.
- The impact of initiatives and continue to explore quality improvement opportunities.
- The Fatigue Management Program
- Second stage member survey(Queen's University)

Culture

0-6 months -Establish:

- A commitment to change our culture.
- A culture baseline for evaluation with Carleton University.
 - Dr. Linda Duxbury and Rebecca Stiles (PhD candidate).

6-18 months - Implement:

- A positive cultural change through programs, training and ongoing communication.
- · Action Research to address culture with Carleton University.
 - Dr. Linda Duxbury and Rebecca Stiles (PhD candidate).

18-36 months – Measure and Evaluate:

- The change in culture-related data.
- The changes in culture and continue to explore quality improvement opportunities.
- The impact of culture-related initiatives on the full adoption of the National Standard for Psychological Health and Safety in the Workplace.

Individual

0-6 months – Establish:

- An understanding of members' needs.
- A wellness baseline for evaluation with Carleton University.
 - Dr. Linda Duxbury and Rebecca Stiles (PhD candidate).

6-18 months - Implement:

- Communication on supports and resources to members and their families.
- Education through programs and training.
- Engagement strategies for internal and/or external wellness activities.

18-36 months - Measure and Evaluate:

- Members' needs and changes in attitudes, awareness and engagement.
- The individual impact for quality improvement of plan delivery.
- The impact of individual initiatives on the full adoption of the National Standard for Psychological Health and Safety in the Workplace.

Conclusion

The OPS *Wellness Strategy* sets out a series of clear, specific and achievable steps we will take in order to attain our vision of a healthy, resilient and engaged workforce.

We know that changing culture will take time. While, we have a number of programs already in place and attitudes around wellness within OPS are beginning to shift, there is still much work to be done in order to sustain a healthy culture for current and future employees. Our goals are to develop an **environment** that is lead strategically with dedicated resources, and improved policies and programs that support our organization's wellness vision; to foster a **culture** with increased trust, reduced stigma, and improved practices around wellness; and to support **individuals** in their wellness journey to be more aware, engaged and motivated.

As we work to increase the awareness around wellness issues and decrease stigma in our culture, we expect to see real change which may be reflected in various collected data, including an improvement in our LTD claims. As we work towards a stigma-free culture where it is more openly acceptable for anyone who needs help to come forward, we expect to see more members seeking help and using the programs available to them. We may already be seeing these results. The recent First Responders First legislation may have been instrumental in removing barriers for a First Responder to come forward with their PTSD diagnoses. We have seen this in the form of an increase in our reported lost time claims for the Traumatic Event category since the Act was adopted in 2016.

Ultimately, by investing in the health and wellness of all our members, the OPS is working to improve the quality of members' lives and to enhance their ability to do their job well.

References

- Arsenault T. (2015) the Emotionally Demanding Workplace: Is There a Relationship between Emotional Intelligence and Burnout in Emergency Responders? Master of Arts, the Adler School of Professional Psychology, Published by ProQuest LLC.
- Brown, H.E., Gilson, N.D., Burton, N.W., & Brown, W.J. (2011). Does physical activity impact on presenteeism and other indicators of workplace well-being? Sports Medicine, 41, 249-262. doi:10.2165/11539180
- Canadian Mental Health Association (2016) Understanding Mental Illness, Retrieved from http://www.cmha.ca/mental-health/understanding-mental-illness/
- Carter, R., & Golant, S. (2011). Helping Someone with Mental Illness: A compassionate guide for family, friends, and caregivers. Harmony.
- Dubury, L. (2015) Presentation: Implementing the Wellness Initiative within the Ottawa Police Service, Sprott School of Business, December 7, 2015.
- Goetzel, R.Z. (2011). Reflections on 25 years of health promotion: Where have we been and where are we going? American Journal of Health Promotion 25, exvi-exviii. doi:10.4278/ajhp.25.4.exvi
- Hutchinson, A.D., & Wilson, C. (2011). Improving nutrition and physical activity in the workplace: A meta-analysis of intervention studies. Health Promotion Interational, 27, 238-249. doi:10.1093/heapro/dar035
- Kaiser Permanente (2017) Healthy Aging, Retrieved from

 https://healthy.kaiserpermanente.org/health/care/!ut/p/a0/RYvBCsIwEER_xX6Ar
 KAH8VYFz0IPmlzKEJYkkE1KGivvW1yEBZm5w2PNL1IRyzeovgUEdauZkY27tLi
 gQyhJ2nSEywPFV5LJNXeOmRYAamY9gbG8caaPZTsoyW1mrvToXKXPvcAO0
 YIk5L0nnIMC-e_dENhm_KXVB8CTSLn43Z91_0APd8szg!!/
- Kleim & Westphal (2011) Mental Health in First Responders: A Review and Recommendation for Prevention and Intervention Strategies. American Psychological Association, DOI: 10.1177/1534765611429079
- Malmin, M. (2012) FBI- Changing Police Subculture. Retrieved from https://leb.fbi.gov/2012/april/changingpolicesubculture
- Marin, A. (2012) In the Line of Duty Ombudsman's remarks. Retrieved from https://www.ombudsman.on.ca/Files/sitemedia/Documents/Investigations/SORT %20Investigations/OPPremarks-EN.pdf

- Marin, A. (2012) In the Line of Duty Retrieved from https://www.ombudsman.on.ca/Files/sitemedia/Documents/Investigations/SORT %20Investigations/OPP-final-EN.pdf
- McIntosh (11 January 2016) The Impact of Shift Work on Health, In Media News Today. Retrieved from http://www.medicalnewstoday.com/articles/288310.php
- Newman, R. (2005) American Psychological Association Resilience Initiative, Retrieved From http://libproxy.usc.edu/login?url=http://search.proquest.com/docview/614470740?accountid=14749
- Nöhammer, E., Stummer, H., & Schusterschitz, C. (2011). Improving employee

 Wellbeing through worksite health promotion? The employees' perspective.

 Journal of Public Health, 19, 121-129. doi:10.1007/s10389-010-0364-4
- Ontario Ministry of Labour (2016) Ontario Passes Legislation to Support First
 Responders with PTSD, Retrieved from
 https://news.ontario.ca/mol/en/2016/04/ontario-passes-legislation-to-support-first
 responders-with-ptsd.html
- Ottawa Police Service (2013) A Plan Where Everyone Matters: 2013-2015 Business Plan, Retrieved from https://www.ottawapolice.ca/en/news-and community/resources/2013_2015BusinessPlan.pdf
- Ottawa Police Service (2015) Public Survey on Policing Services. Retrieved from https://www.ottawapolice.ca/en/news-and-community/2015-Public-Survey-on-Policing-Services.asp
- Ottawa Police Service (2016) Innovation & Investment in Community Safety: 2016-2018

 Business Plan, Retrieved from https://www.ottawapolice.ca/en/news-and-community/resources/Projects/OPS_15-364_BusinessPlan_E_acc.indd.pdf
- Pietrantoni, L., & Prati, G. (2008). Resilience among first responders. African Health Sciences, 8 (Suppl 1), S14–S20. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3060722/
- Spring, B. (2016) A Framework for Comprehensive Workplace Wellness. American Journal of Health Promotion 30 (7): 569-571.
- Spring, B. et al (2015) Fostering Multiple Healthy Lifestyle Behaviors for Primary

 Prevention of Cancer, In: American Psychological Association Vol 70 (2), 75-90.
 http://dx.doi.org/10.1037/a0038806
- Talent Map (2015) Executive Presentation to OPS: Member Engagement
- Williams, L.C., & Day, B.T. (2011). Medical cost savings for web-based wellness program participants from employers engaged in health promotion activities.

- American Journal of Health Promotion, 25, 272-280. doi:10.4278/ajhp.100415-QUAN-119
- Workman, C. Great-West Life Assurance Company. Sleep Correlation Interview. May 2016.
- World Health Organization (2017) Gender and Women's Mental Health, Retrieved from http://www.who.int/mental_health/prevention/genderwomen/en/