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What are effective workplace strategies used by employers to positively impact employee mental health?

Institute for Work & Health
Research Excellence Advancing Employee Health

Contents

EXECUTIVE SUMMARY

Purpose of the project

This report summarizes the findings from a rapid review of the peer-reviewed literature to answer the question, "*What are effective workplace strategies used by employers to positively impact employee mental health*?" The review focuses on research about workplaces that have adopted psychological health and safety programs and/or the CSA Standard Z1003 (CSA/BNQ 2013) that was released in Canada in January 2013 and targets the prevention of psychological injury and illness in the workplace [Appendix A]. The review aimed to report on:

- the outcomes of implementing a psychological health and safety program and/or CSA Z1003 in workplaces;
- the challenges, costs and benefits associated with program implementation;
- strategies for effective worker engagement in psychological health and safety programs; and
- best practices associated with program implementation.

The review aimed to include as many of the components of the CSA standard as possible and therefore to look for studies that evaluated programs or practices that were designed to address workplace hazards such as bullying and harassment, traumatic events, cumulative exposure to traumatic events, and the identification of other key hazards that impact psychological health and safety, as well as efforts to promote respectful workplaces and effective psychological health and safety programs. The team used a rapid review methodology to examine and assess the literature published within the last 5 years on these topics.

Methodology

Our rapid review followed six review steps developed by the Institute for Work & Health for use in occupational health and safety prevention reviews. The steps encompassed: 1) research

question development, 2) a comprehensive literature search, 3) article relevance screen, 4) quality appraisal, 5) data extraction, and 6) evidence synthesis.
This approach was adapted from established methods (Ganann et al.,2010; Haby et al., 2016; Hartling, 2015 and Tricco, 2015) and the IWH systematic review process (Irvin et al., 2010).
The review question was provided to the team by WorkplaceNL. The literature search was constructed to be comprehensive and capture literature broadly on the topic of workplace based mental health interventions. The search terms were developed iteratively by the review team, which included two librarians and WorkplaceNL. Search terms were identified for population (occupations/workers), interventions (standards/strategies/policies/practices/interventions), and outcomes (mental health/stress/anxiety/depression). A complete list of these search terms can be found in Appendix H.

Searches were conducted for the period of January 2013 to August 2018 in the following databases: Medline (OVID), PsycINFO (OVID), and the Cochrane Library (Wiley). Searches were customized with vocabulary specific to each database, when possible. Keyword terms were also used to assist in capturing relevant literature. We did not limit the search by language. References identified through other sources were added to the review if they had not already been captured by the database searches. In addition, we conducted a focused search for any articles written about the CSA Standard Z1003 and/or its implementation.

Study Selection

Selection of relevant studies took place in two stages. In the first stage, titles and abstracts were reviewed by rotating pairs of reviewers. The pairs assessed relevance based on our inclusion/exclusion criteria. Reviewer pairs came to consensus when there were conflicts or consulted a third reviewer for resolution. In the second stage, full-text relevancy review followed the same process and utilized the same inclusion/exclusion criteria. For primary studies, a requirement for inclusion was the use of a comparison group. (We also included systematic reviews.)

Quality Appraisal/AMSTAR Appraisal

Relevant full-text references were categorized as either a systematic review or as a primary (single) study. Systematic reviews were assessed using the critical appraisal tool AMSTAR 2 (Shea et al 2017). For primary studies, quality appraisal (QA) was conducted with a tool previously used in IWH systematic reviews, adapted from the Cochrane risk of bias (RoB) tool for randomized controlled trials as well as several existing tools for observational studies (Irvin, 2010). Relevant primary studies were appraised for methodological quality using 17 methodological criteria within the following broad categories: i) design and objectives; ii) sample/level of recruitment; iii) intervention characteristics; iv) intervention intensity; v) outcomes; and vi) analysis. A single reviewer assessed each systematic review or study after a team discussion on completing quality appraisal.

Data Extraction and Synthesis

Data from relevant studies were extracted to help address the research question using standardized forms. We intended to follow a best-evidence synthesis approach developed by Slavin (1995). In this method, the determination of the level (strength) of evidence involves consideration of article quality, the quantity of articles meeting quality thresholds, and the consistency of the research findings.

Key Findings

This rapid review identified, appraised, and classified the existing evidence on *effective workplace strategies used by employers to positively impact employee mental health*.

Researchers and WorkplaceNL met to tailor the research questions and five researchers reviewed the available evidence. The search identified 4089 references. After removing duplicates, we screened 3471 titles and abstracts and 229 full texts for relevance. We retrieved 15 additional studies from the reference lists of included studies and some references provided by the environmental scan on studies that examined the Quebec Healthy Enterprise Standard.

As a result, we identified 17 systematic reviews and 32 primary studies for inclusion in this report (see flowchart). The studies covered a variety of interventions which we classified by the thirteen workplace factors listed in the CSA Standard Z1003 as having an impact on psychological health (Appendix A) in order to provide a perspective on the state of the current evidence as it pertains to the standard and to link with the design of the environmental scan on the same topic being conducted by Memorial University. Please note that while that environmental scan has used the Z1003.1-18 Psychological health and safety in the paramedic service organization, we chose to use the CAN/CSA-Z1003-13/BNQ 9700-803/2013 (R2018) Standard which was updated in 2018 but is not specific to paramedics. The majority of the interventions in both the primary studies and the systematic reviews focused on psychological social support and/or psychological protection (see Appendix B).

We found 14 of 17 systematic reviews included interventions that address psychological and social support (factor #2). There were also seven reviews that included interventions relevant to psychological protection (factor #12). Whereas we did not find any interventions within the systematic reviews that addressed growth and development (factor #6), recognition and reward (factor #7), or balance (factor #11). Overall the systematic reviews report mostly positive impacts of the interventions reported. See Appendix F for the details and findings of the relevant systematic reviews.

The 32 primary studies came from 13 different countries and evaluated 30 unique interventions to address 47 different mental health outcomes (see Appendix G). In general, the interventions described in the primary studies included: Cognitive behavioural therapy, Mental Health First Aid, Awareness/literacy, Leadership, Stress management, Health promotion. Appendix B shows that 28 of 32 primary studies included interventions that address psychological and social support (factor #2). In addition, there were 26 of 32 primary studies that included interventions relevant to psychological protection (factor #12). There were no primary studies that examined interventions consistent with recognition and reward (factor #7), or engagement (factor #10). Across the 32 primary studies, 11 report improvement for all studied outcomes, 17 show improvement for some outcomes and no change for others, and four report no change. No studies showed a negative effect (See Appendix G). All of the 32 primary studies were

randomized controlled trials, the most rigorous study design, and 27 of them were deemed to be of high quality, which leads to confidence in their results.

Though our review was focussed on quantitative studies, we did come across several qualitative articles as part of our focused search on the standard and have included them for your information (see the list in Appendix C).

During our background research on this topic, we also came across a number of websites that list best practices for creating psychologically healthy workplaces. Based on our meeting with Workplace NL on October 29th, 2018 we feel these may be of some value. We have included them for your information (Appendix D).

In conclusion, this rapid review examined a large number of studies from 13 countries for evidence of *effective workplace strategies used by employers to positively impact employee mental health*?". We identified a number of systematic reviews and primary studies that met our inclusion criteria but none that examined the effectiveness of the Canadian workplaces that have adopted psychological health and safety programs and/or the CSA Standard Z1003 (CSA/BNQ 2013), which is not surprising as the standard was released only five years ago. It is important to note the evidence regarding effectiveness of reducing psychological hazards/improving psychological health and safety is quite heterogenous. For example, we found 30 unique interventions and 47 different outcomes across 32 primary research studies. Very few outcomes were used multiple times across studies. Even though all studies used one of the strongest types of study designs (randomized controlled trial, RCT) and were of medium or high quality, the level of heterogeneity makes it challenging to synthesize in a meaningful manner. If we were to apply our evidence synthesis algorithm at this point, we have sufficient quality but insufficient quantity due to the degree of heterogeneity and therefore the level of evidence from this review would be limited.

Next Steps

As per our stakeholder model (Keown, 2008), our next steps include meeting with WorkplaceNL and the Memorial team after the WorkplaceNL review of this report, our classification and data tables in order to discuss and determine if relevant levels of evidence can be calculated.

ABOUT THIS REPORT

This report summarizes the findings from a rapid review of the peer-reviewed literature on the question, "What are effective workplace strategies used by employers to positively impact employee mental health?" which was commissioned by WorkplaceNL as part of their commitment to *Advancing a Strong Safety Culture in Newfoundland and Labrador (Appendix E).* The review focuses on research about workplaces that have adopted psychological health and safety programs and/or the CSA Standard Z1003 (CSA/BNQ 2013) which was released in Canada in January 2013 and targets the prevention of psychological injury and illness in the workplace. (Appendix A]. The review aimed to report on the effectiveness of implementing a psychological health and safety program and/or CSA Z1003 in workplaces; the challenges, costs and benefits associated with program implementation; and strategies for effective worker engagement in psychological health and safety programs. In addition, the review aimed to be inclusive of as many of the components of the standard as possible and therefore to look for studies that included workplace interventions, programs or policies that impact psychological health and safety, as well as efforts to promote respectful workplaces and effective psychological health and safety programs. The team used a rapid review methodology to examine and assess the literature published within the last 5 years on these topics.

About the Institute for Work & Health

The Institute for Work & Health (IWH) is an independent, not-for-profit research organization based in Toronto, Canada. Our goal is to protect and improve the health and safety of working people by providing useful, relevant research in two key areas: (1) preventing work-related injury and illness, and (2) promoting recovery and work functioning following injury and illness. Our work provides impartial, evidence-based guidance to government policy-makers, health and safety associations, workers and employers, occupational health & safety professionals, disability management professionals and clinicians.

IWH reviews aim to be comprehensive, systematic, rigorous and transparent. For our reviews, we use a six-step process that includes developing the research question, conducting a literature search, identifying relevant journal articles, appraising the quality of the research described in the articles, extracting data from articles of sufficient quality, and synthesizing the evidence. Throughout the process, we engage knowledge users and stakeholders, from refining the research question to extracting the data and communicating the research messages.

Who should read this report

This report synthesizes the published research evidence on the question of what effective workplace strategies are used by employers to positively impact employee mental health. The results are intended for WorkplaceNL but may be of interest to other jurisdictions in Canada, policy makers, employers, labour representatives, organizations providing health and safety services to workplaces, researchers.

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THE RESEARCH QUESTION

This report summarizes the findings from a rapid review of the peer-reviewed literature on the question, "What are effective workplace strategies used by employers to positively impact employee mental health?"

BACKGROUND

According to the National Standard of Canada on Psychological Health and Safety in the Workplace, psychologically safe and healthy work has been defined as taking place in "*a workplace that promotes workers' psychological well-being and actively works to prevent harm to worker psychological health, including in negligent, reckless or intentional ways*" (Canadian Standards Association, 2013). Work-related stress and trauma, violence and harassment, and psychosocial risks are now widely recognized as important issues to be addressed within the context of the occupational health and safety of an organization. When these issues are not addressed, they impact the health of the organization, in terms of productivity, and the health and well-being of individual employees. According to the Mental Health Commission of Canada, half a million Canadians in any given week are unable to work because of mental health problems (Mental Health Commission of Canada, 2013). *The National Standard of Canada for Psychological Health and Safety in the Workplace (the Standard)* is a voluntary set of guidelines, tools, and resources to guide organizations in promoting mental health and preventing psychological harm at work. It is suggested that adopting the standard can have an impact on organizations' recruitment, retention, performance and productivity (Mental Health Commission of Canada, 2013). To quote Sari Sairanen, Director, Health, Safety and Environment at Unifor, in her piece, *The business case: collaborating to help employees maintain their mental well-being, "*Preventing a problem in the first place is the best strategy.*"* (Sairanen, 2011). Therefore, it is important for organizations to look for the best available evidence on what are the most effective interventions and approaches they may employ to improve the psychological

health of their organization. As a result, a rapid review was undertaken to answer the following question: *What are effective workplace strategies used by employers to positively impact employee mental health?*

METHODOLOGY

This rapid review used a systematic approach with the following steps: development of the review question, literature search, study selection (inclusion/exclusion), study characterization, quality appraisal, data extraction, and data synthesis. The rapid review approach was adapted from established methods (Ganann et al.,2010; Haby et al., 2016; Hartling, 2015; Tricco, 2015) and the IWH systematic review methods (Irvin et al., 2010). Ethics approval was not required for a review of the literature.

Review question

The review question was developed in an iterative process by the review team and WorkplaceNL to ensure that the question was relevant and answerable. The review question was: *What are effective workplace strategies used by employers to positively impact employee mental health?*

What evidence did we look for?

In collaboration with IWH librarians and with input from Workplace NL, we developed search strategies to identify relevant published literature in electronic bibliographic databases that was published in the last five years in the US, Canada, Europe, and Australia.

Literature search

The literature search was based on the research question. Search terms were developed iteratively by our research team (which included two librarians) in consultation with our

funders. Search terms were identified for three broad areas: population (occupations/workers), interventions (standards/strategies/policies/practices/interventions), and outcomes (mental health/stress/anxiety/depression). Both database-specific vocabulary terms and keywords were included for each database. Search strategies can be found in Appendix H.

The searches were conducted in August 2018. We searched the following databases with no language restrictions, limiting results to studies published between 2013 and 2018:

- MEDLINE
- PsycINFO
- Cochrane Library

To be comprehensive we also ran the search in EMBASE; however, screening the results was not feasible in our time frame. The strategy can be found in Appendix H.

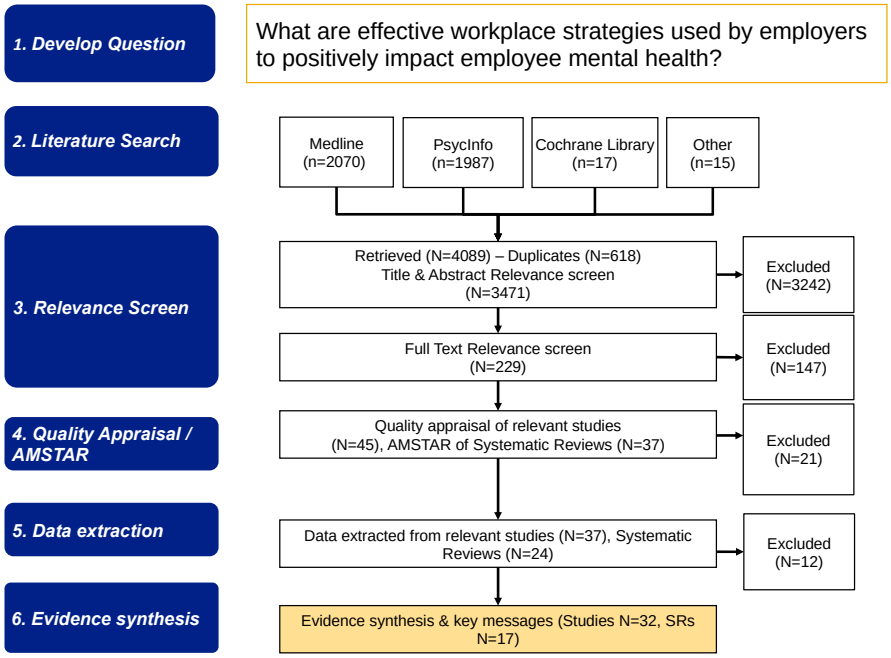
References identified from other sources, such as reference lists or journal e-alerts, were added to the review if not already identified through the database searches.

References from all sources were imported into a Reference Manager® database where duplicates were screened out. All unique references were then imported into Distiller SR, a web-based systematic review software program for recording the assessments of team members.

The search identified 4089 articles. We retrieved 15 additional studies from the reference lists of the included studies and some references provided by the environmental scan on studies that examined the Quebec Healthy Enterprise Standard. After removing duplicates, we screened 3471 titles and abstracts and 229 full-text studies for relevance. 45 primary studies were appraised for quality and 37 systematic reviews were appraised using AMSTAR 2 (Shea et

al 2017). We identified 32 studies and 17 systematic reviews for inclusion in this report (see flowchart). We also identified 17 protocols, which were not included in the review, but searches were done to see if they were completed and published elsewhere. One interlibrary loan could not be retrieved and did not move past full-text relevancy.

Flowchart



Study selection (Inclusion/exclusion) criteria

Standardized relevance screening forms with instructions were prepared to ensure that the review team applied the inclusion/exclusion criteria uniformly. A pilot test of the relevance screen process was completed. Selection of relevant studies took place in two stages. In the first stage, titles and abstracts of identified references were reviewed based on our

inclusion/exclusion criteria to exclude studies of obvious irrelevance (see Table 1). In the second stage, the full texts of all articles that met the criteria as well as those whose abstracts did not contain enough information were reviewed using our inclusion/exclusion criteria. We used an Artificial Intelligence (AI) feature in the DistillerSR® software, pairing a human reviewer with the AI feature to double-review each reference at each stage of relevance screening. Disagreements between the human and AI feature were reviewed by a third (human) reviewer until consensus was achieved. Team members did not review studies they had consulted on, authored, or co-authored.

The team was asked to include studies that examined a workplace strategy used by employers to positively impact mental health, in our jurisdictions of interest (see Table 1), with a working population defined as 18 to 64. While we did not limit our search by language, we did limit our review to English language only as this was a rapid review, this excluded 147 studies. We also asked the reviewers to flag any articles that may not meet the inclusion criteria if they were of interest to some aspect of the review, such as background information or statistics, but would otherwise be excluded. In addition, the team was asked to determine if articles were either a systematic review, a primary study with a comparison group, or a primary study with no comparison group to separate these three types of study for quality appraisal. Finally, we conducted a focused search on any articles published in English or French that may have been conducted in Quebec or that looked at the Quebec Healthy Enterprise Standard as these would add Canadian context. These studies were reviewed by an external reviewer with requisite language proficiency.

TABLE 1: Inclusion/Exclusion Criteria

	Inclusion	Exclusion
Population	• Working population defined as 18-64 • Jurisdiction of interest (North America, Europe, Scandinavia, Australia, etc)	• Non-working population • Volunteers • Students • <18 or >65
Intervention	• Workplace strategy	• Non-workplace strategies
Outcome	• Mental health (depression, anxiety, stress, etc)	
Study Design	• Systematic review • Comparison group that looks at the effectiveness of an intervention	
Language	• English	• not English, except for French studies conducted in Quebec or that looked at the Quebec Health Enterprise Standard

Quality Appraisal

We appraised the quality of 37 systematic reviews using the AMSTAR 2 critical appraisal tool (Shea 2017) and 45 primary studies with a comparison group using a quality assessment tool adapted from the Institute for Work and Health's Depression review [Irvin 2017]. We determined that we had enough studies with a comparison group to exclude primary studies without a comparison group from further assessment.

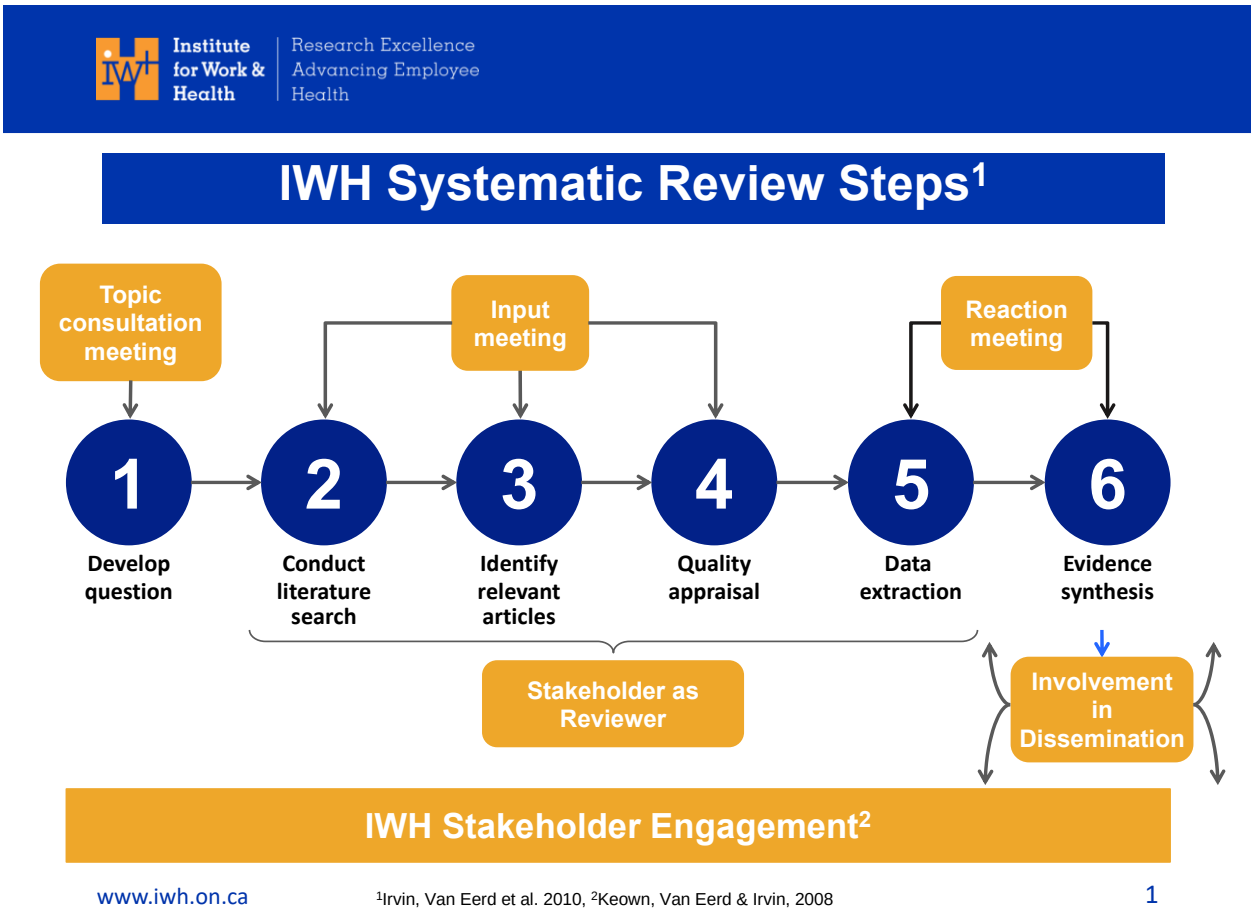
Each review or study was assessed by a single reviewer. The team met to run a sample of reviews and primary studies through the appropriate quality appraisal tool to ensure that the criteria were being applied consistently. Disagreements were examined until consensus was reached. By the end of quality appraisal, we had included 17 systematic reviews and 32 studies with a comparison group for data extraction and synthesis. 11 reviews were excluded as they were not true systematic reviews (e.g. narrative, scoping, or literature reviews), were clinically

focused, or did not include mental health outcomes. Six studies were excluded because the interventions were not aimed at improving mental health.

Data Extraction and Synthesis

We extracted relevant data from each systematic review and study that would help us address our question. Data were extracted describing the population, jurisdiction, details of the intervention and control groups, outcome measures and the effects of interventions on mental health outcomes.

We attempted to follow a best-evidence synthesis approach developed by Slavin (1995). This method allows consideration of article quality, the quantity of articles meeting quality thresholds, and the consistency of the research findings. We would then asses the levels of evidence with rankings on a scale from “strong evidence” through to “insufficient evidence.” However, due to the diverse types of interventions and heterogeneity of outcomes we will defer this step until WorkplaceNL have had the opportunity to digest our findings. This is in keeping with our SR framework to ensure we have stakeholder input into the evidence synthesis and messages from the review.



REVIEW FINDINGS

The search identified 4089 references. After removing duplicates, we screened 3471 titles and abstracts and 229 full texts for relevance. We also retrieved 15 additional studies from the reference lists of the included studies. After reviewing titles, abstracts and full articles for relevance, we identified 17 systematic reviews and 32 primary studies for data extraction and inclusion in this report (see flowchart).

While the systematic reviews and primary studies met our inclusion criteria, none specifically evaluated the implementation of the CSA Z1003 (or similar standard) and therefore did not provide data to answer our original research question (or sub questions). However, the

systematic reviews and primary studies evaluated various workplace-based interventions to address a variety of mental health outcomes that may be of interest. Below we describe the findings from, first the systematic reviews and, then the primary studies included in this rapid review. Please see tables in appendices F and G for detailed information about: author/year/study design, research question, jurisdiction(s), population, intervention(s), outcomes, and observed effects.

Systematic reviews

The relevant systematic reviews synthesized available research evidence on various interventions with some impact on a variety of mental health outcomes. Broadly the interventions synthesized in the reviews covered training, health promotion, organizational intervention, policies, and cognitive behavioural therapy interventions (See Appendix F). There were some systematic reviews that examined individual interventions but did not pool the results. There was also one null review (did not find any studies to answer their question) included.

We categorized the interventions examined in the systematic reviews according to the 13 workplace factors described in the Z1003 standard (See Appendix A). The first table in Appendix B shows that 14 of 17 reviews included interventions that address psychological and social support (factor #2). There were also seven reviews that included interventions relevant to psychological protection (factor #12). We did not find any interventions within the systematic reviews that addressed growth and development (factor #6), recognition and reward (factor #7), or balance (factor #11).

Overall the systematic reviews report mostly positive impacts of the interventions reported. See Appendix F for the details and findings of the relevant systematic reviews.

Primary studies

The 32 primary studies that evaluated 30 unique interventions to address 47 different mental health outcomes (see Appendix G). In general, the interventions described in the primary studies included: cognitive behavioural therapy, Mental Health First Aid, awareness/literacy, leadership, stress management, health promotion.

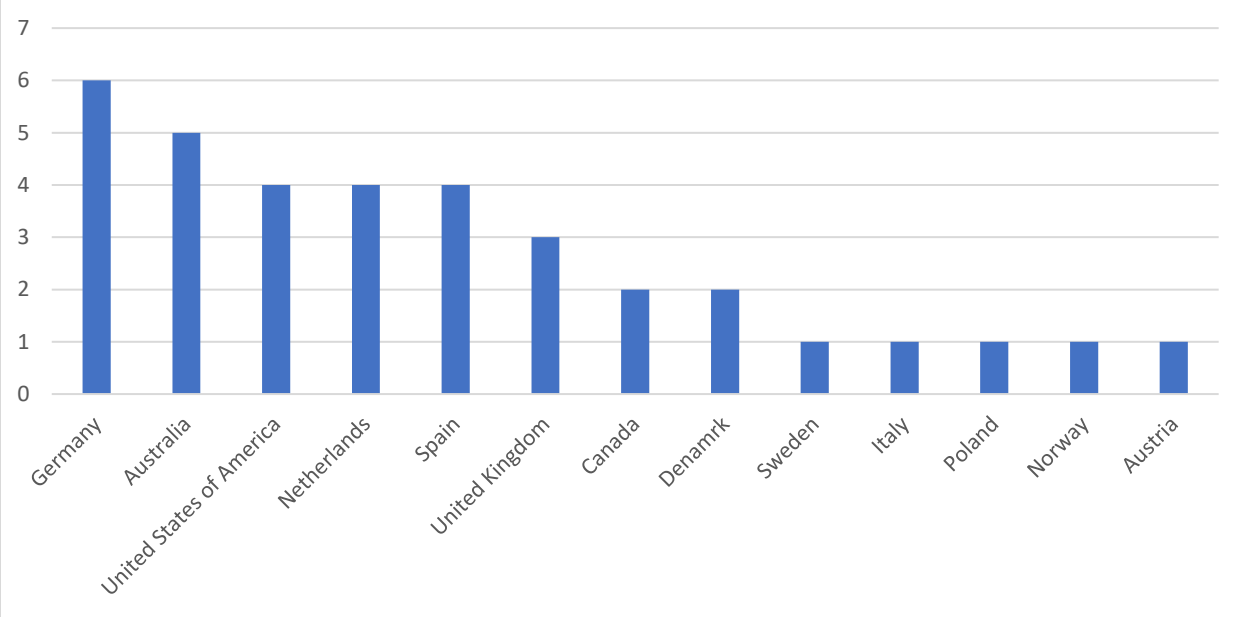


Figure 2: Number of studies by jurisdiction

The relevant studies came from a variety of jurisdictions, with most coming from Germany and Australia, followed by the United States of America, the Netherlands, and Spain (See Figure 2). Two of the relevant studies were done in Canada.

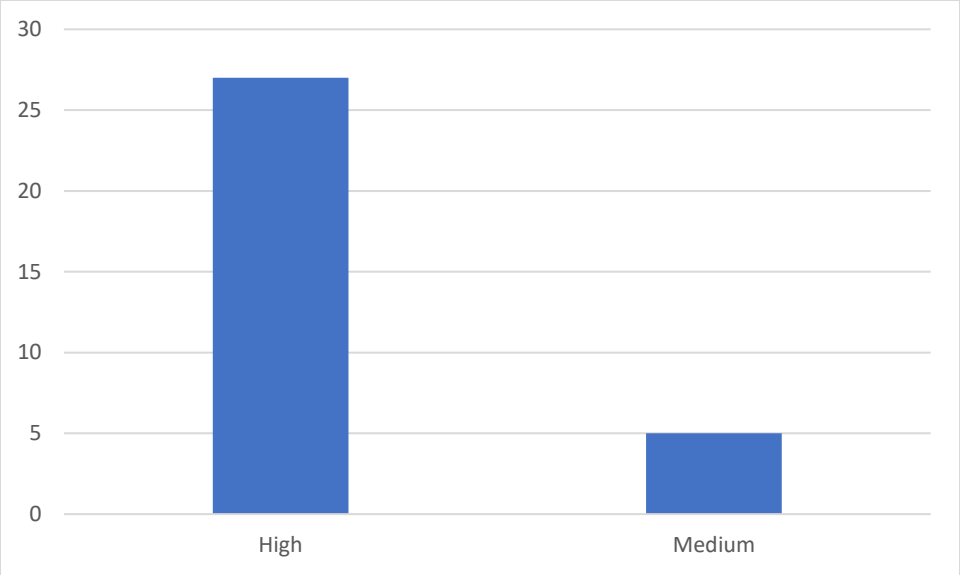


Figure 3: Quality breakdown of relevant primary studies

All 32 of the primary (single) studies were randomized controlled trials (RCT) and were assessed as either medium or high quality according to our quality appraisal (see Appendix G, and Figure 3).

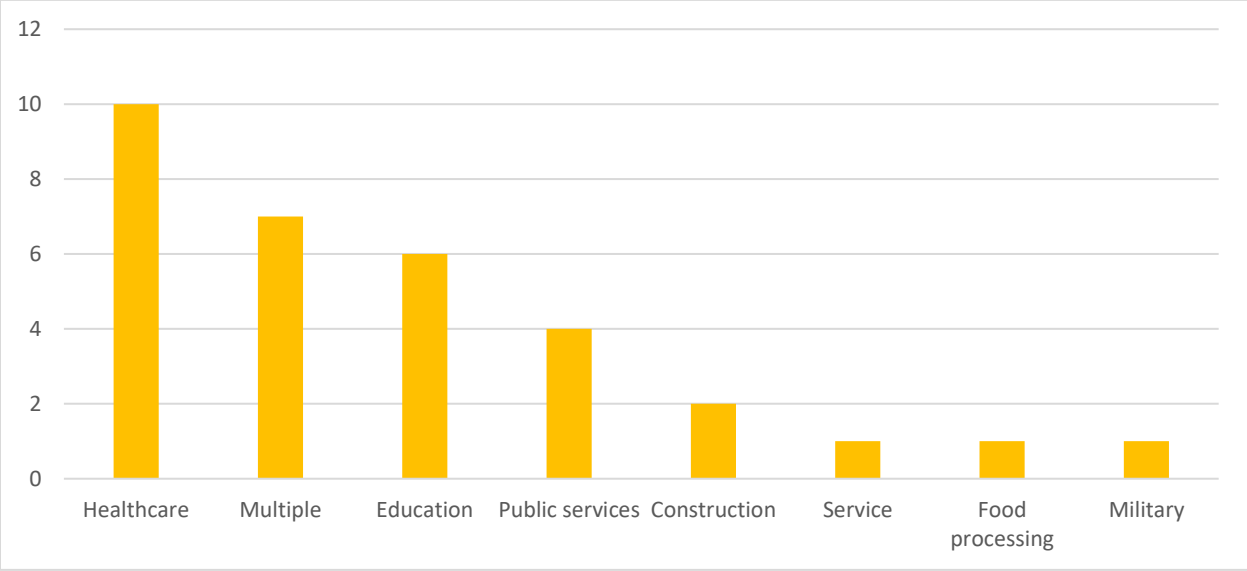


Figure 4: Number of studies by industrial sector

The primary studies examined workplaces from a variety of industrial sectors with the highest number from healthcare. There were a substantial number that evaluated mental health interventions in workplaces across multiple sectors (See Figure 4).

The interventions were delivered in a variety of ways, including traditional in-person and class-room or group-based modes, blended training, online resources and training, as well as e-mail and text delivered interventions. We found six studies (Shann 2018; Stansfield 2015; Milner 2018; Glass 2017; Addley 2014; Oude Hengel 2014) that explicitly mentioned the involvement of unions in the intervention. The level of involvement varied somewhat from having input into the development/implementation of the intervention or that they were aware of the research taking place regarding the intervention.

We categorized the interventions examined in the primary studies according to the 13 workplace factors described in the Z1003 standard (See Appendix A). The second table in Appendix B shows that 28 of 32 primary studies included interventions that address psychological and social support (factor #2). In addition, there were 26 of 32 primary studies that included interventions relevant to psychological protection (factor #12). There were no primary studies found that examined interventions consistent with recognition and reward (factor #7), or engagement (factor #10).

Across the 32 primary studies, 11 report improvement for all studied outcomes, 17 show improvement for some outcomes and no change for others, and four report no change. No studies showed a negative effect (See Appendix G).

SYNTHESIS AND DISCUSSION

Our structured literature searches were guided by OHS stakeholder input and yielded over 4000 references. We identified a number of systematic reviews and primary studies that met our inclusion criteria but none that examined the effectiveness of the Canadian workplaces that have adopted psychological health and safety programs and/or the CSA Standard Z1003 (CSA/BNQ 2013), which is not surprising as the standard was released only five years ago.

We also note that there were 17 study protocols identified by our search, the majority of which involved interventions using technology to promote safe and healthy work, indicating that this is a burgeoning field of research.

It is important to note that the evidence regarding the effectiveness of reducing psychological hazards/improving psychological health and safety is quite heterogenous. For example, we found 30 unique interventions and 47 different outcomes across 32 primary research studies. Very few outcomes were used multiple times across studies. Even though all studies used one of the strongest types of study designs (randomized controlled trial, RCT) and were of medium or high quality, the level of heterogeneity makes it challenging to synthesize in a meaningful manner. Therefore, we also categorized the intervention types according to the 13 workplace factors affecting psychological health and safety described in CSA Z1003-13.

Categorizing the data according to the 13 workplace factors of the CSA Z1003 shows that most systematic reviews and primary studies seemed to address psychological and social support (factor #2) or psychological protection (factor #12). It is possible that studies over the past five years have focussed on these factors as either the most important or the most easily addressed among the 13 factors. We should point out that the majority of the interventions described

were not implemented as part of management systems. Rather they were implemented as single programs and compared to another type of intervention (often usual approach) or to no intervention. This is almost certainly a result of finding randomized controlled trials, where there is a requirement to 'control' who gets an intervention, how it is delivered, and what is compared.

Strengths and Limitations

The strengths of this review are that it used a rigorous methodology and was conducted by an experienced team of researchers, including three members of the Cochrane Back and Neck group. Potential limitations of the review are that it covered only 5 years, and that, although the search was not limited by language, it was conducted in only three databases and the study selection was later limited to English studies, with the except of French studies conducted in Quebec or about the Quebec Healthy Enterprise standard to capture the French-Canadian context. A further limitation is inherent in the fact that, as the team was commissioned to conduct a rapid review, the search was not as comprehensive as would have been possible with a full systematic review that would have required a longer time frame.

Next steps:

To provide practical information and evidence related to reducing psychological hazards and improving the psychological health and safety within workplaces and going beyond the description of the research/evidence found in the peer-reviewed literature to date we will meet with the funder to determine appropriate intervention categories and outcome groupings. This

next step may allow us to provide a synthesis of the findings from the variety of systematic reviews and primary studies we have reviewed.

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APPENDICES

APPENDIX A

CAN/CSA-Z1003-13/BNQ 9700-803/2013 Psychological health and safety in the workplace — Prevention, promotion, and guidance to staged implementation

CSA Group

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CAN/CSA-Z1003-13/BNQ 9700-803/2013
National Standard of Canada
(reaffirmed 2018)

Psychological health and safety in the workplace —

Prevention, promotion, and guidance to staged implementation

Disponible en français

Santé et sécurité psychologiques en milieu de travail — Prévention, promotion et lignes directrices pour une mise en œuvre par étapes

Commissioned by the
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In its role as a catalyst, the MHCC has created partnerships to focus on key projects and issues, and to make recommendations on how best to improve the systems that are directly related to mental health care. Examples include the justice system, primary health care, workplace, housing and others that impact the lives of Canadians living with a mental health problem or illness and their families.

The MHCC is funded by Health Canada and has a 10-year mandate (2007-2017).

The MHCC provides its recommendations to governments, service providers, community leaders and many others, and works with these partners to implement them so improvements are made. Consulting with people who have experience living with a mental health problem or illness and their families is also a key aspect in all of the MHCC's work.

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National Standard of Canada

CAN/CSA-Z1003-13/BNQ 9700-803/2013
Psychological health and safety in the workplace — Prevention, promotion, and guidance to staged implementation

Prepared by

CSA Group

BNQ
Bureau de normalisation du Québec

Commissioned by

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Commission de la santé mentale du Canada

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The following were members of the Technical Committee on Psychological Health and Safety in the Workplace at time of ballot:

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The Technical Committee acknowledges the valuable contribution of Martin Gélinas, Air Canada, a member of the Technical Committee who passed away during the development of this Standard, as well as that of Richard Boughen, Royal Canadian Mounted Police, who took an international assignment.

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Development of this Standard was overseen by the Project Review Committee, which was comprised of members representing BNQ, CSA Group, HRSDC, and MHCC:

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The Project Review Committee acknowledges the valuable contribution of Jayne Barker, formerly of the Mental Health Commission of Canada (MHCC).

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Contents

Preface

This is the first edition of CSA Z1003/BNQ 9700-803, *Psychological health and safety in the workplace — Prevention, promotion, and guidance to staged implementation.*

This Standard is intended to align with other relevant standards, such as BNQ 9700-800, CAN/CSA-Z1000, and CSA Z1002, and with recognized management system standards that incorporate the following five elements (see also Annex G):

- policy, commitment, and engagement;
- planning;
- implementation;
- evaluation and corrective action; and
- management review and continual improvement.

This Standard specifies requirements for a documented and systematic approach to develop and sustain a psychologically healthy and safe workplace, and provides complementary information in Annexes A to G.

This voluntary Standard can be used for conformity assessment.

Development of this Standard was undertaken collaboratively by the Bureau de normalisation du Québec (BNQ) and CSA Group. The content was prepared by the harmonized BNQ-CSA Group Technical Committee on Psychological Health and Safety in the Workplace, under the authority of BNQ Management and the CSA Group Strategic Steering Committee on Occupational Health and Safety, and has been formally approved by the Technical Committee. Development of this Standard was overseen by the Project Review Committee. This Standard has been approved as a National Standard of Canada by the Standards Council of Canada.

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Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes in this Standard are informative and provide additional information intended to assist in the understanding or use of elements of this document or to clarify its implementation, but they contain no requirements that are mandatory in order to comply with this document.

CAN/CSA-Z1003-13/BNQ 9700-803/2013 Psychological health and safety in the workplace — Prevention, promotion, and guidance to staged implementation

0 Introduction

The vision for a psychologically healthy and safe workplace is one that actively works to prevent harm to worker psychological health, including in negligent, reckless, or intentional ways, and promotes psychological well-being. This voluntary Standard has been developed to help organizations strive towards this vision as part of an ongoing process of continual improvement.

Psychological health and safety is embedded in the way people interact with one another on a daily basis and is part of the way working conditions and management practices are structured and the way decisions are made and communicated. While there are many factors external to the workplace that can impact psychological health and safety, this Standard addresses those psychological health and safety aspects within the control, responsibility, or influence of the workplace that can have an impact within, or on, the workforce.

Four main areas of consideration make up the business case for improving workplace psychological health and safety:

- risk mitigation;
- cost effectiveness;
- recruitment and retention; and
- organizational excellence and sustainability.

Workplaces with a positive approach to psychological health and safety are better able to recruit and retain talent, have improved employee engagement, enhanced productivity, are more creative and innovative, and have higher profit levels. Other positive impacts include a reduction of several key workplace issues including the risk of conflict, grievances, turnover, disability, injury rates, absenteeism and performance, or morale problems.

This voluntary Standard has been developed in the context of a large body of scientific literature from many relevant areas of workplace health and safety, law, and social science, which support the business value of psychological health and safety in the workplace.

Research has shown that those organizations that implement psychologically healthy and safe workplace strategies are, on average, better performers in all key performance categories from health and safety to key human resource measures to shareholder returns.

In the development of this voluntary Standard, the technical committee has recognized that the requirements and complexities of organizations and employees vary considerably. The technical committee also recognizes that implementation of a standard is not a “yes/no” response but a journey of continual improvement. In an effort to address this reality and encourage organizations to start on this journey, a couple of implementation approaches and both large and small enterprises scenarios are included as Annexes C and D.

The strategic pillars of a psychological health and safety system are prevention of harm (the psychological safety of employees), promotion of health (maintaining and promoting psychological health), and resolution of incidents or concerns. It has been well demonstrated that it is important to provide a psychologically safe work environment before health promotion endeavours can have significant success. In implementing this Standard, organizations should assess needs and address gaps in psychological safety prior to embarking on far reaching health promotion activities.

Human needs when unmet or thwarted can become risk factors for psychological distress; when satisfied can lead to psychological and organizational health. These human needs include security and physiological safety, belonging, social justice, self-worth, self-esteem, self-efficacy, accomplishment, or autonomy.

Although numerous factors play a role in an individual's psychological make-up, the workplace plays a large part in daily life and is therefore an important component in maintaining and promoting these human needs. Both the workplace and the individual have a shared responsibility for maintaining and improving that well-being because of the diversity of influences on a person's psychological well-being.

Some of the key drivers for employers to adopt a psychological health and safety system include risk mitigation (including compliance with existing legislation and regulation), cost effectiveness, improved ability for recruitment and retention of workers, and organizational excellence and sustainability. Key drivers are the reasons why organization would adopt this Standard. This Standard will enable an organization to introduce measures that will assist them to meet their objectives with respect to those key drivers.

The key drivers for workers and their organizations include the promotion and protection of workers well-being, job satisfaction, self-esteem, and job fulfilment.

The successful and continual improvement of the workplace's psychological health and safety will, however, depend on the active participation of both the organization and of its employees. Both the employer and the employee have responsibilities to help ensure a successful outcome from the use of this Standard while maintaining the necessary confidentialities.

Evidence-based research from numerous scientific and legal disciplines identifies several workplace factors that alone, but more typically in combination, can contribute to either the promotion or defeat of psychological health and safety (see Clauses A.2 and A.3).

The psychological health and safety system should be consistent with integration into the existing, and future, organizational policies and processes, including occupational health and safety, across the organizational structure. Evaluation of outcomes leads to a drive for continual improvement.

The Model presented in Clause A.3 represents a planned and widely accepted approach to address thirteen identified and measurable workplace factors that are known to impact psychological health and safety. They have had wide acceptance as key factors that, when satisfied, will enhance and promote psychological health and safety in the workplace leading to measurable improvements in employee psychological health, overall workplace psychological safety, and enhanced organizational efficiency and effectiveness. The latter includes better overall productivity, a decrease in costs related to ill health, and an overall enhancement of the organization's bottom line.

1 Scope

1.1 Purpose

This Standard specifies requirements for a documented and systematic approach to develop and sustain a psychologically healthy and safe workplace, and provides complimentary information in Annexes A to G. This Standard provides a framework to create and continually improve a psychologically healthy and safe workplace, including

a) the identification and elimination of hazards in the workplace that pose a risk of psychological harm to a worker;
b) the assessment and control of the risks in the workplace associated with hazards that cannot be eliminated;
   Note: *For example, stressors due to organizational change or reasonable job demands.*
c) implementing structures and practices that support and promote psychological health and safety in the workplace; and
d) fostering a culture that promotes psychological health and safety in the workplace.

1.2 Applicability

This Standard is applicable to any organization.

Note: *The application of psychological health assessment measures of workers or adherence of workers to program activities is voluntary unless it is legally or contractually required.*

1.3 Guiding principles

This Standard is based on the following guiding principles:

a) legal requirements associated with psychologically healthy and safe workplaces applicable to the organization will be identified and complied with as a minimum standard of practice;
b) psychological health and safety is a shared responsibility among all workplace stakeholders and commensurate with the authority of the stakeholder;
c) the workplace is based on mutually respectful relationships among the organization, its management, its workers, and worker representatives, which includes maintaining the confidentiality of sensitive information;
d) individuals have a responsibility towards their own health and behaviour;
e) a demonstrated and visible commitment by senior management for the development and sustainability of a psychologically healthy and safe workplace;
f) active participation with all workplace stakeholders;
g) organizational decision making incorporates psychological health and safety in the processes; and
h) a primary focus on psychological health, safety, awareness, and promotion as well as the development of knowledge and skills for those persons managing work arrangements, organization, processes, and/or people.

Activities associated with this Standard, specifically related to planning, data collection, and evaluation requirements, are to be conducted in a psychologically safe, confidential, and ethical manner.

2 Reference publications

There are no normative reference publications in this Standard. Informative reference publications are found in Annexes B and G.

3 Definitions and abbreviations

3.1 Definitions

The following definitions apply in this Standard:

Critical event (individual) *n* — an event or a series of events that has a stressful impact sufficient enough to overwhelm the usually effective coping skills of either an individual or a group. French: ***évènement critique (personnes)***.

Critical event (organization) *n* — an event or a series of events that interrupts the normal flow of activities of the organization in a way that impacts psychological health and safety. French: ***évènement critique (organisme)***.

Harm *n* — an injury or damage to health. French: ***dommage***.

Hazard *n* — a potential source of psychological harm to a worker. French: ***danger***. [Reference: CAN/CSA-Z1000 (adapted wording) (see Annex G).]

Health *n* — a state of complete physical, social, and mental well-being, and not merely the absence of disease or infirmity. French: ***santé***. [References: World Health Organization Web page http://www.who.int/suggestions/faq/en/ and BNQ 9700-800 (see Annex G).

Health promotion *n* — the process of enabling people to increase control over and to improve their health. French: ***promotion de la santé***. [References: *Health Promotion Glossary* and BNQ 9700-800 (see Annex G).]

Mental health *n* — a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. Synonym: psychological health. French: ***santé mentale***. [Reference: World Health Organization (see Annex G).]
Note: *"[…] In this positive sense, mental health is the foundation of well-being and effective functioning for an individual and for a community." [Reference: World Health Organization (see Annex G).]*

Organization *n* — a company, employer, operation, undertaking, establishment, enterprise, institution, or association, or a part or combination thereof, that has its own management. French: ***organisme***. [Reference: CAN/CSA-Z1000 (adapted wording) (see Annex G).]

Organizational culture *n* — a pattern of basic assumptions invented, discovered, or developed by a given group that are a mix of values, beliefs, meanings, and expectations that group members hold in common and use as behavioural and problem-solving cues. French: ***culture organisationnelle***.

Procedure *n* — a documented method to carry out an activity. French: ***procédure***. [Reference: CAN/CSA-Z1000 (see Annex G).]

Process *n* — a set of interrelated or interacting activities that transforms inputs into outputs. French: ***processus***. [Reference: CAN/CSA-Z1000 (see Annex G).]

Psychological health — see **Mental health**.

Psychological safety *n* — the absence of harm and/or threat of harm to mental well-being that a worker might experience. French: ***sécurité psychologique***. [Reference: Guarding Minds@Work (adapted wording) (see Annex G).]
Note: *Improving the psychological safety of a work setting involves taking precautions to avert injury or danger to worker psychological health.*

Psychologically healthy and safe workplace *n* — a workplace that promotes workers' psychological well-being and actively works to prevent harm to worker psychological health including in negligent, reckless, or intentional ways. French: ***milieu de travail psychologiquement sain et sécuritaire***. [Reference: Guarding Minds@Work (adapted wording) (see Annex G).]

Risk *n* — the combination of the likelihood of the occurrence of harm and the severity of that harm. French: ***Risque***. [Reference: CSA Z1002 (see Annex G).]

Risk analysis *n* — the systematic use of information to identify hazards and to estimate the risk. French: ***analyse du risque***.
Notes:
1) *Risk analysis provides a basis for risk evaluation and risk control.*
2) *Information can include current and historical data, theoretical analysis, informed opinions, and the concerns of stakeholders.*

Risk assessment *n* — the overall process of risk analysis and risk evaluation. French: ***appréciation du risque***.

Risk criteria *n pl* — terms of reference by which the significance of risk is assessed. French: ***critères de risque***.
Note: *Risk criteria can include associated cost and benefits, legal and statutory requirements, socioeconomic and environmental aspects, the concerns of stakeholders, priorities, and other inputs to the assessment.*

Risk evaluation *n* — the process of comparing the estimated risk against given risk criteria to determine the significance of the risk. French: ***évaluation du risque***.

Psychosocial risk factor *n* — hazards including elements of the work environment, management practices, and/or organizational dimensions that increase the risk to health. French: ***facteur de risque psychosocial***.

Senior management *n* — the person(s) at the highest level of an organizational structure responsible for leading, managing, and/or directing an organization. French: ***haute direction***.

Stakeholder *n* — any person or organization within the workplace that can affect or be affected by, or perceive themselves to be affected by, the decisions or activities related to mental health and safety factors within the workplace. French: ***partie prenante***. [Reference: ISO Guide 73, Paragraph 3.2.1.1 (see Annex G).]

Worker *n* — a person employed by an organization or a person under the day-to-day control of the organization, whether paid or unpaid, which includes employees, supervisors, managers, leaders, contractors, service providers, volunteers, students, or other stakeholders actively engaged in undertaking activities for benefit to the organization. French: ***travailleur, travailleuse***. [Reference: CAN/CSA-Z1000 (adapted wording) (see Annex G).]

Worker representative *n* — a non-managerial worker who is
a) a member of the workplace health and safety committee;
b) a representative of other workers in accordance with the requirements of law or collective agreements; or
c) selected by non-managerial workers for other reasons.
French: ***représentant des travailleurs, représentante des travailleurs***.

Workplace *n* — an area or location where a worker works for an organization, or is required or permitted to be present while engaging in service (including social events) on behalf of an organization. French: ***milieu de travail***.

3.2 Abbreviations

The following abbreviations are used in this Standard.

EFAP — employee and family assistance plan
LTD — long term disability
OHS — occupational health and safety
PHSMS — psychological health and safety management system
PPE — personal protective equipment
STD — short term disability

4 Psychological health and safety management system

4.1 General

The organization shall establish, document, implement, and maintain a psychological health and safety management system (PHSMS) in the workplace and continually improve its effectiveness in accordance with the requirements of this Standard.

This PHSMS should be integrated into, or compatible with, governance practices and other systems in the organization.

The PHSMS includes the following elements:
a) commitment, leadership, and participation (see Clause 4.2);
b) planning (see Clause 4.3);
c) implementation (see Clause 4.4);
d) evaluation and corrective action (see Clause 4.5); and
e) management review (see Clause 5).

4.2 Commitment, leadership, and participation

4.2.1 General

Commitment, leadership, and effective participation are crucial to the success of the PHSMS. All stakeholders share an interest and responsibility to ensure psychological health and safety in the workplace.

Management shall ensure that the responsibilities and authorities related to the PHSMS are defined and communicated throughout the organization.

4.2.2 Commitment

The organization shall have or incorporate into existing policies a current policy statement approved by senior management and the Board of Directors (where applicable) that outlines their commitment to the development of a systematic approach for managing psychological health and safety in the workplace. The policy statement shall be based on the organizational commitments to

a) establish, promote, and maintain a PHSMS in accordance with this Standard;
b) align with the ethics and stated values of the organization;
c) establish and implement a process to evaluate the effectiveness of the system and implement changes as necessary;
d) delegate the authority necessary to implement an effective system;
e) ensure that workers and worker representatives, as required, participate in the development and implementation and continual improvement of the system;
f) provide the required resources to develop, implement, and maintain the PHSMS;
g) evaluate and review the system at planned intervals for the purpose of continual improvement; and
h) recognize that it is in everybody's common interest to promote and enhance a working relationship consistent with the principles of mutual respect, confidentiality, and cooperation.

4.2.3 Leadership

This Clause pertains to those who have key responsibility for the organization's performance. People in leadership roles shall

a) reinforce the development and sustainability of a psychologically healthy and safe workplace environment based on a foundation of ethics and stated values;
b) support and reinforce all line management in the implementation of the PHSMS;
c) establish key objectives toward continual improvement of psychological health and safety in the workplace;
d) lead and influence organizational culture in a positive way (see Annex B for resources);
e) ensure that psychological health and safety is part of organizational decision making processes;
f) engage workers and, where required, their representatives to
    i) be aware of the importance of psychological health and safety;
    ii) be aware of the implications of tolerating psychological health and safety hazards;
    iii) provide feedback to help the organization determine the effectiveness of the PHSMS implementation and operation; and
    iv) identify workplace needs regarding psychological health and safety.

4.2.4 Participation

4.2.4.1

Active, meaningful, and effective participation of stakeholders is a key factor in psychological health. Participation is a requirement for successful policy development, planning, implementation, and operation of specific programs, and evaluation of the system and its impacts. To ensure such participation, the organization shall

a) engage stakeholders in active regular dialogue that facilitates understanding of stakeholders' needs and goals;
b) engage workers and, where required, their representatives in policy development, data gathering, and planning process to better understand their needs with respect to psychological health and

safety in the workplace;
c) encourage workers and, where required, their representatives to participate in programs implemented to meet identified needs;
d) actively involve workers and, where required, their representatives in the evaluation process through the use of recognized instruments such as focus groups, surveys, and audits; and
e) ensure that the results generated by the evaluation process and the follow-up plans of action are effectively communicated with all management, workers, and their representatives (where applicable).

The organization shall engage the Occupational Health and Safety (OHS) committee or HS representatives, where required, to define their involvement in the PHSMS. Where discussion of psychological hazards in the workplace takes place at the OHS committee, confidentiality of all persons shall be respected and identifying markers removed from the documents used at the OHS committee in accordance with Clause 4.2.5.

To further encourage participation and engagement, the organization may consider the implementation of a specific committee or sub-committee for psychological health and safety in the workplace.

4.2.4.2

Worker participation is an essential aspect of the PHSMS in the organization. The organization shall
a) provide workers and worker representatives with time and resources to participate effectively in the development of the psychological health and safety policy and in the process of PHSMS planning, implementation, training, evaluation, and corrective action; and
b) encourage worker participation by providing mechanisms that
   i) support worker participation, such as identifying and removing barriers to participation;
   ii) establish workplace health and safety committees or worker representatives where required by OHS legislation and, where applicable, collective agreements or other requirements; and
   iii) ensure that workers and worker representatives are trained in, and consulted on, all aspects of PHSMS associated with their role within this system.

Note: *Consultation with workers and worker representatives does not require the organization to obtain worker approval or permission. Worker and worker representative participation should not interfere with business needs or operations.*

4.2.5 Confidentiality

The organization shall establish and sustain processes that ensure confidentiality and privacy rights are respected and protected.

4.3 Planning

4.3.1 General

Planning enables an organization to identify and prioritize work-related psychological health and safety
a) hazards;
b) risks;
c) legal requirements;
d) management system gaps; and
e) opportunities for improvement.

Note: *See Annex B for resources.*

The planning process is necessary to establish appropriate objectives and targets, and plans to achieve compliance with legal requirements, relevant regulations, organizational requirements, and a commitment to continual improvement.

4.3.2 Planning process

The planning process shall include
a) planning for management of psychological health and safety in the workplace, including the assessment of worker health impact, financial impact, and organizational policy and processes that promote good psychological health;

b) developing a collective vision of a psychologically healthy workplace, specific goals for reaching the vision, and a plan for ongoing process monitoring for continual improvement;
c) assessment of the strengths of the existing psychological health and safety strategy; and
d) recognition and identification of current practices that are already protecting and promoting psychological health and safety.

4.3.3 Review

The organization shall review its approach to managing and promoting psychological health and safety in the workplace, to assess conformance with the requirements and recommendations in this Standard. If no such system exists, the organization shall establish a system in conformance with this Standard.

4.3.4 Identification, assessment, and control

4.3.4.1

The organization shall develop, implement, and maintain a documented risk mitigation process that includes

a) hazard identification;
b) elimination of those hazards that can be eliminated;
c) assessment for level of risk for hazards that cannot be eliminated;
d) preventive and protective measures used to eliminate identified hazards and control risks; and
e) a priority process reflecting the size, nature, and complexity of the hazard and risk, and, where possible, respecting the traditional hierarchy of risk control.

Notes:

1) *The hierarchy of risk control can involve the following:*
   a) elimination of the hazard;
   b) control the risk or control access to the hazards;
   c) substitution of the hazard with something less hazardous;
   d) making changes to how the work is organized and done;
   e) modifying procedures and practices;
   f) administrative/training;
   g) protective equipment; and
   h) emergency response plans.

2) *The documentation can be scaled to the size, nature, and complexity of the organization.*

4.3.4.2

Factors to assess should include, but are not limited to, the following:

a) psychological support;
b) organizational culture;
c) clear leadership and expectations;
d) civility and respect;
e) psychological job demands;
f) growth and development;
g) recognition and reward;
h) involvement and influence;
i) workload management;
j) engagement;
k) work/life balance;
l) psychological protection from violence, bullying, and harassment;
m) protection of physical safety; and
n) other chronic stressors as identified by workers.

Notes:

1) *A description of these factors is included in Clause A.3.*

2) *Resources such as GuardingMinds@Work (GM@W) can provide a first step to assessing these factors.*

In addition to assessing risks, the organization should identify and assess opportunities for promoting psychological health.

4.3.5 Data collection

The organization shall establish a data gathering process using qualitative, quantitative, or mixed methods. The degree of detail required will depend upon the complexity of the workplace, the goals of the PHSMS, the reasonable accessibility of reliable data, and the decision-making needs of the organization. Any collection of data shall comply with all privacy requirements, legislation, collective agreements, and policies.

The organization shall keep a record of the data collected and of the methods used in data collection. Where required by regulation, the organization shall share the data collected and related reports with the OHS committee. Where data is shared, confidentiality of all persons shall be respected and identifying markers removed from the documents in accordance with Clause 4.2.5.

Data sources and reference documents may include

a) existing organizational policies and plans pertinent to psychological health and safety in the workplace;
b) job descriptions/job demands analysis;
c) aggregated administrative data, such as
    i) rates of absenteeism;
    ii) rates of turnover;
    iii) return to work and accommodation data;
    iv) short-term disability (STD) and long-term disability (LTD) costs;
    v) employee and family assistance plan (EFAP);
    vi) principal diagnostic categories (for short term disabilities/long term disabilities);
    vii) claims data such as benefit utilisation rates, disability relapse rates, and workers compensation data;
    viii) review of incident reports/worker complaints/investigations; and
    ix) health risk assessment data;
d) laws and regulations, including
    i) human rights;
    ii) OHS acts;
    iii) violence and abuse prevention in the workplace;
    iv) labour laws; and
    v) workers compensation;
e) standards, codes, and guidelines;
f) worker engagement indicators and worker feedback (e.g., surveys, participation rates);
g) report(s) from unions or worker groups regarding exposure/risk information;
h) diverse perspectives (e.g., mental illness, cultural differences), including those with personal experience of mental health issues, various cultures, etc.;
i) results of organizational audit;
j) industry or association established best practices; and
k) research.

4.3.6 Diversity

Organizations comprise diverse populations and groups.

The organization shall consider the unique needs of these diverse populations and solicit input when these needs are relevant to complying with the requirements of this Standard.

The organization shall consider workplace factors that can impact the ability of these workers to stay at work or return to work.

While psychological health and safety in the workplace is a shared responsibility among stakeholders, the organization should support individual workers to seek assistance internally or externally when needed.

The organization shall take steps to link workers in need to internal resources and should also take steps to link workers to community or other resources.

4.3.7 Objectives and targets

4.3.7.1
The organization shall document the psychological health and safety objectives and targets for relevant functions and levels within the organization. The objectives and targets should be

a) measurable;
b) consistent with the psychological health and safety policy and commitment to the PHSMS, compliance with legal requirements and other requirements, and commitment to continual improvement;
c) based on past reviews, including past performance measures and any psychological health and safety hazards, risks, the results of the data collection (see Clause 4.3.5) and identification and assessment of psychological workplace factors (see Clause 4.3.4), management system deficiencies, and opportunities for improvement that have been identified;
d) determined after consultation with workers and with consideration of technological options and the organization's operational and business requirements; and
e) reviewed and modified according to changing information and conditions, as appropriate.

The organization should consider objectives and targets that reinforce existing strengths and promote new opportunities for improving psychological health and safety.

4.3.7.2
The organization shall establish and maintain a plan for achieving its objectives and targets. The plan shall include

a) the designation of responsibility for achieving objectives and targets; and
b) identification of the means and time frame within which the objectives and targets are to be achieved.

4.3.8 Managing change

4.3.8.1
The organization shall establish, implement, and maintain a system to manage changes that can affect psychological health and safety. The system shall address changes that include

a) new products, processes, or services at the design stage;
b) significant changes to work procedures, equipment, organizational structure, staffing, products, services, or suppliers;
c) changes to psychological health and safety strategies and practices;
d) changes to psychological health and safety legal and other requirements; and
e) changes to work arrangements, including modified work arrangements.

4.3.8.2
Such a system should include

a) communication between stakeholders about the changes;
b) information sessions and training for workers and worker representatives; and
c) support as necessary to assist workers in adapting to changes.

4.4 Implementation

4.4.1 Infrastructure and resources
The organization shall provide and sustain the infrastructure and resources needed to achieve conformity with this Standard.

The following should be taken into consideration:

a) workplace parties should possess sufficient authority and resources to fulfill their duties related to this Standard;

b) workplace parties should possess the knowledge, authority, and abilities to integrate psychological health and safety into management systems, operations, processes, procedures, and practices; and
c) persons with roles as specified in this Standard should possess the knowledge, skills, and abilities to carry out their roles (e.g., auditing, training, assessment, analysis).

Note: *Internal or external resources might be able to provide substantial expertise, proven programs, or assistance in implementing psychological health and safety programs in the workplace.*

4.4.2 Preventive and protective measures

The organization shall establish and sustain processes to implement preventive and protective measures to address the identified work-related hazards and risks.

Preventive and protective measures should be implemented according to the following priority:

a) eliminate the hazard;
b) implement controls to reduce the risks related to hazards that cannot be eliminated;
c) implement use of personal protective equipment (PPE) in applicable circumstances;
   Note: *The key is to recognize and consider PPE requirements in the context of both physical and psychological safety. Some examples of PPE related to psychological safety could include personal alarm devices or privacy barriers.*
d) implement processes to respond to issues that can impact psychological health and safety of workers; and
e) offer resources to workers who are experiencing mental health difficulties, whether these difficulties relate to organizational factors or to other factors, such as personal factors.
   Note: *These resources may be found within the organization, in the public domain, online, or in the community.*

4.4.3 Education, awareness, and communication

The organization shall establish and sustain processes to

a) provide information about factors in the workplace that contribute to psychological health and safety, and specifically how to reduce hazards and risks that potentially cause psychological harm and how to enhance factors that promote psychological health;
b) ensure stakeholder education, awareness, and understanding in regards to the nature and dynamics of stigma, psychological illness, safety, and health;
c) communicate to stakeholders existing policies and available supports;
d) communicate to stakeholders processes available when issues can impact psychological health and safety;
e) communicate to stakeholders information about the psychological health and safety system and related plans and processes;
f) include stakeholder ideas, concerns, and input for consideration; and
g) ensure communication throughout the monitoring and review process (see Clause 4.5) to all workplace parties.

4.4.4 Sponsorship, engagement, and change management

The organization shall establish processes that support effective and sustained implementation, including

a) sponsorship by senior leadership and leadership at all levels of the organization;
b) engagement on the part of stakeholders; and
c) assessment and application of change management principles throughout planning and implementation.

4.4.5 Implementation governance

The organization shall establish

a) clear responsibilities and accountabilities for effective implementation;
b) governance processes that support effective implementation and communication plans; and
c) documentation requirements.

4.4.6 Competence and training

4.4.6.1

The organization shall establish and sustain processes to

a) determine expectations and minimum requirements of workers and, in particular, those in leadership roles (e.g., supervisors, managers, worker representatives, union leadership) to prevent psychological harm, promote psychological health of workers, and address problems related to psychological health and safety; and
b) provide orientation and training to meet Item a).

4.4.6.2

The organization should establish and sustain processes to

a) provide accessible coaching and supports as required, recognizing the potential complexities of psychological health and safety situations, the unique needs of the individuals affected, and the skills needed; and
b) assess and address competence as specified in Clause 4.4.6.1, Item a) of those in leadership roles.

4.4.7 Critical event preparedness — Individual(s)

The organization shall establish and sustain processes to

a) identify potential critical events where psychological suffering, illness, or injury is involved, or likely to occur, while respecting confidentiality and privacy of all parties;
b) provide response and support, including consideration of specialized external supports;
c) provide related training for key personnel involved in critical event response; and
d) ensure there are opportunities for debriefing and for revising guidelines for critical events as applicable.

Note: *The purpose of this Clause is to help workers who might be dealing with incidents within or external to the workplace (e.g., bullying, harassment, death of a family member).*

4.4.8 Critical event preparedness — Organization

Organizations might undertake or experience events that pose particular risks or are likely to have particular impacts on psychological health and safety. The organization shall establish and sustain processes to

a) ensure the psychological health and safety risks and impacts of critical events are assessed;
b) manage critical events in a manner that reduces psychological risks to the extent possible and supports ongoing psychological safety;
c) incorporate learning from critical events into established plans related to the psychological health and safety system; and
d) ensure there are opportunities for reviewing and for revising guidelines for critical events as applicable.

4.4.9 Reporting and investigations

4.4.9.1

The organization shall establish and maintain procedures for reporting and investigating work-related psychological health and safety incidents such as psychological injuries, illnesses, acute traumatic events, fatalities (including suicides), and attempted suicides.

Such investigations should be carried out by persons who are experienced in psychological injury and incident investigation and who are impartial (and are perceived to be impartial by all parties), and should be carried out with the participation of the appropriate workplace parties, respecting the privacy and confidentiality of involved parties and other relevant legislation.

These procedures shall include

a) the establishment of roles and responsibilities of all parties participating in the investigation process;

b) practices that foster a psychologically safe environment that allows workers to report errors, hazards, adverse events, and close calls;
c) a commitment to appropriate accountability, looking first at system factors that contributed to the error or adverse event;
d) actions to mitigate any consequences of work-related psychological injuries, illnesses, acute traumatic events, chronic stressors, fatalities (including suicides), attempted suicides, and psychological health and safety incidents;
e) the identification of the immediate and underlying cause(s) of such incidents and the implementation of recommended corrective and preventive actions; and
f) an assessment of effectiveness of any preventive and corrective actions taken.

4.4.9.2
The investigation of cause(s) of work-related psychological health and safety incidents such as psychological injuries, illnesses, acute traumatic events, psychosocial risk factors, fatalities (including suicides), and attempted suicides, shall include the identification of any failures in the PHSMS and shall be documented.

4.4.9.3
Recommendations shall be developed and, along with the investigation's results, shall be communicated to the workplace parties. These recommendations shall form the basis of corrective action and shall be included in the management review specified in Clause 5. The investigation results and recommendations should be used for continual improvement of the PHSMS.

4.4.10 External parties
Organizations often engage external providers and suppliers whose personnel interact with those of the organization. The organization shall establish and sustain processes to
a) make external parties and their personnel aware of the organization's policies and expectations related to protecting the psychological health and safety of the organization's workers; and
b) address any issues or concerns identified.

4.5 Evaluation and corrective action

4.5.1 Introduction
The organization shall establish and maintain procedures to monitor, measure, and record psychological health and safety system conformance and the effectiveness of the PHSMS, respecting the confidentiality and privacy of all individuals in accordance with Clause 4.2.5.

The purpose of performance monitoring and measurement is to obtain qualitative and quantitative measurements of
a) the psychological health and safety of the organization (including promotion, prevention, and intervention efforts); and
b) organizational conformance to this Standard, including process evaluation.

Note: *Evaluation is best planned in advance of implementation so that appropriate data requirements can be identified and subsequently included in the evaluation results.*

4.5.2 Monitoring and measurement

4.5.2.1
Performance monitoring and measurement shall
a) determine the extent to which the PHSMS policy, objectives, and targets are being met;
b) provide data on PHSMS performance and results;
c) determine whether the day-to-day arrangements for hazard and risk identification, assessment, minimization, and elimination or control are in place and operating effectively; and

d) provide the basis for decisions about improvements to psychological health and safety of the workplace and the PHSMS.

Note: *See Clause 4.3.5 for data sources.*

Both qualitative and quantitative measures appropriate to the needs, size, and nature of the organization shall be developed in consultation with workers and, where applicable, their representatives. Such assessments shall be carried out by competent persons.

4.5.2.2

Monitoring and measurement activities shall be recorded. Monitoring and measurement shall include the requirements of the PHSMS and the results of the following, as applicable:

a) leadership engagement with the PHSMS;
b) baseline assessment of psychosocial risk factors;
c) a baseline assessment of other workplace determinants of psychological health (e.g., environmental, physical, job requirement, staffing levels);
d) psychological injury and illness statistics;
e) return-to-work programs;
f) aggregated data from health risk assessments; and
g) aggregated analysis of the results of investigations or events.

4.5.3 Internal audits

The organization shall establish and maintain an internal audit program to conduct audits at planned intervals to determine whether the PHSMS

a) conforms to the requirements of this Standard and to the psychological health and safety system requirements established by the organization; and
b) is effectively implemented and maintained.

Note: *The audit can be scalable to the size, nature, and complexity of the organization. See Annex E for a sample audit tool and CAN/CSA-ISO 19011 for guidelines for managing systems.*

The internal audit program should include the criteria for auditor competency, the audit scope, the frequency of audits, the audit methodology, and reporting.

The audit results, audit conclusions, and any corrective action plans shall be documented and communicated to affected workplace parties, including workers and worker representatives, and those responsible for corrective action.

The organization shall consult with workers and, where applicable, their representatives on auditor selection, the audit process, and the analysis of results.

The management responsible for the activity being audited shall ensure that corrective actions are taken to address any non-conformance with the organization's PHSMS or this Standard identified during the audit.

4.5.4 Preventive and corrective action

The organization shall establish and maintain preventive and corrective action procedures to

a) address PHSMS non-conformances and inadequately controlled hazards and their related risks;
b) identify any newly created hazards resulting from preventive and corrective actions;
c) expedite action on new or inadequately controlled hazards and risks;
d) track actions taken to ensure their effective implementation; and
e) implement initiatives to prevent recurrence of hazards.

The organization shall take into account input from PHSMS performance monitoring and measurement, recommendations from workers and worker representatives, PHSMS audits, and management reviews when determining preventive and corrective actions.

5 Management review and continual improvement

5.1 Review process

The organization shall establish and maintain a process to conduct scheduled management reviews of the PHSMS. The review process should address the degree to which the goals of a psychologically healthy and safe workplace are being achieved.

The review process shall include

a) a review and analysis of key outcome data (e.g., audit results, evaluation/outcomes data);
b) an assessment of the level of conformance of the PHSMS to this Standard;
c) a detailed review of findings that are considered significant; and
d) organizational and other reporting requirements.

5.2 Outcome of the review process

The outcome of the review process shall include

a) opportunities for improvement and, where deficiencies/variances are identified, corrective actions to be implemented;
b) review and update of the organizational policies and procedures specific to or related to the PHSMS;
c) review and update of objectives, targets, and action plans; and
d) communication opportunities to enhance understanding and application of results.

Annex preamble

All annexes are informative and provide guidance where needed and are in keeping with the voluntary nature of this Standard. Some annexes also provide useful resources and links. The information provided is evidence informed.

Annex A (informative)
Background and context

Note: *This Annex is not a mandatory part of this Standard.*

A.1 General
This Annex provides background information relevant to the development of this Standard.

A.2 Basic human needs and mental health at work
Note: *This information comes from a variety of research studies and has been agreed to through the consensus process of the Technical Committee to assist in the implementation of this Standard.*
Human needs related to basic physiological and security needs must first be identified and controlled in order that factors related to higher level human needs can be satisfied. The framework for establishing and sustaining a psychologically healthy and safe workplace should ensure that these human needs are included in all aspects of the managed approach to meet the intent and requirements of this Standard. The human needs for consideration in this standard framework include, as a minimum, the following:

Human needs	Workplace needs met	Workplace needs unmet
Physical and psychological safety	Workers feel that they are in a working environment that meets their psychological and physical health and safety needs. Managers and co-workers work together proactively to develop and implement measures so that legitimate health and safety needs, rights, and risks are recognized and accommodated to a reasonable degree.	When there are consistent failures to recognize and accommodate the legitimate health and safety needs, and the rights and claims of workers, risks to psychological health can arise. Perceptions of such failure can lead to feelings that the work is inherently unsafe and risks are ignored or inadequately controlled by choice or ignorance by workplace decision makers. Herzberg et al. (2009) (see Annex G) refers to these needs as maintenance factors that need to be in place to allow the individual to strive for higher level human needs. When not present, the need to regain physical safety and security becomes paramount, preventing the individual from satisfying higher level human needs.
Self-worth, esteem, and social justice	Workers' skills are engaged to the point at which they experience challenge. This point of optimal stress or equilibrium has been widely documented and accepted. Also, workers perceive that work is distributed in an equitable manner [see Fairness, Clause A.3.2 d)].	Where job demands consistently and chronically exceed worker skill levels or exploit them beyond what would be considered reasonable for the type of undertaking, or where work is distributed inequitably, risks to psychological health can arise.

(Continued)

Human needs	Workplace needs met	Workplace needs unmet
Self-efficacy, accomplishment, and autonomy	Workers have sufficient discretion over and participation in decisions about the means, manner, and methods of their work consistent with the intrinsic nature of the work sufficient to allow them to feel part of the enterprise and not just cogs in a wheel. Control in this context includes "voice", meaning the perceived freedom to express views or feelings appropriate to the situation or context.	When discretion over the means, manner, and methods of their work (including voice) is withheld from workers for no good business reason, risks to psychological health can arise.
Self-esteem	Workers feel rewarded in terms of praise, recognition, and acknowledgement of and credit for their contributions.	When praise, recognition, and acknowledgement/credit are withheld from workers for no good business reasons, risks to psychological health can arise.
Social justice or self-worth	Workers feel that they are treated with fairness and respect by their managers and co-workers in that their reasonable needs, rights, and claims are recognized and accommodated to a reasonable degree consistent with the expected norms of the business or industry.	When there are consistent failures to recognize and accommodate the legitimate needs, rights, and claims of workers, risks to psychological health can arise. Perceptions of such failure can arise from feelings that the work is inequitably distributed and that decisions leading to this distribution are biased.
Belonging	Workers experience support from supervisors and colleagues with regard to advice, direction, planning, and provision of technical and practical resources and information (to the extent that they are available within the organization) and this is offered as a matter of course without prejudice or favour.	When such support is withheld from workers by choice rather than because of some systematic constraint within the organization, risks to psychological health can arise.

Note: *All of these human needs are addressed in the workplace factors described in Clause 4.3.4.2.*

A.3 MHCC *The Road to Psychological Safety*

A.3.1 General

Legal, scientific, and social foundations for a National Standard should be considered for psychological safety in the workplace.

MHCC *The road to psychological safety* addresses two related topics:

In Part 1, "Convergence of Legal and Scientific Evidence", it is shown that the convergence of evidence from legal and scientific sources creates a powerful case for the development of a National Standard for psychological health and safety built around the five key factors related to the organization of work and to the management of people.

In Part 2, "Fountains of Wellbeing, Cascade of Harm: Workplace Standards and Population Mental Health", it is proposed that the introduction of a National Standard can be expected in the long run to have positive social benefits since the health or harm that is generated in the workplace does not remain there but migrates into families, communities, and society at large in the form of either social capital or social exhaust. The very existence of this migration establishes psychological safety at work as a national health policy issue. Efforts to measure the extent of this migration are reported.

The paper is available at
http://www.mentalhealthcommission.ca/SiteCollectionDocuments/Workforce_2011/The_Road_to_Psychological_Safety.pdf

A.3.2 Overview

Over the last 20 years there have been significant developments in both law and various scientific disciplines with regard to defining the need for, and characteristics of, what has been termed the psychologically safe workplace.

A psychologically safe workplace, for these purposes, is defined as one that is the result of every reasonable effort being made to protect the mental health of employees.

Evidence from several disciplines identifies a key set of workplace factors that alone, but more typically in combination, can contribute to either the promotion or defeat of psychological safety. These factors can be conceptualized as human needs that, when unmet or thwarted, can become risk factors for psychological distress (Vézina 2010)*. *The Road to Psychological Safety* focuses upon the risk factor side of the equation.

From this perspective, law and science agree that risks to mental health are more likely to arise and contribute to a psychologically unsafe workplace in the following situations:

a) **Job demands and requirements of effort:** Job demands consistently and chronically exceed worker skill levels or exploit them beyond what would be considered reasonable for a particular type of undertaking, or where work is distributed inequitably.
b) **Job control or influence:** Discretion over the means, manner, and methods of their work (including "voice" or the perceived freedom to express views or feelings appropriate to the situation or context) is withheld from workers by choice rather than because of the intrinsic nature of the work.
c) **Reward:** Praise, recognition, acknowledgement, and credit are withheld from workers for no good business reasons.
d) **Fairness:** There is consistent failure or refusal to recognize and accommodate the reasonable needs, rights, and claims of workers. Perceptions of such failure can arise from feelings that decisions are made without attention to due process.
e) **Support:** Support with regard to advice, direction, planning, and provision of technical and practical resources and information (to the extent that they are available within the organization) is withheld from workers by choice rather than because of some systematic constraint within the organization.

Psychological safety is in fact a concept that connects the dynamics of the workplace to the health, resilience, and well-being of society at large.

**Vézina, M. "Santé mentale au travail: répondre à des besoins humains fondamentaux", in* Travail et Santé. *Ed. Y. Clot and D. Lhuilier. Éditions Érès 2010, pp. 169–174.*

A.4 Workplace factors affecting psychological health and safety

Note: *The factors discussed in this Clause were adapted from GuardingMinds@Work, with the exception of the thirteenth factor, protection of physical safety, which was added for the purposes of this Standard.*

The thirteen workplace factors listed in Figure A.1 are organizational or systemic in nature and therefore within the influence of the workplace. These factors are described more fully in Items 1) to 13). Addressing them effectively has the potential to positively impact worker mental health, psychological safety, and participation. This in turn can improve productivity and bottom line results.

Note: *While psychological health and psychological safety are deserving of equal protection, it is important to note that, from a strategic perspective, ensuring safety (in the sense of preventing psychological harm) is a pre-requisite to the promotion of health.*

The statements for each factor are provided to help users think about the current state of their own workplace. The more strongly users agree with the statements, the more likely users have a psychologically safe workplace:

1) **Organizational culture** is a mix of norms, values, beliefs, meanings, and expectations that group members hold in common and that they use as behavioural and problem-solving cues. Organizational culture could enhance the psychological safety and health of the workplace and the workforce when it is characterized by trust, honesty, respect, civility, and fairness or when it values, for example, psychological and social support, recognition, and reward.

   An organization with good organizational culture would be able to state that

   a) all people in the workplace are held accountable for their actions;

b) people at work show sincere respect for others' ideas, values, and beliefs;
c) difficult situations at work are addressed effectively;
d) workers feel that they are part of a community at work; and
e) workers and management trust one another.

2) **Psychological and social support** comprises all supportive social interactions available at work, either with co-workers or supervisors. It refers to the degree of social and emotional integration and trust among co-workers and supervisors. It refers also to the level of help and assistance provided by others when one is performing tasks. Equally important are the workers' perceptions and awareness of organizational support. When workers perceive organizational support, it means they believe their organization values their contributions, is committed to ensuring their psychological well-being, and provides meaningful support if this well-being is compromised.

An organization with good psychological and social support would be able to state that

a) the organization offers services or benefits that address worker psychological and mental health;
b) workers feel part of a community and that the people they are working with are helpful in fulfilling the job requirements;
c) the organization has a process in place to intervene if an employee looks distressed while at work;
d) workers feel supported by the organization when they are dealing with personal or family issues;
e) the organization supports workers who are returning to work after time off due to a mental health condition; and
f) people in the organization have a good understanding of the importance of worker mental health.

3) **Clear leadership and expectations** is present in an environment in which leadership is effective and provides sufficient support that helps workers know what they need to do, explains how their work contributes to the organization, and discusses the nature and expected outcomes of impending changes. There are many types of leadership, each of which impacts psychological safety and health in different ways. The most widely accepted categorizations of leadership are instrumental, transactional, and transformational. Of these, transformational leadership is considered the most powerful. Instrumental leadership focuses primarily on producing outcomes, with little attention paid to the "big picture," the psychosocial dynamics within the organization, and unfortunately, the individual workers. Transformational leaders are seen as change agents who motivate their followers to do more than what is expected. They are concerned with long-term objectives and transmit a sense of mission, vision, and purpose. They have charisma, give individual consideration to their workers, stimulate intellectual capabilities in others, and inspire workers.

An organization with clear leadership and explicit expectations would be able to state that

a) in their jobs, workers know what they are expected to do;
b) leadership in the workplace is effective;
c) workers are informed about important changes at work in a timely manner;
d) supervisors provide helpful feedback to workers on their expected and actual performance; and
e) the organization provides clear, effective communication.

4) **Civility and respect** is present in a work environment where workers are respectful and considerate in their interactions with one another, as well as with customers, clients, and the public. Civility and respect are based on showing esteem, care, and consideration for others, and acknowledging their dignity.

An organization with good civility and respect would be able to state that

a) people treat each other with respect and consideration in the workplace;
b) the organization effectively handles conflicts between stakeholders (workers, customers, clients, public, suppliers, etc);
c) workers from all backgrounds are treated fairly in our workplace; and
d) the organization has effective ways of addressing inappropriate behaviour by customers or clients.

5) **Psychological demands** of any given job are documented and assessed in conjunction with the physical demands of the job. Psychological demands of the job will allow organizations to determine whether any given activity of the job might be a hazard to the worker's health and well being. When

hazards are identified, organisations consider ways of minimizing risks associated with identified job hazards through work redesign, analyst of work systems, risk assessment, etc. The assessment of psychological demands should include assessment of time stressors (including time constraints, quotas, deadlines, machine pacing, etc.); breaks and rest periods; incentive systems (production bonuses, piece work, etc.); job monotony and the repetitive nature of some work; and hours of work (overtime requirements, 12 h shifts, shift work, etc.).

An organization with a good psychological demands assessment process for its workers would be able to state that

a) the organization considers existing work systems and allows for work redesign;
b) the organization assesses worker demand and job control issues such as physical and psychological job demands;
c) the organization assesses the level of job control and autonomy afforded to its workers;
d) the organization monitors the management system to address behaviours that impact workers and the workplace;
e) the organization values worker input particularly during periods of change and the execution of work;
f) the organization monitors the level of emphasis on production issues;
g) the organization reviews its management accountability system that deals with performance issues and how workers can report errors; and
h) the organization emphasizes recruitment, training, and promotion practices that aim for the highest level of interpersonal competencies at work.

6) **Growth and development** is present in a work environment where workers receive encouragement and support in the development of their interpersonal, emotional, and job skills. Such workplaces provide a range of internal and external opportunities for workers to build their repertoire of competencies, which will not only help with their current jobs, but will also prepare them for possible future positions.

An organization with good growth and development would be able to state that

a) workers receive feedback at work that helps them grow and develop;
b) supervisors are open to worker ideas for taking on new opportunities and challenges;
c) workers have opportunities to advance within their organization;
d) the organization values workers' ongoing growth and development; and
e) workers have the opportunity to develop their "people skills" at work.

7) **Recognition and reward** is present in a work environment where there is appropriate acknowledgement and appreciation of workers' efforts in a fair and timely manner. This includes appropriate and regular acknowledgements such as worker or team celebrations, recognition of good performance and years served, and/milestones reached.

An organization with a good recognition and reward program would be able to state that

a) immediate supervision demonstrates appreciation of workers' contributions;
b) workers are paid fairly for the work they do;
c) the organization appreciates efforts made by workers;
d) the organization celebrates shared accomplishments; and
e) the organization values workers' commitment and passion for their work.

8) **Involvement and influence** is present in a work environment where workers are included in discussions about how their work is done and how important decisions are made. Opportunities for involvement can relate to a worker's specific job, the activities of a team or department, or issues involving the organization as a whole.

An organization with good involvement and influence would be able to state that

a) workers are able to talk to their immediate supervisors about how their work is done;
b) workers have some control over how they organize their work;
c) worker opinions and suggestions are considered with respect to work;
d) workers are informed of important changes that can impact how their work is done; and
e) the organization encourages input from all workers on important decisions related to their work.

9) **Workload management** is present in a work environment where assigned tasks and responsibilities can be accomplished successfully within the time available. This is the risk factor that many working Canadians describe as being the biggest workplace stressor (i.e., having too much to do and not enough time to do it). It has been demonstrated that it is not just the amount of work that makes a difference but also the extent to which workers have the resources (time, equipment, support) to do the work well.

   An organization with good workload management would be able to state that

   a) the amount of work workers are expected to do is reasonable for their positions;
   b) workers have the equipment and resources needed to do their jobs well;
   c) workers can talk to their supervisors about the amount of work they have to do;
   d) workers' work is free from unnecessary interruptions and disruptions; and
   e) workers have an appropriate level of control over prioritizing tasks and responsibilities when facing multiple demands.

10) **Engagement** is present in a work environment where workers enjoy and feel connected to their work and where they feel motivated to do their job well. Worker engagement can be physical, emotional, and/or cognitive. Physical engagement is based on the amount of exertion a worker puts into his or her job. Physically engaged workers view work as a source of energy. Emotionally engaged workers have a positive job outlook and are passionate about their work. Cognitively engaged workers devote more attention to their work and are absorbed in their job. Whatever the source, engaged workers feel connected to their work because they can relate to, and are committed to, the overall success and mission of their company.

    Engagement should be seen as a result of policies, practices, and procedures for the protection of worker psychological health and safety. Engagement is similar to, but is not to be mistaken for, job satisfaction, job involvement, organizational commitment, psychological empowerment, and intrinsic motivation.

    An organization with good engagement would be able to state that

    a) workers enjoy their work;
    b) workers are willing to give extra effort at work if needed;
    c) workers describe work as an important part of who they are;
    d) workers are committed to the success of the organization; and
    e) workers are proud of the work they do.

11) **Balance** is present in a work environment where there is acceptance of the need for a sense of harmony between the demands of personal life, family, and work. This factor reflects the fact that everyone has multiple roles: as workers, parents, partners, etc. This complexity of roles is enriching and allows fulfillment of individual strengths and responsibilities, but conflicting responsibilities can lead to role conflict or overload.

    An organization with good balance would be able to state that

    a) the organization encourages workers to take their entitled breaks (e.g., lunchtime, sick time, vacation time, earned days off, parental leave);
    b) workers are able to reasonably meet the demands of personal life and work;
    c) the organization promotes life-work harmony;
    d) workers can talk to their supervisors when they are having trouble maintaining harmony between their life and work; and
    e) workers have energy left at the end of most workdays for their personal life.

12) **Psychological protection** is present in a work environment where workers' psychological safety is ensured. Workplace psychological safety is demonstrated when workers feel able to put themselves on the line, ask questions, seek feedback, report mistakes and problems, or propose a new idea without fearing negative consequences to themselves, their job, or their career. A psychologically safe and healthy organization actively promotes emotional well-being among workers while taking all reasonable steps to minimize threats to worker mental health.

    An organization with good psychological protection would be able to state that

    a) the organization is committed to minimizing unnecessary stress at work;
    b) immediate supervisors care about workers' emotional well-being;
    c) the organization makes efforts to prevent harm to workers from harassment, bullying, discrimination, violence, or stigma;

d) workers would describe the workplace as being psychologically healthy; and
e) the organization deals effectively with situations that can threaten or harm workers (e.g., harassment, bullying, discrimination, violence, stigma, etc).

13) **Protection of physical safety** is present when a worker's psychological, as well as physical safety, is protected from hazards and risks related to the worker's physical environment.

An organization that protects physical safety would be able to state that

a) the organization cares about how the physical work environment impacts mental health;
b) workers feel safe (not concerned or anxious) about the physical work environment;
c) the way work is scheduled allows for reasonable rest periods;
d) all health and safety concerns are taken seriously;
e) workers asked to do work that they believe is unsafe, have no hesitation in refusing to do it;
f) workers get sufficient training to perform their work safely; and
g) the organization assesses the psychological demands of the jobs and the job environment to determine if it presents a hazard to workers' health and safety.

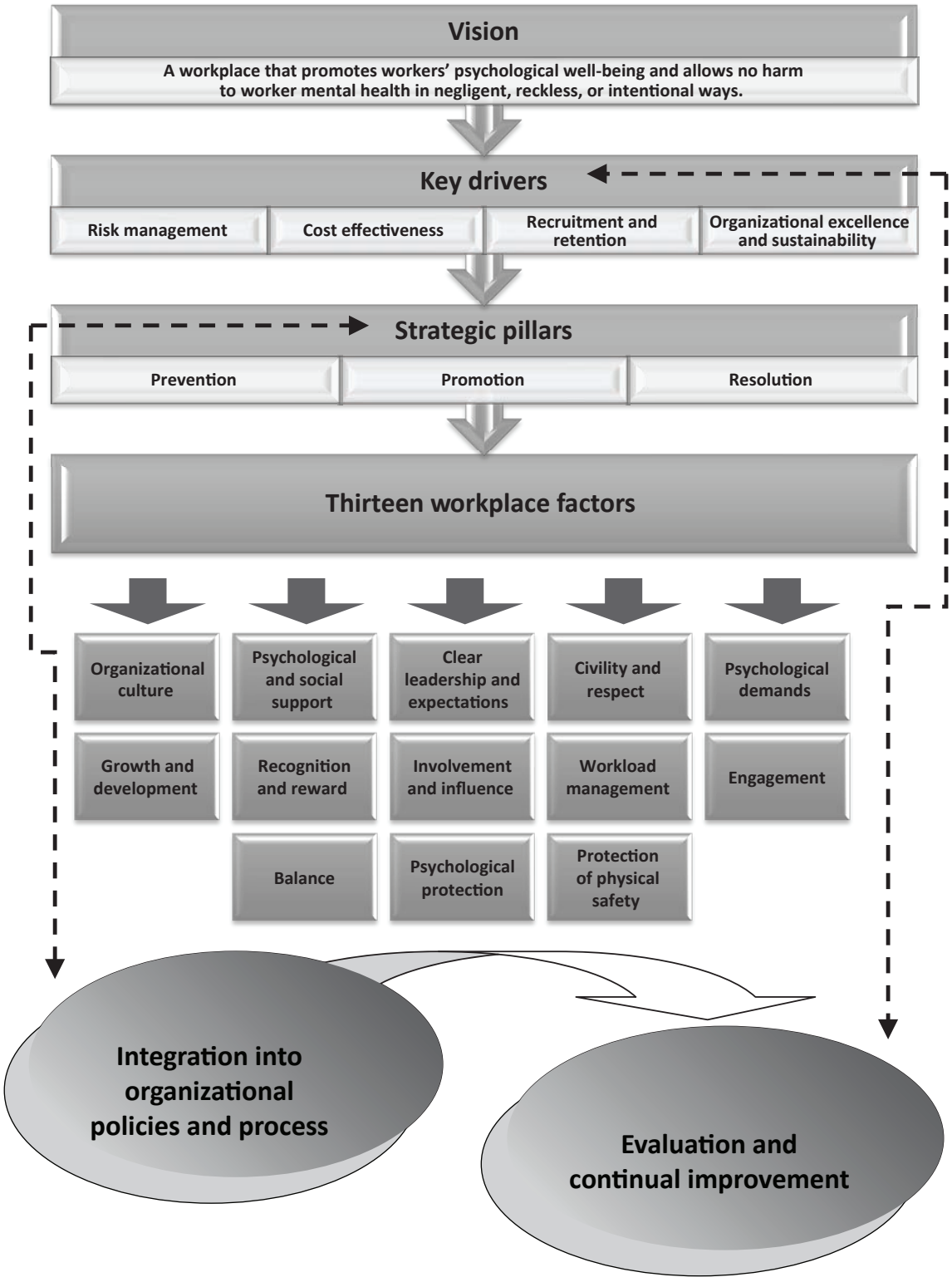

Figure A.1
Model of a planned approach to address thirteen workplace factors known to impact psychological health
(See Clause A.4.)

Annex B (informative)
Resources for building a psychological health and safety framework

Notes:
1) *This Annex is not a mandatory part of this Standard.*
2) *Clauses B.4 and B.5 refer to the corresponding Clauses found in the main body of this Standard.*

B.1 General

Annex B provides the user with additional resources that can assist in the development and implementation of the organization's psychological health and safety management system. The resources found in this Annex are available at no cost, from credible sources, and practical for application in the majority of organizations. These are provided to help begin discussion about how to comply with this Standard and not as a definitive list. Many other resources and tools are available and many more will be developed following publication of this Standard.

Note: *In this Standard, the term "workers" includes employees, supervisors, managers, leaders, contractors, service providers, volunteers, and students (see Clause 3 for a complete definition of the term "worker").*

For any new initiative, some background information can be helpful in explaining why this process can be beneficial for the organization.

B.2 The *Leadership Framework for Advancing Workplace Mental Health*

This Mental Health Commission of Canada (MHCC) website will take the user through the business case for creating a mentally healthy workplace. Included in this website are tools and information that can be used to implement strategies. It provides a business case, strategic direction, and sample policies, as well as functioning as a guide in identifying a champion and in the accountability that each department can assume in the implementation of a workplace mental health program. This website can assist users their own approaches to creating a workplace mental health program:
http://mhccleadership.ca/index.html.

B.3 The Shain Reports on *Psychological Safety in the Workplace — A Summary*

A summary and bibliography of the Shain Reports including "Stress at Work", "Mental Injury and the Law in Canada", and "Tracking the Perfect Legal Storm". These reports were commissioned by the MHCC to understand jurisprudence in Canada related to psychological safety in the workplace:
http://www.mentalhealthcommission.ca/SiteCollectionDocuments/workplace/Shain%20Report%20Summary%20April%2018%20EN.pdf

B.4 Psychological health and safety management system

B.4.1 General

Note: *See Clause 4.1.*

Psychological health and safety should become an integral part of all operations of the organization. This means that all workers, including managers, have a role to play. For example, psychological health and safety is embedded in the way people interact with one another on a daily basis and is part of the way decisions are made and communicated.

A report generated by a group of expert stakeholders who came together to look at the implications of Dr. Martin Shain's paper entitled "Tracking the Perfect Legal Storm: Converging systems create mounting pressure to create the psychologically safe workplace" provides a framework to integrate the approach across the employment lifecycle:
http://workplacestrategiesformentalhealth.com/display.asp?l1=7&l2=187&d=187

B.4.2 Commitment, leadership, and participation

Note: *See Clause 4.2.*

Visible commitment and ongoing support from leadership is a key element of success for any long term initiative. Active participation of workers (including all levels of management) in the process is necessary to develop and sustain success. Refer to the following resources regarding leadership:

- *A Leadership Framework for Advancing Workplace Mental Health*
  A framework to help senior leaders delegate responsibility and accountability for psychological health and safety throughout the organization:
  http://www.mhccleadership.ca/
- *You As A Leader*
  Practical steps for senior leaders to build credibility, respect, fairness, pride, and camaraderie within the workforce:
  http://workplacestrategiesformentalhealth.com/display.asp?l1=7&l2=84&d=84
- *The Union's Role in Workplace Mental Health*
  Action plans that help outline strategies for union representatives and employers in unionized workplaces to help address situations where mental health is a factor in a professional and effective manner:
  http://workplacestrategiesformentalhealth.com/display.asp?l1=7&l2=98&d=98
- Leadership info from *Health and Safety Executive* website
  Roles expectations and tips for all levels of an organization including unions:
  http://www.hse.gov.uk

B.4.3 Planning

Note: *See Clause 4.3.*

While there are many tools, surveys, and approaches that can be used to assess risk, it is important to also provide a safe environment to engage staff in discussions about issues, aspirations, or concerns on an on-going basis. The people whose concerns are being addressed should be the active participants in identifying the issues and workable responses. This increases the chance of long-term commitment to the ultimate solutions as well as contributing to a sense of being valued.

Determining where to begin to address concerns or improve the workplace is the first step and comes from identification of the issues. Once this has been done, the planning stage will move into how those issues will be addressed. Engaging the workforce in both of these stages can also improve both process and outcomes.

The planning process should ideally move beyond hazards and risks towards psychological health promotion. This approach aims to enhance positive mental health among workers and optimize organizational performance.

Refer to the following resources regarding planning:

- *Appreciative Inquiry Commons: Practice & Management*
  This website provides an overview of the appreciative inquiry approach to organizational development and change. This approach focuses on organizational strengths and how to enhance

them, based on a particular set of assumptions. The website provides links to practical tools and methodologies for appreciative inquiry:
http://appreciativeinquiry.case.edu/practice/default.cfm

- *20 Questions for Leaders*
  A list of 20 overarching questions that organizational leaders can ask themselves about psychological safety in their workplaces:
  http://workplacestrategiesformentalhealth.com/display.asp?l1=180&l2=191&d=191
- *Making the Business Case*
  An approach to assessing the risks and returns of addressing workplace mental health issues, which includes suggested measures to assess costs of mental ill health in the workplace:
  http://workplacestrategiesformentalhealth.com/display.asp?l1=3&l2=37&d=37
- *Self-Assessment Tool for Measuring the Costs of Work Stress*
  A highly detailed method for determining the costs of work stress provided by Health Canada:
  http://www.hc-sc.gc.ca/ewh-semt/occup-travail/work-travail/_cost-cout/index-eng.php
- *Healthy Workplace Strategies: Creating Change and Achieving Results*
  Dr. Graham Lowe provides an action plan for transformational change towards a healthier workplace:
  http://www.grahamlowe.ca/documents/93/Hlthy%20wkpl%20strategies%20report.pdf
- *Health and Safety Executive — What are the Management Standards*
  A perspective from the Health and Safety Executive of Great Britain on how to (step-by-step) develop a management plan for managing stress in the workplace. A number of resources are listed here with multiple areas of focus e.g., statistics, research, case studies, publications, videos, and tools:
  http://www.hse.gov.uk/stress/standards/index.htm
- *Health Impact of Psychosocial Hazards at Work: An Overview*
  World Health Organization provides information and resources to help assess and consider psychosocial risks in the workplace:
  http://whqlibdoc.who.int/publications/2010/9789241500272_eng.pdf
- *Stress Management Competence Indicator Tool*
  To help managers and supervisors consider the impact their behaviours have on the stress levels of workers:
  http://www.hse.gov.uk/stress/mcit.pdf
- *Guarding Minds @ Work*
  A set of free tools that will allow identification of psychosocial risks in the organization, a selection of evidence-based interventions, and a way to measure success:
  http://www.guardingmindsatwork.ca/
- *On the Agenda*
  A series of discussion frameworks that include facilitator's guides and PowerPoint presentations that support team engagement in a conversation about solutions to improve workplace mental health:
  http://workplacestrategiesformentalhealth.com/display.asp?l1=186&d=186

B.4.4 Implementation

Note: *See Clause 4.4.*

The key to successful and sustainable implementation of this Standard is the involvement of those affected by the changes. Engagement of workers in the development and planning stages must be carried over into the implementation stage to ensure that the changes are communicated effectively and that the process of implementation does not cause undue stress or harm. If done well, the process of implementation can enhance psychological health and safety by increasing a sense of belonging, building positive relationships, and securing commitment to the system.

Refer to the following resources regarding implementation:

- *Workplace Mental Health Promotion: A How-To Guide*
  Case studies of successful approaches to improving workplace mental health are included on this site along with other resources:
  http://wmhp.cmhaontario.ca/case-studies

- *A Leadership Framework for Advancing Workplace Mental Health*
  To establish actions and accountabilities by roles, go to the Roles by Department section:
  http://www.mhccleadership.ca/identify-a-champion/actions-by-department/
- *Workplace Strategies for Mental Health*
  A website with multiple resources, programs and tools that address awareness, communication, change management, prevention, promotion, crisis response, management training, and employee resources:
  www.workplacestrategiesformentalhealth.com

B.4.5 Evaluation and corrective action

Note: *See Clause 4.5.*

Without monitoring and measuring, there is no way to determine if the interventions or strategies used are successful. This puts the initiatives at risk when another priority comes along. Without evidence of efficacy or plans for improvement, the approaches might be dropped or forgotten.

See Annex E for a sample audit tool.

B.5 Management review and continual improvement

Note: *See Clause 5.*

Frontline staff and middle management can work hard to make improvements to the psychological health and safety in the workplace. If senior management is unaware of these changes, then decisions or strategies can be developed that risk inadvertently decreasing the gains made. Ensuring that the approach to psychological health and safety is operationalized into strategic and operational business plans is also a reason to involve senior management in regular review of the progress. Keeping senior management aware of the initiative can have a positive impact in terms of ongoing sustainability through a continual improvement process.

See Annex E for a sample audit tool.

Annex C (informative)
Sample implementation models

Note: *This Annex is not a mandatory part of this Standard.*

C.1 Staged implementation levels

For some organizations, implementing this Standard in its entirety might be impractical in terms of the size or range of locations, organizational readiness, available resources, or simply a wish to move more incrementally towards the full implementation of this Standard.

The following are two models suggesting staged implementation of this Standard that might better suit an organization's unique needs and circumstances:

a) Commitment and engagement (see Clause C.2) — This model assumes commitment to comply with the entire Standard in four stages that build on the level of engagement of workplace stakeholders.

b) Building leadership commitment (see Clause C.3) — This model assumes that senior leadership has not yet committed to this Standard. It allows those on the front line to implement some programs or initiatives to demonstrate the value to the organization. Once senior leadership is engaged, the model suggests ways to embed the approach across the various organizational departments. The final stage closes the accountability loop through a process of continuous improvement.

C.2 Commitment and engagement

Table C.1 shows four levels of implementation corresponding to four levels of engagement and commitment by the enterprise.

Table C.1
Four levels implementation model
(See Clause C.2.)

	Level 1 Awareness/ readiness/ preparedness (in strategic plan)	Level 2 Needs/ current state assessment	Level 3 Setting goals and objectives Develop the implementation plan	Level 4 Work the plan
4.1 General	X			
4.2 Commitment, leadership, and participation				
4.2.1 General	X			
4.2.2 Commitment	X			
4.2.3 Leadership	X			
4.2.4 Participation		X		
4.2.5 Confidentiality	X			
4.3 Planning				
4.3.1 General				
4.3.2 Planning process			X	
4.3.3 Review		X		
4.3.4 Identification, assessment, and control		X		
4.3.5 Data collection		X		
4.3.6 Diversity	X			
4.3.7 Objectives and targets			X	
4.3.8 Managing change			X	
4.4 Implementation				
4.4.1 Infrastructure and resources			X	
4.4.2 Preventive and protective measures		X		
4.4.3 Education, awareness, and communication	X			
4.4.4 Sponsorship, engagement, and change management	X			
4.4.5 Implementation governance			X	
4.4.6 Competence and training			X	

(Continued)

Table C.1 (Concluded)

	Level 1 Awareness/ readiness/ preparedness (in strategic plan)	Level 2 Needs/ current state assessment	Level 3 Setting goals and objectives Develop the implementation plan	Level 4 Work the plan
4.4.7 Critical event preparedness — Individual(s)			X	
4.4.8 Critical event preparedness — Organization			X	
4.4.9 Reporting and investigations			X	
4.4.10 External parties			X	
4.5 Evaluation and corrective action				
4.5.1 Introduction		X		
4.5.2 Monitoring and measurement				X
4.5.3 Internal audits			X	
4.5.4 Preventive and corrective action				X
5 Management review and continual improvement				
5.1 Review process				X
5.2 Outcome of the review process				X

C.3 Building leadership commitment

C.3.1 Four stages model

While the ideal is to have leadership commitment from both labour and management from the outset, it is not always possible or practical. This model is for those on the frontlines of management, human resources, unions, or health, safety, or wellness who want to begin a process to build leadership commitment. This could range from a small piloting approach for a team or department to a larger initiative that one is able to undertake.

It begins with the development of programs or initiatives that can demonstrate the value of psychological health and safety approaches. It builds to some level of engagement of senior leadership and evolves over time to a more comprehensive approach.

This approach is one where the positive support and effort of both labour and management is required for success.

The stages of this model are as follows:

Stage 1 — Leveraging existing resources:
If the organization has limited time, personnel, or budget to implement this Standard, the process may begin by leveraging resources that are in the public domain. Within the organization, there might be existing knowledge and skills from workers to help start this process.

An example of implementation of Stage 1 and Stage 2 can be found in Clause C.3.2, and includes the resources that may be used. This level of the initiative needs to be documented in order for outcomes to be reported in Stage 2.

Stage 2 — Engaging leadership from labour and management:
By beginning with practical and measurable initiatives like those described in Stage 1, the organization can make a stronger case for implementing a psychologically health and safe system. Assistance in establishing and articulating a logical and compelling business case exists on *The Leadership Framework for Advancing Workplace Mental Health**, which was developed by the Mental Health Commission of Canada.

The goals at this Stage include the following:

- recruiting a champion from senior leadership to sponsor and/or support further development; and
- obtaining commitment from senior leadership in the form of strategic direction and allocation of resources.

This Stage takes the initiative from a localized effort by a few dedicated individuals to a state that has the explicit support of leadership.
*www.mhccleadership.ca

Stage 3 — Embedding across the organization:
Each department, process, or role has the potential to impact psychological health and safety. When this is considered in policy or decision-making processes across the employment lifecycle and across the organizational structure, a more substantial and sustainable success can be achieved. The publication *Elements and Priorities Towards a Psychologically Safer Workplace**, can assist at this Stage. It breaks down action items by stages such as recruiting and hiring, orientation and training, performance management, promotion, and termination.
*http://www.workplacestrategiesfor-mentalhealth.com/mhcc/pdf/WorkingTowardAPsychologicallySafeWorkplace_20101.pdf

Stage 4 — Closing the accountability loop:
Each organization will need to develop their own accountability structure, and at this Stage the following issues should be considered:

- ongoing monitoring and measuring of relevant outcomes;
- continual improvement processes; and
- recognition of psychological health and safety approaches in management performance appraisals.

One way to close this accountability loop may be to engage in one of the award processes for a mentally or psychologically healthy workplace where the process is consistent with the objectives of this Standard. The criteria for most of the awards guides the user towards the development of a sound accountability structure and the end result can be a boost for those who have made the effort to implement this Standard.

C.3.2 Example of implementation of Stage 1 and Stage 2

There are many frameworks and models available to begin an approach towards implementing a PHSMS in the workplace. No one framework or model will be ideal for every application. It is the responsibility of those in the organization to choose or modify the most appropriate and credible resources. What follows is just one example of using existing resources to advance the efforts implementing a PHSMS in the workplace:

Preparation:
Review *The Leadership Framework for Mental Health in the Workplace* at www.mhccleadership.ca for ways that this project can cascade down into different departments and roles and consider issues such as

- making the business case go forward with the strategy;
- identifying a champion (sponsor) from senior management;
- securing senior management support and strategic policy direction;
- embedding the strategy into organizational policy and procedures; and
- developing an accountability strategy to measure effectiveness.

Preparing leaders:
Before engaging in a workplace mental health strategy that involves employees in identifying issues and working towards solutions, it might be advisable to prepare the leaders, including supervisors, managers, and executives, to be part of the process.

The resource *Working Through It** includes a 1.5 hour DVD that may become part of a learning process with minimal effort on the part of the facilitator. This resource should become part of a 3-hour session in the following manner:
*http://www.gwlcentreformentalhealth.com/display.asp?l1=2&l2=17&l3=173&d=173

- Introduction of the topic (10 minutes):
  - Explain why this is an issue — turnover, absenteeism, disability, conflict, performance problems, human rights complaints, duty to accommodate, grievances, etc.
  - Share senior management's support for this strategy.
  - Be explicit that this is part of a wider strategy that includes education, training, changes in processes and procedures, development of resources, and measurement of effectiveness.
  - Discuss how they will be recognized for their efforts in this regard (why this matters to them).
- Identification of issues (10 minutes):
  - Hold a free discussion about what supervisors see (behaviours rather than symptoms) that might indicate an employee's mental health concern.
  - Ask what makes this a challenge for them (record these answers for the next phase of the work using *Managing Mental Health Matters* (MMHM): http://www.gwlcentreformentalhealth.com/display.asp?l1=7&l2=176&d=176&
- Video (60 minutes):
  Note: *Use the DVD version and click on Play All. Pause at the end of Dr. Anthony Levitt talking about Concerns with medication and before Gord Conley talks about My Experience in a Treatment Centre — approximately 60 minutes.*
  Ask participants to write down the following comments to discuss half way through the video:
  - information they learned about mental illness ("aha" moments or "I did not know that");
  - things they question or dispute from the video; and
  - one "test the team" question — they are to ask the question and see if they can stump the others.
- Break (15 minutes)
- Discussion of what they had observed so far (15 minutes)
- Resume video and ask for a continuation of the notes (50 minutes)
- Take up notes from second half and assign first module of MMHM (20 minutes)

Note: *Consider making this session part of new supervisor training.*

Review *Managing Mental Health Matters* (MMHM)*. Assign the first module and give all supervisors and managers at least two weeks to complete it during work time (with the understanding that many will prefer to do it at home or when they are not working). Explain that they will be brought together to discuss and demonstrate their understanding of the module. Arrange 1 hour sessions where as many supervisors or managers as are available can be brought together to engage in one or more of the exercises to discuss the questions and answers and to learn about any procedures that would allow them to integrate their learning into organizational processes.
*http://workplacestrategiesformentalhealth.com/display.asp?l1=7&l2=176&d=176

Repeat for each of the 5 modules and consider repeating every two years and embedding this into new supervisor training.

When the leaders are more familiar with mental health issues and how to handle them, move on to assessing the systemic or organizational factors that might be impacting employee mental health.

Assessment of workplace factors:
Depending on the circumstances of the organization, begin *Guarding Minds @ Work** with any one of the following strategies:

- Review "How to Conduct a GM@W Survey Successfully" and begin this process with the authority to conduct an employee survey.
- Consider adding the questions from the "Initial Scan" to surveys that are needed to conduct among employees if another survey would not be feasible at this time.
- Conduct the "Organizational Audit" if a survey of employees cannot be reasonably performed.

When the results are in from the survey or when the audit has been completed, determine which of the psychosocial risk factors need to be addressed first. The "Selection of Effective Actions Using a Quality Framework" may be used to help decide where to begin.
*http://www.guardingmindsatwork.ca/info/resources

Engaging the team:
To engage the team in developing solutions, approaches, and strategies to address the first issue, use the appropriate *On the Agenda* PowerPoint and Facilitator's Guide*. Review the guide and set up a time to bring the team together to create an action plan. This can be facilitated by a supervisor who feels comfortable doing this or by an HR professional or other if necessary.

This is an ongoing process of identifying issues, engaging the team in developing solutions, and working together to implement.
*http://workplacestrategiesformentalhealth.com/display.asp?l1=186&d=186

Developing solutions:
While an integral part of developing solutions is to engage the team in order to get commitment as well as compliance with the plan, it is also important to know that the strategies are cost effective, practical in the work environment, and evidence-based. Many of these types of strategies and resources can be found at www.workplacestrategiesformentalhealth.com. Whatever is decided to be addressed (such as the following), ideas, tools, and resources can be found that have already been reviewed:

- awareness of mental health issues;
- promotion of good mental health at work;
- improving the return to work strategy;
- considering more effective accommodation strategies for those with mental health issues;
- resolving workplace issues;
- psychological health and safety;
- healthier approaches to performance and change management;
- addiction; and
- suicide, violence, harassment, or other serious issues.

Employee Assistance Program (EAP), benefit providers, or other resources
Employee Assistance Program (EAP) is essentially a confidential and accessible one-on-one short-term counselling and coaching approach to identify and help resolve problems experienced by workers and their family members. Examples of reasons for which individuals access EAPs include psychological, family, financial, work-related, and substance abuse/misuse problems.

If the organization has a benefit or health care plan provider or an EAP, check to see what they offer in terms of training or education around the issues of concern to the workplace. Some might be able to provide useful workplace services. These might be at no extra cost or minimal cost.

These could include reports on usage of the services by category of problem, number of sessions, or duration of assistance. There might be training available, on site or web-based, on particular topics of interest that can help prevent or mitigate emerging psychological injuries or illnesses.

For more information on EAPs, visit www.easna.org .

Accessing resources
Some organizations and government agencies offer resources at low cost or no cost that can help creating a strategy. Consider contacting the resources in the community to see what is offered.

Annex D (informative)
Implementation scenarios for small and large enterprises

Note: *This Annex is not a mandatory part of this Standard.*

D.1 Small enterprise scenario

In the following case study, the enterprise might not comply with this Standard in its entirety but uses this Standard to make workplace improvements and to make it psychologically safer.

Scenario:
Joe owns a small independent mechanical garage. He has 10 employees and his wife contributes to the business administration. Recently, he has noticed that employee morale is low, the working environment negative, and there are high rates of absenteeism among his employees. Joe has decided that he needs to do something to improve the psychological working environment and he hopes to employ this Standard. The following steps might be used:
Note: *These steps are not linear. They may be adjusted or blended to meet the needs of the organization. This process can be quick (i.e., a matter of a few hours) or it might require more time to implement depending on the size and complexity of the organization.*

Step 1: Problem recognition (see Clause 4.2.1):
- Joe has decided that there is room for improvement regarding psychological health and safety in his workplace.
- He now needs to involve his staff and reach an agreement that there is room for improvement within the workplace.
- He could organize a staff meeting over lunch or on a Friday afternoon to discuss problem areas in the work setting.
- If the staff agree that something needs to be done about the workplace problems (i.e., poor morale, high absenteeism, and negative working environment) then Joe must ensure that they agree with his plan to use CAN/CSA-Z1003/BNQ 9700-803 to make these changes.
- If Joe's staff accepts to implement and participate in this process, then they may move on to the next step; if not, Joe must conduct further assessment of the workplace barriers.

Step 2: Policy statement and commitment:
- Joe develops a written policy statement to set the tone for his workplace (see Clause B.2. See also Clause 4.2.2). Sample policy statements:
  - "Joe's Garage considers the mental health and psychological safety of its employees to be as important as other aspects of health and safety. Joe's Garage is committed to supporting a mentally healthy workplace through appropriate policies, programs and services" or
  - "Joe's Garage aspires to become a model organization for optimizing the health of its employees, and believes that the physical and mental health, well-being and safety of employees are key aspects of organizational success and sustainability. To this end, Joe's Garage is committed to working collaboratively with all of its employees to create and sustain a psychologically and physically healthy and safe work environment".
- He communicates this policy with his workers (e.g., by verbally telling them, posting on a bulletin board, email if available, etc.)
- Joe takes a leadership role to address the psychological concerns in his company. [See Annex A *Leadership Framework for Advancing Workplace Mental Health*, *You as a Leader*, and *Leadership info from HSE website* (see Clause B.4.2). See also Clause 4.2.3].

Step 3: Worker participation (see Clause 4.2.4):

- It is important to ensure that Joe's employees are not only open to Joe implementing this Standard, but also that they are willing and interested in actively participating in its implementation. Joe may seek out participation in a variety of ways:
  - requesting that workers volunteer to sit on a psychological health and safety management committee;
  - having workers elect a liaison;
  - if the work force is small enough, engaging all employees in meetings; or
  - selecting a worker to act as a liaison with the staff.

Step 4: Planning and assessing needs (see Clause 4.3):

- The needs assessments may be conducted in a variety of ways (see Clause 4.3.3):
  - If Joe is a verbal person and prefers this type of communication, he may use the *Appreciative Inquiry Commons* (see Clause B.4.3).
  - If Joe prefers to use a tool that will provide immediate feedback, he may use *Guarding Minds at Work* (see Clause B.4.3).
  - Other assessment options are available under *Planning* (see Clause B.4.3).
  - Joe may develop an independent assessment tool or use an alternative resource.
  - If Joe is unable to find the underlying causes of the problem in the workplace using one of the above strategies, he may enlist the help of an external body, such as an independent consultant.
  - Joe may also collect data such as absenteeism, payroll, incidents, stress leaves, employee turnover, etc.
- Once Joe and the employees have identified the barriers in the workplace, they need to set realistic goals for change (see Clause 4.3.4):
  - Example: If Joe finds that working alone is a concern for his employees (i.e., hazard identification), he may set a goal to ensure there are always two staff working together (i.e., elimination of hazard). If extra staffing is not feasible, Joe may set goals using preventative and protective measures to control the hazard associated with working alone (i.e., always keeping the door locked).
  - If Joe finds that there are high levels of mental health concerns in this work place, he may consider establishing an Employee Assistance Program (EAP) or reviewing his current benefit package for coverage related to psychological treatment. Although the cost of an EAP is usually affordable, it can vary greatly for small-sized organizations. Joining other organizations in the community and forming a consortium might make it more affordable. Alternatively, Joe may find resources in his community/online and post these on a staff bulletin board. For example, he may include his local Public Community Mental Health Services, Crisis line, Canadian Mental Health Association, Family Services, Addiction Services, etc.

Step 5: Implementation (see Clause 4.4):

- Joe must communicate his assessment findings to his staff. For example, he might hold a health and safety meeting, staff meeting, or even have a discussion over lunch. Doing this reinforces employee participation and provides staff with an opportunity to become actively involved.
- Once barriers have been identified during the assessment process, Joe and his staff must select a specific goal to address (see Clause 4.3.6). Some examples include employees having concerns regarding working alone, lack of barriers between an irate customer and themselves, poor morale due to frequent customer conflict, etc.
- For the purpose of this example, customer conflict will be explored (see *Workplace Mental Health Promotion: A How to Guide,* Clause B.4.4).
- Joe and his employees might decide that there are always two staff working when clients come to pick up their car (see Clause 4.4.2). They might create a rule that the doors remain locked when only one employee is servicing vehicles. Joe could install a counter to create a barrier between clients and staff (preventative measure).

- Although Joe cannot ensure that his clients will be satisfied, he can create a reporting system to address customer conflict. For example, Joe could have his employees record the date and time of the incident and a brief description of the client's complaint (see Clause 4.4.9). Alternatively, Joe could amend his health and safety incident form to capture these events. This provides staff the ability to actively participate in the program and also allows Joe to examine trends in dissatisfaction so he can better address complaints and reduce further conflict.
- Joe may also discuss the PHSMS with some of his customers to obtain feedback regarding the program and solicit their participation (see Clause 4.4.10).

Step 6: Evaluation and corrective action (see Clause 4.5):
- A review of the program's success may be achieved using any of the following tools or independent resources (see Clause 4.5.2):
  - asking staff their perception of the plan regarding successes and areas needing improvement;
  - tracking incident numbers (might require a new reporting system mentioned above); or
  - using a staff suggestion box to further support employee participation.
- Joe may use the Sample Audit Tool in Annex E (see Clause 4.5.3).

Step 7: Management review (see Clause 5):
- Joe meets with his committee or employee liaison to discuss suggestions, incidents, feedback, etc.
- Joe can also provide positive feedback at this meeting.
- Joe commits to an action plan with annual review based on meeting results.

D.2 Large enterprise scenario

The following is an example of a large enterprise that already has many policies, procedures, and programs in place. It will show how implementation of this Standard can be of benefit to such an organization.

ABC Inc is a large multinational company operating several lines of business within a number of countries. It employs over 10 000 people in Canada, in every province and territory, operating both small and large retail and head office sites, with both unionized and non-unionized workplaces. ABC has a number of workplace policies and programs developed to attract and retain the talent it needs to be competitive, including robust health and safety and respectful workplace policies and associated awareness and training programs, a wellness program, several work/life balance programs, an employee and family assistance program, short- and long-term disability benefit programs, a diversity and employment equity program, an employee Ombudsman, and well-established career development and talent management processes. It offers multiple channels for employees to voice concerns, including an anonymous hot line. ABC's employee opinion surveys indicate that its workforce is highly engaged.

ABC considers that its programs currently do much to foster a psychologically healthy workplace and wants to ensure that it remains competitive in this respect, using this Standard to do so.

Note: *These steps are not linear. They may be adjusted or blended to meet the needs of the organization. Large complex organizations will look to integrate psychological health and safety in existing programs, and leverage existing communication and reporting processes.*

Step 1: Problem recognition (see Clause 4.2.1):
- ABC has decided to review its policies, programs, and processes against this Standard to ensure it is competitive in the labour market.
- The challenge ABC faces is to obtain worker input from its diverse and dispersed workplaces. It could use existing committees, employee representatives, and employee resource groups as sources of input. It could request input through questions on an employee opinion survey. It could review and analyse reported concerns or employee feedback on internal social media sites.
- ABC reviews this input against its existing programs and policies to determine whether there are gaps or issues that implementation of this Standard might resolve.
- ABC could use similar sources to obtain worker agreement on implementation of this Standard.

Step 2: Policy statement and commitment :

- ABC has many internal stakeholders whose input is required for the policy statement, as well as many existing general policy statements that could anchor a policy statement under this Standard. ABC could establish a group of key stakeholders, including Health and Safety Committee members, to review existing policies and programs and develop a statement consistent with this Standard.
- ABC uses its usual communication channels to communicate the policy statement to its workers.

Step 3: Staff participation (see Clause 4.2.4):

- ABC may ensure participation in a variety of ways:
  - using existing employee committees and representatives;
  - using existing or establishing new employee resource groups;
  - requesting volunteers for a new psychological health and safety committee; or
  - using existing internal social media sites.

Step 4: Planning and assessing needs (see Clause 4.3):

- ABC may conduct the needs assessments in a variety of ways (see Clause 4.3.3):
  - using any of the tools suggested by this Standard;
  - consulting with an expert; or
  - reviewing data sources (absenteeism and attrition rates, EAP use, disability claims, opinion survey engagement results, investigation outcomes, employee ombudsman reports, etc.).
- Once ABC has identified gaps or barriers, it determines appropriate and realistic goals for change (see Clause 4.3.4). For example, if ABC finds high levels of mental health concerns in its work place, it could develop and implement training programs, tools, and resources for managing mental health issues in the workplace.

Step 5: Implementation (see Clause 4.4):

- ABC must communicate the assessment findings to its workers. It may use its usual communication channels (for example, the way it communicates employee opinion survey results to its workers) or develop a specific communication resource for this purpose.
- If multiple gaps were identified during the assessment process, ABC and its workers must prioritize specific goal(s) to address (see Clause 4.3.6) and develop an implementation plan.
- For example, if managing mental health issues in the workplace is the goal selected, ABC could develop awareness and training programs, and tools and resources for managers and employees repurposing/refreshing existing resources where appropriate.
- ABC may decide that mandatory, general training is warranted throughout its organization, or target specific areas for mandatory training with supplemental needs based training available as required.
- ABC could highlight its EAP program on mental health, encourage discussion with leadership, and spotlight success stories, providing opportunities for worker feedback.

Step 6: Evaluation and corrective action (see Clause 4.5):

- A review of the program's success may include employee opinion survey results, disability claim statistics, complaint/investigation outcomes, etc.
- ABC's internal audit group could be engaged to develop an audit program consistent with the requirements of this Standard.

Step 7: Management review (see Clause 5):

- ABC could ensure appropriate management review by including a summary of the program and its results in existing workplace reporting.

Annex E (informative)
Sample audit tool

Note: *This Annex is not a mandatory part of this Standard.*

E.1

Table E.1 is a sample audit tool that may be used by organizations to conduct internal audits. This audit tool may be modified to suit the size, nature, and complexity of the organization. The audit tool may also function as a "gap analysis" tool to highlight those areas that require further work to meet the requirements of this Standard.

Most organizations that implement this Standard will do so over a period of time. This Standard addresses different aspects of the subject at three levels of commitment, from more demanding to less demanding, that will ultimately reflect the maturity of an organization with respect to its ability to implement this Standard:

a) requirements (expressed with "shall" throughout the body of this Standard), which are mandatory aspects that are required in order to implement this Standard;
b) recommendations (expressed with "should" throughout the body of this Standard), which suggest aspects that are deemed valuable for full implementation of this Standard but not at the same level as requirements; and
c) options, which reflect best practices and are considered as "nice to have" parts of the PHSMS.

The column labelled "Level" in Table E.1 indicates those audit questions that relate to the Item categories "a", "b", and "c".

Table E.1
Sample audit tool

(See Clause E.1.)

	Level	Yes	No	Findings	Comments
1. Psychological health and safety management system (PHSMS) policy; leadership; participation					
1.1 Responsibilities and authorities related to the PHSMS must be defined and communicated throughout the organization.	a				
1.2 A policy statement (alone or incorporated as part of another relevant policy) endorsed by senior management should refer to psychological health and safety as it applies to the organization.	a				
1.3 The policy statement must reflect the organization commitment to • Establish, promote, and maintain a PHSMS. • Align with stated organizational values and ethics. • Establish and implement a process to evaluate the effectiveness of the system and implement changes. • Delegate the necessary authority to implement the system. • Ensure involvement of workers/worker representatives in the development, implementation, and continual improvement of the system. • Provide ongoing resources. • Ensure regular evaluation and review. • Respect the principles of mutual respect and cooperation.	a				
1.4 Organizational leadership must demonstrate the following qualities: • Reinforce the development and sustainability of a psychologically healthy and safe workplace environment. • Support line management. • Establish key objectives for continual improvement. • "Walk the talk". • Ensure psychological health and safety is part of decision-making processes. • Engage workers/worker representatives.	a				

(Continued)

Table E.1 (Continued)

	Level	Yes	No	Findings	Comments
1.5 The organization must ensure participation through • engaging stakeholders in regular dialogue; • engaging workers/worker representatives in policy development, data generation, and planning. • encouraging worker/worker representative participation in programs; • encouraging worker/worker representative in the evaluation process; and • ensuring results of the evaluation process are communicated and follow-up action plans are available.	a				
1.6 The organization must engage the OHS committee/worker representatives in defining their involvement in the PHSMS.	a				
1.7 Confidentiality of persons must be respected, including removal of identifying material on relevant documents.	a				
1.8 The organization has considered development of a specific PHSMS Committee.	c				
1.9 The organization must encourage worker/worker representative participation by • providing time and resources to participate in the PHSMS program; • identifying and removing barriers to participation; and • involving and training in relevant aspects of the PHSMS.	a				
2. Planning					
2.1 The organization's planning process must include • plans to manage workplace psychological health and safety, including assessment of worker health impact, financial impact and organizational policy/processes promoting good psychological health; • a collective vision of a psychologically healthy workplace with specific goals for reaching the vision and a plan for ongoing process monitoring for continual improvement; • assessment of the strengths of the existing psychological health and safety strategy; and	a				

(Continued)

Table E.1 (Continued)

	Level	Yes	No	Findings	Comments
• recognition and identification of current practices that are already protecting and promoting psychological health and safety.					
2.2 The organization must review its approach to managing and promoting psychological health and safety in the workplace and to assess conformance with the requirements and recommendations in this Standard.	a				
2.3 The organization must have a defined data collection process that respects privacy requirements.	a				
2.4 The organization must maintain a record of all data collected and information on its sources and share results as required with the OHS committee.	a				
2.5 The organization makes use of multiple sources of data in their planning process.	c				
2.6 The data collection process must ensure that privacy is protected by removal of personal identifiers and aggregation of data.	a				
2.7 The organization must develop, implement, and maintain a risk management process that includes • hazard identification and processes to eliminate hazards where possible; • risk assessment for each identified hazard; • preventive and protective measures to control risks; and • a priority process reflecting the size, nature, and complexity of the hazard and risk and also, where possible, respecting the traditional hierarchy of risk control.	a				
2.8 The organization must assess their occupational health management system for compatibility with the requirements of this Standard.	a				

(Continued)

Table E.1 (Continued)

	Level	Yes	No	Findings	Comments
2.9 The following factors have been assessed: • psychological support; • organizational culture; • clear leadership and expectations; • civility and respect; • psychological job demands; • growth and development; • recognition and reward; • involvement and influence; • workload management; • engagement; • work/life balance; • psychological protection from violence, bullying and harassment; • protection of physical safety; and • other chronic stressors as identified by workers.	c				
2.10 The organization should identify and assess opportunities for promoting psychological health.	b				
2.11 The organization must consider the unique needs of a diverse population and solicit input when these needs are relevant to achieving the goals of this Standard.	a				
2.12 The organization must consider workplace factors that can impact the ability of diverse populations to stay at work or return to work.	a				
2.13 The organization should encourage individual workers to seek assistance internally or externally when needed.	b				
2.14 The organization must take steps to link workers in need to internal resources and should also take steps to link workers to community or other resources.	a, b				
2.15 The organization must document the PHSMS objectives and targets for relevant functions and levels within the organization.	a				

(Continued)

Table E.1 (Continued)

	Level	Yes	No	Findings	Comments
2.16 Objectives and targets should be • measurable; • consistent with the PHSMS policy and commitment to PHSMS, compliance with legal requirements and other requirements, and commitment to continual improvement; • based on past reviews, including past performance measures and any work-related psychological health and safety hazards, risks, the result of the data collection, and identification and assessment of psychological workplace factors, management system deficiencies, and opportunities for improvement that have been identified; • determined after consultation with workers, consideration of technological options, the organization's operational and business requirements; and • reviewed and modified according to changing information and conditions, as appropriate.	b				
2.17 The organization's objectives and targets should reinforce existing strengths and promote new opportunities for improving psychological health and safety.	b				
2.18 The organization must establish and maintain a plan for achieving its objectives and targets, including • designation of responsibility for achieving objectives and targets; and • identification of the means and time frame within which the objectives and targets are to be achieved.	a				
2.19 The organization must establish, implement, and maintain a system to manage changes that can affect psychological health and safety.	a				
2.20 The system in Item 2.19 should include aspects on • communication between stakeholders about the changes; • information sessions and training for workers and worker representatives; and • support as necessary to assist workers in adapting to changes	b				

(Continued)

Table E.1 (Continued)

	Level	Yes	No	Findings	Comments
3. Implementation and operation:					
3.1 The organization must provide and sustain the infrastructure and resources needed to achieve conformity with this Standard.	a				
3.2 The organization should recognize that • workplace parties possess sufficient authority and resources to fulfill their duties related to this Standard; • workplace parties possess the knowledge, authority, and abilities to integrate psychological health and safety into management systems, operations, processes, procedures, and practices; and • persons with roles as specified in this Standard possess knowledge, skills, and abilities to carry out their roles (e.g., auditing, training, assessment, analysis, etc.).	b				
3.3 The organization establishes and sustains processes to implement preventive and protective measures to address the identified hazards and risks.	a				
3.4 The organization has implemented preventive and protective measures that reflect the following priorities: • eliminating the hazard; • implementing controls to reduce the risks related to hazards that cannot be eliminated; • implementing use of personal protective equipment in applicable circumstances; and • implementing processes to respond to and provide support for issues that can impact psychological health and safety, whether they relate to organizational factors, or to other factors, such as personal factors.	a				
3.5 The organization must establish and sustain processes to • Provide information about factors in the workplace that contribute to psychological health and safety, and how to reduce hazards and risks that potentially cause psychological harm, and how to enhance factors that promote psychological health.	a				

(Continued)

Table E.1 (Continued)

	Level	Yes	No	Findings	Comments
• Ensure stakeholder education, awareness, and understanding of the nature and dynamics of stigma, psychological illness, safety, and health. • Communicate to stakeholders existing policies and available supports. • Communicate to stakeholders processes available when issues can impact psychological health and safety. • Communicate to stakeholders information about the psychological health and safety system and related plans and processes. • Include stakeholder ideas, concerns, and input for consideration. Ensure communication throughout the monitoring and review process (see Clause 4.5) to all workplace parties.					
3.6 The organization has established processes to support effective and sustained implementation, including • sponsorship by senior leadership and leadership at all levels of the organization; • engagement on the part of stakeholders; and • assessment and application of change management principles throughout planning and implementation.	a				
3.7 The organization must establish • clear responsibilities and accountabilities for effective implementation; • governance processes that support effective implementation and communication plans; and • documentation requirements.	a				
3.8 The organization must establish and sustain processes that ensure confidentiality and privacy rights are respected and protected.	a				

(Continued)

Table E.1 (Continued)

	Level	Yes	No	Findings	Comments
3.9 The organization must establish and sustain ongoing resources to • Determine expectations and minimum requirements of workers and in particular those in leadership roles (e.g., supervisors, managers, workers representatives, union leadership) to prevent psychological harm, promote psychological health of workers, and address problems related to psychological health and safety. • Provide orientation and training to meet requirements for Clause 4.4.6.	a				
3.10 The organization should establish and sustain processes to • Provide accessible coaching and supports as required, recognizing the potential complexities of psychological health and safety situations, the unique needs of the individuals affected, and the skills needed. • Assess and address competence of those in leadership roles specific to Item 3.9.	b				
3.11 The organization must establish and sustain processes to • identify potential critical events where psychological suffering, illness, or injury is involved, or likely to occur, while respecting confidentiality and privacy of all parties; • provide response and support, including consideration of specialized external supports; • provide related training for key personnel involved in critical event response; and • ensure there are opportunities for debriefing and for revising guidelines for critical events as applicable.	a				
3.12 The organization must establish and sustain processes to • ensure the psychological health and safety risks and impacts of critical events are assessed; • manage critical events in a manner that reduces psychological risks to the extent possible and that supports ongoing psychological safety;	a				

(Continued)

Table E.1 (Continued)

	Level	Yes	No	Findings	Comments
• incorporate learnings from critical events into established plans related to the psychological health and safety system; and • ensure there are opportunities for reviewing and for revising guidelines for critical events as applicable.					
3.13 The organization must establish and maintain procedures for reporting and investigating work-related psychological health and safety incidents. These procedures must include • establishing roles and responsibilities of all parties participating in the investigation process; • practices that foster a psychologically safe environment that allows workers to report errors, hazards, adverse events, and close calls; • a commitment to appropriate accountability, looking first at system factors that contributed to the error or adverse event; • actions to mitigate any consequences of work-related psychological injuries, illnesses, acute traumatic events, chronic stressors, fatalities (including suicides), attempted suicides, and psychological health and safety incidents; • the identification of the immediate and underlying cause(s) of such incidents and the implementation of recommended corrective and preventive actions; and • an assessment of effectiveness of any preventive and corrective actions taken.	a				
3.14 Work-related psychological health and safety incident investigations should • be carried out by persons who are experienced in psychological injury and incident investigation; • be carried out by persons impartial and who are perceived to be impartial by all parties; • be carried out with the participation of the appropriate workplace parties; and • respect the privacy and confidentiality of involved parties, and other relevant legislation.	b				

(Continued)

Table E.1 (Continued)

	Level	Yes	No	Findings	Comments
3.15 Investigations of cause(s) of work-related psychological health and safety incidents must identify any failures in the PHSMS and must be documented.	a				
3.16 Recommendations must be developed and, along with the investigation's results, must be communicated to the workplace parties.	a				
3.17 Recommendations must form the basis of corrective action and must be included in the management review process and contribute to the continual improvement of the PHSMS.	a				
3.18 The organization must establish and sustain processes to • make external parties and their personnel aware of the organization's policies and expectations related to protecting the psychological health and safety of the organization's workers; and • address any issues or concerns identified.	a				
4. Evaluation and corrective action					
4.1 The organization must establish and maintain procedures to monitor, measure, and record psychological health and safety and the effectiveness of the PHSMS, respecting the confidentiality and privacy of all individuals.	a				
4.2 The organization must assess organizational conformance to this Standard, including an evaluation of the processes associated with the implementation of this Standard.	a				
4.3 The organization's performance monitoring and measurement approach: • determines the extent to which the PHSMS policy, objectives, and targets are being met; • provides data on PHSMS performance and results; • determines whether the day-to-day arrangements for hazard and risk identification, assessment, minimization, and elimination or control are in place and operating effectively; and	a				

(Continued)

Table E.1 (Continued)

	Level	Yes	No	Findings	Comments
• provides the basis for decisions about improvements to psychological health and safety of the workplace and the PHSMS.					
4.4 Qualitative and quantitative measures (appropriate to the needs, size, and nature of the organization) must be developed in consultation with workers (and where applicable, their representatives) and must be carried out by competent persons.	a				
4.5 Monitoring and measuring results must be recorded and include the following, as applicable: • leadership engagement with the PHSMS; • baseline assessment of psychosocial risk factors; • baseline assessment of other workplace determinants of psychological health (e.g., environmental, physical, job requirement, staffing levels); • psychological injury and illness statistics; • return-to-work programs; • aggregated data from health risk assessments; and • aggregated analysis of the results of investigations or events.	a				
4.6 The organization must establish and maintain an internal audit program to conduct audits at planned intervals to determine whether the PHSMS • conforms to the requirements of this Standard and to the psychological health and safety system requirements established by the organization; and • is effectively implemented and maintained.	a				
4.7 The internal audit program must include criteria for • auditor competency; • the audit scope; • the frequency of audits; • the audit methodology; and • reporting requirements.	a				

(Continued)

Table E.1 (Continued)

	Level	Yes	No	Findings	Comments
4.8 The audit results, audit conclusions, and any corrective action plan must be documented and communicated to affected workplace parties, including workers and worker representatives, and those responsible for corrective action.	a				
4.9 The organization must consult with workers and, where applicable, their representatives on auditor selection, the audit process, and the analysis of results.	a				
4.10 Management responsible for the activity being audited must ensure that corrective actions are taken to address any non-conformance with the organization's PHSMS or this Standard identified during the audit.	a				
4.11 The organization must establish and maintain preventive and corrective action procedures to • address PHSMS non-conformances and inadequately controlled hazards and their related risks; • identify any newly created hazards resulting from preventive and corrective actions; • expedite action on new or inadequately controlled hazards and risks; • track actions taken to ensure their effective implementation; and • implement initiatives to prevent recurrence of hazards.	a				
5. Management review:					
5.1 The organization must establish and maintain a process to conduct scheduled management reviews of the PHSMS, including • review and analysis of key outcome data (e.g., audit results, evaluation/outcomes data); • assessment of the level of conformance of the PHSMS to this Standard; • a detailed review of findings that are considered significant; and • organizational and other reporting requirements.	a				

(Continued)

Table E.1 (Concluded)

	Level	Yes	No	Findings	Comments
5.2 The review process should address the degree to which the goals of a psychologically healthy and safe workplace are being achieved.	b				
5.3 The outcome of the review process must include • opportunities for improvement and, where deficiencies/variances are identified, corrective actions to be implemented; • review and update of the organizational policies and procedures specific to or related to the PHSMS; • review and update of objectives, targets, and action plans; and • communication opportunities to enhance understanding and application of results.	a				

Annex F (informative)
Discussion of relevant legislation or regulation
(as of September 2011)

Note: *This annex is not a mandatory part of this Standard.*

F.1 Seven major trends in law referring to workplace mental health

Martin Shain, in his report *Tracking the Perfect Legal Storm** suggests that providing a psychologically safe workplace is no longer something that is simply nice to do, it is increasingly becoming a legal imperative. Changes in labour laws, occupational health and safety, employment standards, workers' compensation, the contract of employment, tort law, and human rights decisions are all pointing to the need for employers to provide a psychologically safe workplace:
*http://www.mentalhealthcommission.ca/SiteCollectionDocuments/workplace/Perfect%20Legal%20Storm%20FINAL%20EN%20wc.pdf

a) **Human rights** — Courts and tribunals across the country are increasingly adding scope and definition to an employer's obligation to reasonably accommodate mental illness in the workplace. Human rights agencies in some jurisdictions have gained increased powers to issue public interest remedies that can limit employers' rights. For links to Federal and Provincial Human Rights Agencies, go to the following address and look under Resources:
www.workplacestrategiesformentalhealth.com/display.asp?l1=6&l2=79&l3=83&d=83
b) **Law of torts** — In some provinces and territories, it has been held that reasonably prudent managers should be expected to understand the effect their behaviour has on those who report to them. Failure to do so can attract liability for infliction of mental suffering. Standards vary across the country. Most jurists recognize that reckless and intentional infliction of mental suffering are actionable wrongs but disagree on the extent to which negligence is included in this framework.
c) **Workers' compensation** — In British Columbia, it has been held unconstitutional to administer and adjudicate claims for mental stress differently from those for physical injury. In Ontario, death benefits were awarded to the family of a heart attack victim resulting from mental stress to which managerial negligence contributed.
d) **Occupational health and safety** — There is an increasing recognition in at least Manitoba and Saskatchewan that mental health and psychological safety are part of the responsibility to provide a safe system of work under OHS legislation. Assessing and addressing psychological risk is becoming part of the overall hazard identification and risk management process. Some provinces have added violence and harassment explicitly to their Acts.
e) **The employment contract** — No longer is the employment contract simply an exchange of wages for services. It has now been deemed by some courts to include implied terms for psychological comfort, which go some way toward establishing the duty to provide a psychologically safe workplace within the context of the employment relationship.
f) **Employment standards legislation** — the Employment Standards developed under the *Accessibility for Ontarians with Disabilities Act* (AODA)* and the Quebec standards concerning psychological harassment† are contributing toward making freedom from harassment a normal part of the employment relationship.
*http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_05a11_e.htm
†http://www.cnt.gouv.qc.ca/en/in-case-of/psychological-harassment-at-work/labour-standards/index.html

g) **Labour law** — Even when the wording is not implicitly included, collective bargaining agreements have been deemed in some jurisdictions to contain the terms of relevant occupational health and safety statutes, which in turn have been held to include terms for the protection of mental health.

Notes:

1) *This list is provided for the purpose of general information only and is not a substitute for obtaining legal advice.*

2) *Adapted from www.workplacestrategiesformentalhealth.com*

F.2 Articles and reports on legislation and policy frameworks referring to psychological health in the workplace in Canada

Note: *This is not intended to be an exhaustive list.*

The following is a list of publications on legal issues relevant to occupational health and safety and psychosocial hazards:

Lippel, K. (2010). "Law, Public Policy and Mental Health in the Workplace". *Healthcare Papers*, 11 (Special Issue), 20-37.

> The first part of this article describes regulatory interventions, drawn from different Canadian jurisdictions, designed to reduce worker exposure to psychosocial hazards, including occupational violence, and to protect workers' mental health. It also addresses legislative provisions providing workers' compensation for mental health problems and regulatory provisions supporting the return to work of those who have been absent from work because of work-related mental health problems. The second part of the article, relying on illustrations from case law in workers' compensation claims for mental health problems have been accepted, examines ways in which law and policy can actually contribute directly or indirectly to behaviours that can lead to increasing illness and disability associated with mental health problems.

Lippel, K., and Sikka , A. (2010, March/April). "Access to Workers' Compensation Benefits and Other Legal Protections for Work-related Mental Health Problems: A Canadian Overview". *Canadian Journal of Public Health,* 101, S16-S22.

> This article reports on a study of the legal and policy framework governing access, in Canada, to workers' compensation benefits for workers who are work disabled because of mental health problems attributed to stressful working conditions and events. It also provides a brief description of legislation regulating psychological harassment in Quebec and Saskatchewan.

Lippel, K., Vézina, M., and Cox, R. (2010). "Protection of workers' mental health in Quebec: Do general duty clauses allow labour inspectors to do their job?" *Safety Science*, 1-9.

> Given that no specific provisions of the Occupational Health and Safety (OHS) Act explicitly deal with psychosocial risk factors in Quebec, occupational health and safety inspectors employed by the Commission de la santé et de la sécurité du travail (CSST) address psychosocial hazards under the Act's general duty clause. This general duty clause and related provisions require that all employers eliminate hazards at source and protect the health of workers. More specifically, they are required to ensure that the organisation of work does not adversely affect the safety or health of the worker. Since 2004, Quebec minimum standards legislation has also provided for the right of workers to an environment that is free from psychological harassment.
>
> Written from both a legal and public health perspective, this paper has two primary objectives: first, to better understand the potential and limits of the current legislative framework for the protection of mental health of workers and second, to describe how scientific knowledge related to high risk situations for the mental health of workers might inform interventions by inspectors for the protection of workers' mental health.

Lippel, K., Cox, R., and Aubé, I. (2011 December). "Interdiction du harcèlement et protection de la vie privée et des droits fondamentaux", in *JurisClasseur Québec*, series. *Droit du Travail*, *Rapports individuels et collectifs du travail*, vol. 23, Montréal, LexisNexis Canada, feuilles mobiles 2009, 187 p.

This paper analyzes the law governing the legal provisions on psychological harassment and provides a current picture of the jurisprudence of the Labour Relations Commission and adjudicators in the field of psychological harassment.

Lippel K., and Cox, R. (2011 April). "Droit de la santé au travail régissant les problèmes de santé mentale: prévention, indemnisation et réadaptation", in *JurisClasseur Québec*, series. *Droit du Travail*, Santé et sécurité du travail, vol. 27, Montréal, LexisNexis Canada, feuilles mobiles 2010, 111 p.

This paper analyzes the law governing the legal provisions governing prevention and compensation for mental health problems related to exposure to psychosocial risks at work and provides a current picture of the jurisprudence of the *Commission des lésions professionnelles* (occupational injuries commission) under the Occupational Health and safety Act, LRQ c. S-2.1 and the Industrial Accidents and Occupational Diseases Act, LRQ c. A-3.001.

Annex G (informative)
Related Standards and reference documents

Note: *This Annex is not a mandatory part of this Standard.*

G.1 General

The following is a list of standards and guides in relation to psychological health and safety that can be referred to for more information.

The purpose of this Annex is to provide users of this Standard with information on relevant standards and guidelines. Canadian standards are given priority. There is normally a charge for standards and guidelines and copies can be obtained by contacting the appropriate standards development organization.

G.2 Documents from standards development organizations

BNQ (Bureau de normalisation du Québec) [http://www.bnq.qc.ca]

BNQ 9700-800/2008
Prevention, Promotion and Organizational Practices Contributing to Health in the Workplace (Prévention, promotion et pratiques organisationnelles favorables à la santé en milieu de travail.)

> The purpose of BNQ 9700-800, also known as the "Health Enterprise Standard", is the maintenance and sustainable improvement of employees' health. The Standard calls for integration of the value of individual health into the organization's management processes. It also seeks to create favourable conditions for empowerment of individuals regarding their health and to encourage them to adopt and maintain healthy living habits. The Standard serves as a reference for a certification program administered by the BNQ.

BNQ 9700-820/2010
Work-Family Balance (Conciliation travail-famille)

> BNQ 9700-820 specifies the requirements regarding good work-family balance (WFB) practices tailored to the characteristics and realities of organizations and their employees. The Standard aims to promote WFB as an integral part of an organization's management of human resources. It applies to all types of organizations (private, public, and other) seeking to implement and maintain WFB measures and practices that match the needs expressed by both employees and organizations. The Standard (PDF) is available free of charge and it serves as a reference for a certification program administered by the BNQ.

BSI (British Standards Institution) [http://www.bsigroup.com]

BSI Publicly Available Specification (PAS) 1010: 2011
Guidance on the Management of Psychosocial Risks in the Workplace

> BSI PAS 1010 provides guidance and good practice on assessing and managing psychosocial risks at work. It covers aspects of work organization and management, work-related stress and workplace harassment. There is currently no recognized standard or official benchmark for good practice for psychosocial risk assessment and management, so the BSI standard will help assessors address this area of workplace health.

BSI Standards, the University of Nottingham, and the Institute of Work Health and Organizations were leading the development of the standard. Psychosocial risk management (the management of risks associated with work organization and the social context of work which have the potential for causing psychological or physical ill health) forms part of the European Council Directive 89/391/EEC, which stipulates the assessment and management of all types of risks to workers' health as employers' responsibility. Nottingham University will also be developing supporting training programs to assist HR managers, occupational health and safety managers, therapists, and managers of small and medium sized enterprises in applying the Standard.

BSI Publicly Available Specification (PAS) 1012
Code of Practice for the Resilience, Well-being and Returning to Work (under development)

BSI PAS 1012 is comprised of two parts. The first part provides guidance in relation to prevention or resilience in the workplace by individual employees taking personal responsibility for their own well-being. The second part lays out clear procedures to ensure that employees receive an effective return to work programme. It is anticipated that this PAS will be available sometime in late 2012.

CSA Group [http://www.csagroup.org]

CAN/CSA-Z1000–06 (R2011)
Occupational health and safety management (Gestion de la santé et de la sécurité au travail)

This National Standard of Canada specifies requirements for an occupational health and safety management system. The purpose of the Standard is to enable an organization to improve its occupational health and safety performance, and thus reduce or prevent occupational injuries, illnesses, and fatalities. The Standard is based on principles and model for a management system (Plan, Do, Check, Act).

CSA Z1002-12
Occupational health and safety — Hazard identification and elimination and risk assessment and control

CSA Z1002 provides users with guidance on how to identify hazards, assess risks, and chose appropriate controls for hazards and risks that cannot be eliminated, to ensure that risk is reduced to ensure the health and safety of workers. It augments existing OHS management systems and provide guidance to users to select appropriate assessment methods for the nature of hazards and risks under consideration. High level guidance on psychosocial hazards is included in the Standard.

CSA Z1004-12
General Workplace Ergonomics

CSA Z1004 specifies requirements and provides guidance for the systematic application of ergonomics principles to the development, design, use, management, and improvement of work systems. This is achieved through the implementation of an ergonomics process as outlined in the Standard and is applicable to all types and sizes of organizations. The Standard does not include aspects that could be considered part of a medical management program such as therapeutic or clinical interventions.

CAN/CSA-ISO 31000-10
Risk Management — Principles and Guidelines [Management du risque — Principes et lignes directrices (Adopted ISO 31000: 2009, first edition 2009-11-15)]

This is the Canadian adoption of the ISO Standard. The Standard provides internationally accepted principles for effective risk management. The Standard will help users manage risks so that they can implement and continually improve a risk management framework as an integral component of their organization's governance and management systems. Although this International Standard provides generic guidelines, it is not intended to promote uniformity of risk management across organizations. The design and implementation of risk management plans and frameworks will need to take into account the varying needs of a specific organization, its particular objectives, context, structure,

operations, processes, functions, projects, products, services, or assets and specific practices employed. It is intended that this International Standard be utilized to harmonize risk management processes in existing and future standards. It provides a common approach in support of standards dealing with specific risks and/or sectors, and does not replace those standards.

CSA Q31001-11
Implementation guide to CAN/CSA ISO 31000, Risk Management — Principles and Guidelines

This is the first edition of CSA Q31001 and was developed to supplement, and is intended to be used in conjunction with, CAN/CSA-ISO 31000. It provides further guidance relevant to the needs of Canadian stakeholders.

CAN/CSA-ISO 19011-03 (R2007)
Guidelines for Quality and/or Environmental Management Systems Auditing [Lignes directrices pour l'audit des systèmes de management (Adopted ISO 19011:2002, first edition, 2002-10-01)]

This International Standard provides guidance on the principles of auditing, managing audit programmes, conducting quality management system audits, and environmental management system audits, as well as guidance on the competence of quality and environmental management system auditors. It is applicable to all organizations needing to conduct internal or external audits of quality and/or environmental management systems or to manage an audit programme. The application of this International Standard to other types of audit is possible in principle, provided that special consideration is paid to identifying the competence needed by the audit team members in such cases.

ISO (International Organization for Standardization) [http://www.iso.org]

ISO Guide 73:2009
Risk management — Vocabulary (Management du risqué — Vocabulaire)

This ISO Guide provides the definitions of generic terms related to risk management. It aims to encourage a mutual and consistent understanding of, and a coherent approach to, the description of activities relating to the management of risk, and the use of uniform risk management terminology in processes and frameworks dealing with the management of risk. ISO Guide 73 is intended to be used by those engaged in managing risks and developers of national or sector–specific standards, guides, procedures, and codes of practice relating to the management of risk.

ISO 26000:2010
Guidance on Social Responsibility (Lignes directrices relatives à la responsabilité sociétale)

This ISO standard includes a clause requiring organizations to "strive to eliminate psychosocial hazards in the workplace, which contribute or lead to stress and illness". CSA Group and BNQ are working jointly to adopt this ISO guidance standard as a National Standard of Canada. In March 2010, ILO for the first time listed mental and behavioural disorders, post-traumatic stress disorders, and other mental disorders as a recognized occupational disease, which supports the importance of this requirement in ISO 26000.

G.3 Other documents

Consortium for Organizational Mental Healthcare (COMH). *Guarding Minds @ Work* (Protégeons la santé mentale au travail). Faculty of Health Sciences, Simon Fraser University, 2009.
[http://www.guardingmindsatwork.ca/eng/info/index]

Guarding Minds @ Work (GM@W) is a free, evidence-based strategy that helps employers protect and promote psychological safety and health in their workplace. GM@W provides a comprehensive set of resources that employers can use to easily assess and address 12 psychosocial risk (PSR) factors known to have a powerful impact on organizational health, the health of individual employees, and the

financial bottom line. The 12 PSRs were identified by researchers from the Faculty of Health Sciences at Simon Fraser University on the basis of extensive research and review of empirical data from national and international best practices. In addition, the factors were determined based on existing and emerging Canadian case law and legislation.

GM@W includes an organizational audit, multiple employee surveys, action tools, and evaluation templates. Guarding Minds @ Work is available to all employers — large or small, in the public or private sector — at no cost.

Herzberg, Frederick, Mausner, Bernard, and Bloch-Snyderman, Barbara. *The Motivation to Work*, Transaction Publishers, 2009, 180 p.

Quality work that fosters job satisfaction and health enjoys top priority in industry all over the world. This was not always so. Until recently analysis of job attitudes focused primarily on human relations problems within organizations. In this document, Herzberg examines thirty years of motivational research in job-related areas. Based on workers' accounts of real events that have made them feel good or bad on the job, the findings of Herzberg and his colleagues have stimulated research and controversy that continue to the present day. The authors surprisingly found that while a poor work environment generated discontent, improved conditions seldom brought about improved attitudes. Instead, satisfaction came most often from factors intrinsic to work: achievements, job recognition, and work that was challenging, interesting, and responsible. Frederick Herzberg and his staff based their motivation-hygiene theory on a variety of human needs and applied it to a strategy of job enrichment that has widely influenced motivation and job design strategies.

Mackillop, Malcolm J., Knight, Jamie, and Ferris-Miles, Meighan. *CLV Special Report — Investigating Harassment in the Workplace — 2nd Edition*, n.d.

Conducting an investigation into harassment in the workplace is stressful, time-consuming, and, if improperly managed, can have a serious impact on the workplace. The purpose of this Special Report is to provide the reader with a sound understanding of the legal principles that inherently come into play in every harassment complaint and investigation in the workplace, and to provide a practical and common sense approach to many of the complicated issues that typically arise during an investigation. Since publication of the first edition, *How to Conduct a Workplace Human Rights Investigation*, there have been significant health and safety-based legislative and regulatory changes, which have introduced legal concepts such as psychological harassment, bullying, workplace harassment, and workplace violence. As such, the second edition has been expanded (and the title changed) to include harassment investigations that start from a health and safety standpoint, as well as harassment investigations that are more traditionally based in human rights.

Mental Health Commission of Canada. *Psychological health and safety — An action guide for employers* (Santé et sécurité psychologiques — Guide de l'employeur), 2012.

This action guide provides a logical approach to moving forward with PH&S strategies. It walks one through the steps of planning and implementing workplace interventions to protect psychological health and safety (PH&S). The section of this Guide entitled "The P6 Framework and the ISO Format" explains the close relationship between the ideas discussed in the guidebook and this National Standard of Canada. This Guide is informed by an evolving understanding of psychological health in the workplace and specifically by two sources of knowledge: literature search and stakeholder consultation. The Guide is mainly intended for employers and HR personnel who are considering programs and policies to improve psychological health in their organizations.

World Health Organization (WHO). *Health Promotion Glossary*, 1998. [http://www.who.int/healthpromotion/about/HPR%20Glossary%201998.pdf].

The first edition of this health promotion glossary of terms was published by WHO in 1986 as a guide to readers of WHO documents and publications. It met a useful purpose in clarifying the meaning and relationship between the many terms that were not in common usage at that time. This first edition of the glossary has been translated into several languages (French, Spanish, Russian, Japanese, Italian, and German), and the terms defined have been widely used both within and outside WHO. Much has happened since the publication of the glossary and a number of terms that are central to health promotion developments have been included in this version of the health promotion glossary.

APPENDIX B

Included systematic reviews and primary studies classified according to the thirteen workplace factors known to impact psychological health according to the standard

Appendix B

Included systematic reviews and primary studies classified according to the thirteen workplace factors known to impact psychological health, taken from the Standard

Systematic Reviews

Author/ Year	1 Org Culture	2 Psych Soc Sup	3 Clear Leadership and expectations	4 Civility and Respect	5 Psych Demands	6 Growth and Development	7 Recognition and Reward	8 Involvement and Influence	9 Workload Management	10 Engagement	11 Balance	12 Psychological Protection	13 Protection of Physical Safety
Bercier 2015		x											
Cocker 2016		x											
Cooklin 2017	x	x	x									x	x
Daniels 2017			x		x			x					
Dreisen 2016		x											
Fernandez 2016	x								x				
Gillen 2017	x			x								x	
Ivandic 2017		x											
Jamieson 2016		x											
Joyce 2016		x			x								
Knight 2016		x	x		x				x	x		x	
Kuster 2017		x										x	
Lee 2014		x							x			x	
Naghieh 2015		x			x							x	
Pezaro 2017		x											
Ruotsalainen 2015	x	x											
Stratton 2017		x										x	

Primary Studies

Author/ Year	1 Org Culture	2 Psych Soc Sup	3 Clear Leadership and expectations	4 Civility and Respect	5 Psych Demands	6 Growth and Development	7 Recognition and Reward	8 Involvement and Influence	9 Workload Management	10 Engagement	11 Balance	12 Psychological Protection	13 Protection of Physical Safety
Addley 2014		x											
Allexandre 2016		x										x	
Anderson 2017		x										x	
Cieslak 2016		x										x	
Dimoff 2018		x	x									x	
Figl-Hertlein 2014												x	x
Gartner 2013		x										x	
Glass 2017		x										x	x
Gussenhoven 2017		x										x	x
Jensen 2016		x										x	
Kuehl 2014		x									x	x	
Maatouk 2018	x	x							x		x	x	
Mache 2017	x	x							x			x	
Mache 2018	x	x							x			x	
Michel 2014		x									x	x	
Milligan-Saville 2017		x	x										
Milner 2018	x	x										x	
Moffitt 2014		X	x									x	
Moll 2018		X										x	
Müller 2015		x			x				x			x	
Myers 2017		x			x				x		x	x	x
Oude Hengel 2014					x			x					x

Persson Asplund 2017		x			x				x		x	x	
Pidd 2015				x								x	
Puig-Ribera 2017		x											
Reavley 2014		x										x	
Saelida 2016		x			x							x	
Shann 2018	x	x	x									x	
Stansfield 2015	x	x			x	x							
Tonarelli 2017		x										x	
Van Berkel 2014		x										x	
Wesemann 2016					x							x	

APPENDIX C

Qualitative references retrieved from a focused search on the standard

Qualitative references retrieved from a focused search on the standard

Kalef L, Rubin C, Malachowski C, Kirsh B. Employers' perspectives on the Canadian National Standard for psychological health and safety in the workplace. Employee Responsibilities and Rights Journal. 2016;28(2):101-12.

Kunyk D, Craig-Broadwith M, Morris H, Diaz R, Reisdorfer E, Wang J. Employers' perceptions and attitudes toward the Canadian national standard on psychological health and safety in the workplace: a qualitative study. International Journal of Law and Psychiatry. 2016;44:41-7.

Malachowski C, Kirsh B, McEachen E. The sociopolitical context of Canada's national standard for psychological health and safety in the workplace: navigating policy implementation. Healthcare Policy. 2017;12(4):10-7.

Sheikh MS, Smail-Crevier R, Wang J. A cross-sectional study of the awareness and implementation of the national standard of Canada for psychological health and safety in the workplace in Canadian employers. Canadian Journal of Psychiatry. 2018:[epub ahead of print].

APPENDIX D

Links to best practices for creating psychologically healthy workplaces

Links to best practices for creating psychologically healthy workplaces

APEC Digital Hub for Mental Health. APEC best practices for psychological health and safety in the workplace [Internet]. APEC Digital Hub for Mental Health; 2018 [cited 2018 Oct 30]. Available from: https://mentalhealth.apec.org/apec-best-practices-psychological-health-and-safety-workplace.

Canadian Centre for Occupational Health and Safety (CCOHS). Mental health: psychologically healthy workplaces (e-Course) [Internet]. Hamilton, ON: CCOHS; 2018 [cited 2018 Oct 30]. Available from: https://www.ccohs.ca/products/courses/mh_psychological/.

Canadian Mental Health Association, The Health Communication Unit. Workplace mental health promotion: a how-to guide. Toronto, ON: Canadian Mental Health Association; [2010].

Chenier L. Mental health and wellness: modern solution for a 21st century challenge. Ottawa, ON: Mental Health Commission of Canada; 2017.

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Harnois G, Gabriel P. Mental health and work: impact, issues and good practices. Geneva, Switzerland: World Health Organization, International Labour Organisation; 2002.

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Pomaki G, Franche RL, Khushrushahi N, Murray E, Lampinen T, Mah P. Best practices for return-to-work/ stay-at-work interventions for workers with mental health conditions: final report. Vancouver, BC: Occupational Health and Safety Agency for Healthcare in BC; 2010.

Public Health Agency of Canada. Mental health and wellness [Internet]. Ottawa, ON: Public Health Agency of Canada; 2017 [cited 2018 Oct 30]. Available from: http://cbpp-pcpe.phac-aspc.gc.ca/public-health-topics/mental-health-and-wellness/.

Workplace Safety & Prevention Services. Mental health at work: 10 best practices from early adopters of CSA Z1003 [Internet]. Mississauga, ON: Workplace Safety & Prevention Services; 2016 [cited 2018 Oct 30]. Available from: http://www.wsps.ca/Information-Resources/Articles/Mental-health-at-work-10-best-practices.aspx.

APPENDIX E

Advancing a Strong Safety Culture in Newfoundland and Labrador A Workplace Injury Prevention Strategy 2018-2022

Advancing a Strong Safety Culture in Newfoundland and Labrador

A Workplace Injury Prevention Strategy 2018-2022

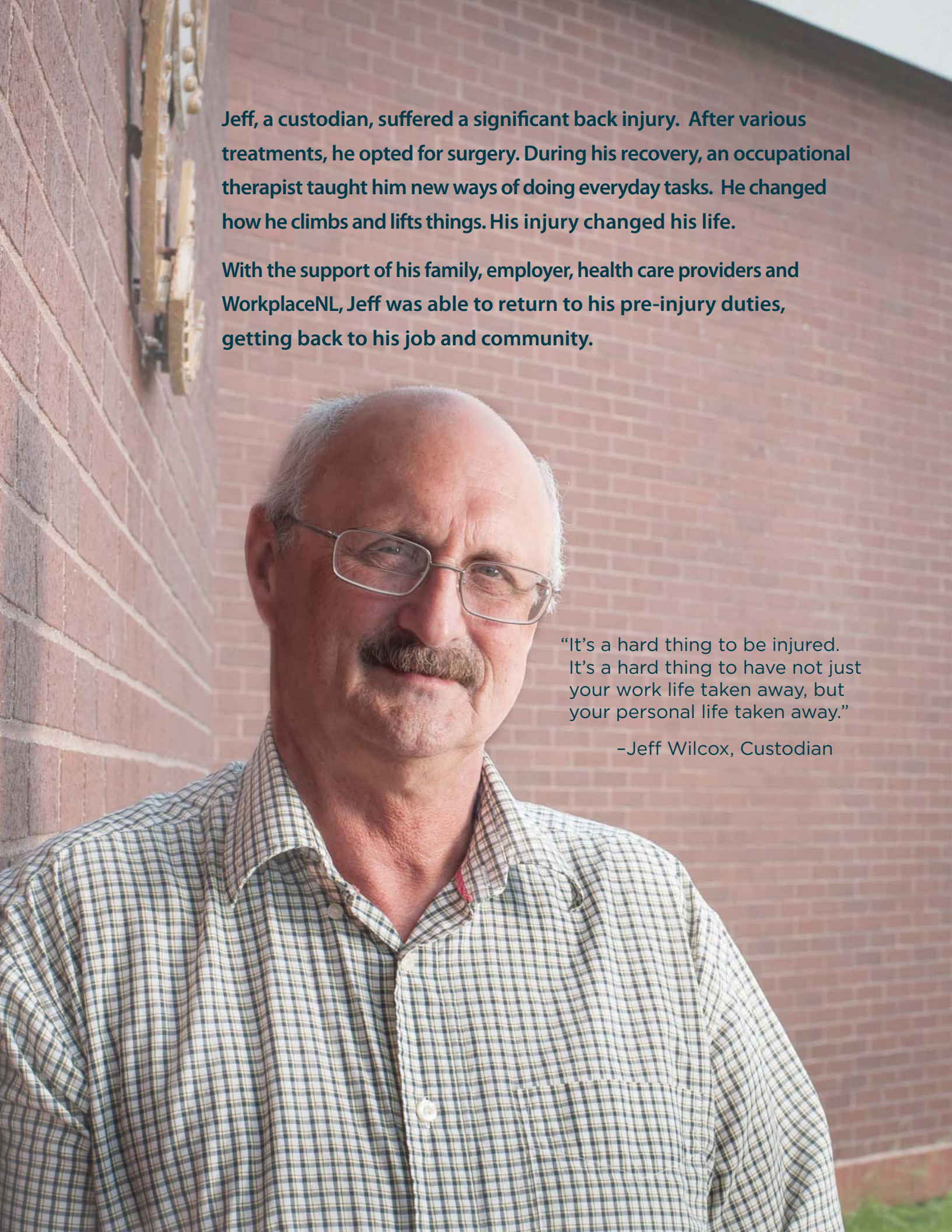
WorkplaceNL

Health | Safety | Compensation

CCUPAT AL HEALTH A AFETY

Working Safely Together

OHS



Jeff, a custodian, suffered a significant back injury. After various treatments, he opted for surgery. During his recovery, an occupational therapist taught him new ways of doing everyday tasks. He changed how he climbs and lifts things. His injury changed his life.

With the support of his family, employer, health care providers and WorkplaceNL, Jeff was able to return to his pre-injury duties, getting back to his job and community.

"It's a hard thing to be injured. It's a hard thing to have not just your work life taken away, but your personal life taken away."

–Jeff Wilcox, Custodian

Contents

WorkplaceNL
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Foreword

A Workplace Injury Prevention Strategy for Newfoundland and Labrador

I present to you a five-year workplace injury prevention strategy: Advancing a Strong Safety Culture in Newfoundland and Labrador.

This prevention strategy, developed in consultation with our injury prevention partners and stakeholders, represents an opportunity for everyone to help protect workers from hazards in the workplace. WorkplaceNL and the Occupational Health and Safety (OHS) Division, Service NL, value the relationships formed with stakeholders during this process, and we appreciate their contributions to improving occupational health and safety in workplaces throughout the province.

WorkplaceNL and the OHS Division share the common philosophy that all workplace injuries and illnesses can be prevented—and that every worker has the right to go home safely at the end of the day. We also believe that Newfoundland and Labrador is one of the safest jurisdictions in which to work. But we must do better.

Using a balanced approach between education, enforcement and well-engineered OHS programs, we can continue toward our goal of zero harm to workers. Our aim is to build a strong safety culture in our province, a culture guided by a shared vision and constructed using evidence-based approaches.

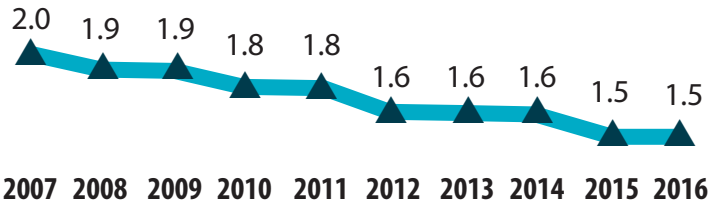
I invite you to join us in implementing this Workplace Injury Prevention Strategy. Together, we can create safe, healthy and productive workplaces in Newfoundland and Labrador.

Hon. Sherry Gambin-Walsh
Minister Responsible for WorkplaceNL
Minister of Service NL

Occupational Health and Safety System Partners in Newfoundland and Labrador

Safe and Healthy Workplaces

Lost-time Incidence Rate (LTI)
PER 100 WORKERS



Last ten years
25%
decrease in LTI
2007-2016

Injury and illness are never acceptable outcomes from work. Every Newfoundlander and Labradorian has the right to a safe and healthy workplace—the right to complete each day of employment free from harm. The effects of a workplace injury or illness can reach beyond an individual, often resulting in a loss to workers, colleagues, employers, families and the community. Every workplace injury and illness should be recognized as preventable. When attitudes shift, and the control of safety and health risks in every work task is prioritized, a strong safety culture will further develop in Newfoundland and Labrador.

Newfoundland and Labrador is a safer place to work today than at any point in our history. In 2016, the lost-time injury rate of 1.5 injuries per 100 workers represented the lowest rate in the 65-year history of WorkplaceNL, and was among the lowest lost-time injury rates in Canada for that year. We should celebrate the decades of collaboration and partnership it has taken to realize this gain.

92%

of workplaces are injury-free 2016

14

workers injured every day (on average) 2016

50%

decline in workplace fatality rate 2007-2016

21%

increase in serious injury 2007-2016

A serious injury includes an injury that:

- places life in jeopardy
- produces unconsciousness
- results in a substantial loss of blood
- fractures of an arm or leg
- results in amputation
- burns to a major portion of the body or
- causes loss of sight

However, we must continue to strive to prevent serious injury and fatalities in our workplaces. Serious injuries have increased 21 per cent over the last decade, and the workplace fatality rate for workers in Newfoundland and Labrador is among the highest in Canada.

The nature of work in our province continues to change. New mining and oil and gas developments, the resurgence of the groundfish industry, changing demographics, and new technologies bring both unique challenges and new opportunities in the management of workplace health and safety.

Leadership is fundamental to improving safety performance. The provincial government is the policy-maker, regulator and enforcer; all stakeholders, however, must work within the regulatory framework to model health and safety, and to reach beyond basic legislative compliance.

This five-year Workplace Injury Prevention Strategy builds on previous strategies. It also focuses on new initiatives in areas that were identified as priorities during stakeholder consultations. Extensive research, including an examination of best practices elsewhere, informed the development of this strategy.

The success of this prevention strategy depends on all partners—workers, employers, industry and labour leaders, government and others—coming together to strengthen the culture of safety in Newfoundland and Labrador workplaces. No person or organization can do it alone. Collective effort and strong safety leadership will better protect workers from workplace hazards, to everyone's benefit.

38%

decline in young worker injury rate (historic low) 2007-2016

33%

fewer soft-tissue injuries 2007-2016

14%

decline in occupational illness 2007-2016

Current and Emerging Issues

Workplaces are shaped by internal and external factors, including innovation, technology, research and economic conditions. As the nature of work changes, new safety and health risks emerge which may require broader control strategies or even legislative changes.

INJURY RATE

The workplace injury rate in Newfoundland and Labrador has declined 29 per cent over the last decade. This reduction can be attributed to better health and safety education, improved OHS legislation, increased enforcement and a greater development of OHS management programs and systems. Improvements in equipment design, training standards and awareness of workplace hazards have also contributed. The magnitude of annual injury-rate decreases has plateaued over the past five years, however, and a concerted effort is required to reduce the current rate even further.

SERIOUS INJURY

The serious injury rate has increased 21 per cent in Newfoundland and Labrador over the last decade. Systemic health and safety risks are not being sufficiently controlled, and immediate dangers to life and health exist in some workplaces. The number of stop work orders (523 in 2016) issued by the OHS Division is further evidence that dangerous and unsafe work is still occurring.

OCCUPATIONAL DISEASE AND ILLNESS

Preventing occupational disease and illness is a significant challenge for health and safety educators, practitioners and regulators. **In many cases, a disease is only first detected many years after a worker is exposed to a health hazard.** Advances in science, health surveillance, personal protection equipment, health-hazard awareness and understanding exposure limits are helping to protect workers.

MUSCULOSKELETAL INJURY

Musculoskeletal injuries represent 68 per cent of all workplace injuries and $85 million in claim costs annually in Newfoundland and Labrador. Repetitive work, awkward postures, static positions and overexertion must be addressed within workplaces.

Risk assessments to evaluate ergonomic hazards must be the focus of education and enforcement efforts. Through proper risk assessment, more effective controls can be implemented. Integrating technology and ergonomic best practices into the workplace will also help mitigate ergonomic risks.

ECONOMIC CLIMATE

Changes in economic activity can influence workplace injury rates. After a period of sustained economic growth, the provincial unemployment rate has recently increased to 13.4 per cent (December 2016), brought on, in part, by lower natural resource commodity prices and the completion of large industrial projects. During periods of slower economic activity, workplaces may need support to ensure safety and health hazards continue to be controlled to reduce risk, and investments in preventative maintenance and health and safety training remain high.

DEMOGRAPHICS

Newfoundland and Labrador has an aging population. As the baby-boom generation enters retirement, the demand for "new" workers is increasing. To fill this gap, more young people may be hired, and the use of temporary foreign workers may increase. New or inexperienced workers may be exposed to greater risk of injury. While the injury rate for young workers has declined to a historic low, they still face a high risk of injury in the workplace.

Older workers comprise an increasing proportion of the labour force in Newfoundland and Labrador. Many may delay retirement due to uncertain economic conditions or a shortage of labour. Traditionally, the rate of workplace injury in older workers was lower than all other age groups.

Over the past 20 years, however, older workers are being injured at the same rate as the 25-44 age group, and young workers are leading the decline in workplace injury and illness in Newfoundland and Labrador. This shift in injury rates is concerning; injuries to older workers are generally more serious in nature with longer recovery periods. Some older workers also bring the potential complication of additional health issues such as diabetes or circulatory disorders.

OHS COMMITTEE EFFECTIVENESS

Only 51 per cent of OHS committees are meeting and reporting as per their legislative responsibility. OHS committees serve a vital function in the workplace and are responsible for monitoring and supporting workplace health and safety programs. OHS committees need to be engaged to fulfill their legislative mandate and supported to perform their role.

FALLS

Working at height or walking on an elevated surface carries a high risk of injury. Certification training is required for any worker working at 3 metres or more above the ground.

The rate of falls from height has declined 31 per cent since specific training requirements were instituted in OHS legislation in 2009. Continued education about fall hazards and enforcement of standards are required to protect workers.

PSYCHOLOGICAL HEALTH AND SAFETY

The Mental Health Commission of Canada has estimated that **one in five Canadians suffer from a mental illness.** Psychological injuries, post-traumatic stress disorder (PTSD) and workplace violence pose significant challenges for workplace injury prevention. Prevention strategies for work-related PTSD include creating supportive work environments, systematic employee training and proper follow-up with employees after a critical event.

Over the past decade, the rate of workplace violence has increased from 5.2 injuries per 10,000 workers to 8.9—an increase of 71 per cent. Occupational health and safety legislation requires risk assessments to be completed for workplace violence and working alone. Unfortunately, these risk assessments are not widely employed in workplaces and more education and enforcement is required.

31%

decline in the rate of falls since mandatory training began

TECHNOLOGY

Technological change is influencing the nature of work, and the tools and equipment used to complete it. Mobile workforces, temporary labour and cloud computing are affecting traditional work patterns, and changing who may or may not be a worker. Workplaces need to manage and adapt to these changes.

For some health and safety training courses, online and mobile technologies can provide an opportunity to train workers and employers in their own space, reduce time away from work and lower course costs. Mobile application development and online programs and services are cost-effective ways to reach more employers and workers.

ATTITUDES AND BEHAVIOURS

The mindset that all work-related injuries and illnesses are preventable is necessary to create a stronger safety culture. While societal attitudes and behaviours toward occupational health and safety are changing in this regard, the view that injuries and illnesses are simply inevitable "accidents" still exists in some workplaces.

HIGH-RISK HAZARDS

Significant levels of uncontrolled risk still exist for workers who engage in traffic control, work at height, enter confined spaces or work around energized sources and power lines. While, overall, employers are providing more effective controls for more frequent, less severe hazards, more attention needs to be placed on hazards with higher risk ratings.

SOCIAL MEDIA

The traditional ways health and safety hazards are communicated to workers has changed drastically over the past decade. The reliance on social media to stay informed on issues impacting health and safety, and the immediate demand for information and action, is shaping how we communicate and engage on common issues. Workplace injury prevention efforts must adapt to these new tools and implement effective strategies to engage and educate workers.

Strategy Development

This Workplace Injury Prevention Strategy is the culmination of a 15-month process led by WorkplaceNL and the OHS Division, in consultation with safety partners and stakeholders.

The development process included a jurisdictional review of workplace injury prevention initiatives in other provinces and territories in Canada, as well as international perspectives from the United Kingdom, Australia, Sweden and New Zealand. Findings were compiled into a discussion paper, Advancing a Strong Safety Culture in Newfoundland and Labrador: Developing a Workplace Injury Prevention Plan for Newfoundland and Labrador 2018-2022, and shared with stakeholders and the public. Stakeholders and partners were invited to take part in consultation sessions to discuss the state of occupational health and safety, and provide written feedback to WorkplaceNL and the OHS Division.

This prevention strategy provides guidance toward creating a stronger safety culture in Newfoundland and Labrador. It should be used as a blueprint to impact attitudes and behaviours in the prevention of workplace injury and illness, and serve as a catalyst for change that advances a higher level of worker protection from workplace hazards.

Vision, Values and Strategic Priorities

Vision	**Healthy workers in safe and productive workplaces.**
Values	
Leadership	Every individual will perform his or her health and safety role. Everyone will work to promote workplace safety, and improve how they protect themselves and their co-workers from workplace hazards.
Transparency	Collaborations and partnerships to implement the Workplace Injury Prevention Strategy will be transparent to employers, workers and the community through annual reports and information exchange.
Accountability	Employers, workers, government, contractors and safety partners will share the responsibility for managing safety and health risks in every workplace.
Teamwork and Collaboration	A strong safety culture will be achieved by having all stakeholders working toward a shared vision of health and safety. Through effective collaboration, workers and employers will be supported in implementing effective safety programs to mitigate risk.
Innovation	Continuous safety improvements will be enhanced by challenging complacency and delivering service through technology.

Principles

The following principles will guide the implementation of this strategy:

- All workplace injuries and illnesses are preventable.
- Employers have the core responsibility to create a safe and healthy workplace.
- Safety partnerships will be developed to encourage collaboration and build on existing initiatives and activities to avoid duplication and maximize use of resources.
- Workplace injury prevention will be evidence-based and incorporate best practices.
- The safety and health needs of employers and workers will be placed at the forefront of the service delivery and policy framework.
- A shared and inclusive vision will achieve the strategic goals.
- The standards of health and safety in all industry sectors of the province will be elevated.

Strategic Goals

Employers, workers, government and safety partners will:

- Reduce the risk of workplace injury, illness and disease by protecting workers from workplace hazards.
- Reduce the human and financial costs of workplace injury, illness and disease on workers, workplaces and the community.
- Raise awareness of safety and health risks to help change safety attitudes and behaviour, and advance a strong safety culture.

Strategic Objectives

This strategy identifies five strategic outcomes and objectives that support its vision:

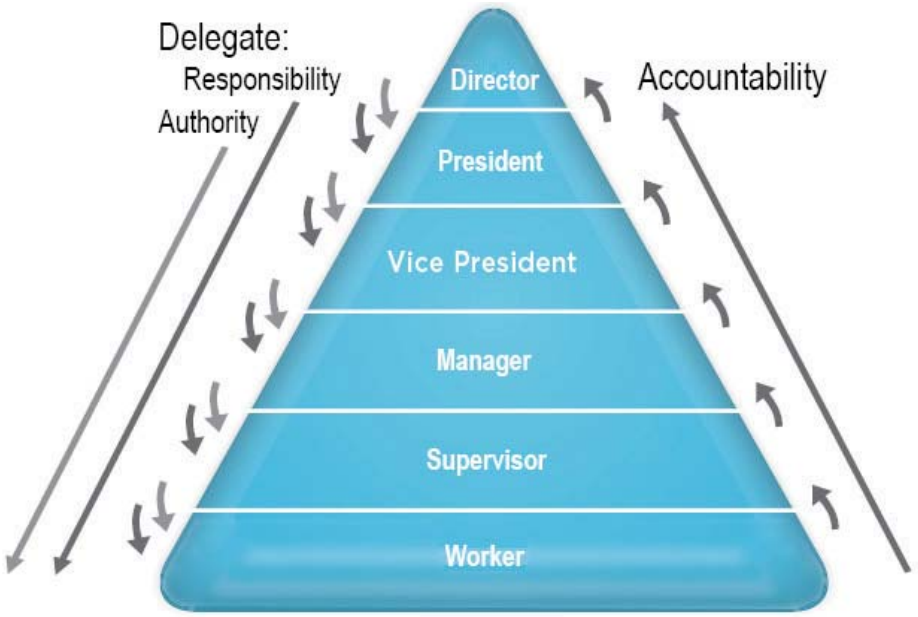
1. Safety leadership
2. Industry collaboration
3. Education and training
4. OHS programs and systems
5. Enforcement and regulatory practices

8 Injury and Illness Priorities

1. Musculoskeletal injuries 2. Occupational disease and illness 3. Falls 4. Serious injuries
5. Young workers 6. Workplace violence 7. Traffic control 8. Psychological health and safety

5-year Strategy

Basic Structure of the Internal Responsibility System
Authority, Responsibility, Accountability



1. Safety Leadership

Empowering safety advocates in the workplace

Shared Leadership and the Internal Responsibility System

A strong safety culture requires that everyone take responsibility—and be accountable—for workplace health and safety. Workers, employers and supervisors must all be leaders, and competently apply the practices outlined in their OHS management system.

The Internal Responsibility System (IRS) is the underlying philosophy of all occupational health and safety legislation in Canadian jurisdictions. Its foundation is that every person in the workplace—workers and employers—is responsible for his or her own safety and for the safety of co-workers. IRS promotes participatory leadership throughout an organization, and outlines tangible ways all parties can improve workplace health and safety. It also recognizes that workers are the best positioned to identify and address hazards, when properly supported by other system partners.

A properly functioning IRS helps create a strong safety culture and provides the capacity to prevent workplace injury and illness. It must be complemented by:

- Robust OHS policies and programs, in full compliance with legislation;
- A safe environment in which anyone can raise safety concerns; and
- A competent workforce with safety knowledge, training and experience.

OHS Committees and Worker Health and Safety Representatives/Designates

The Occupational Health and Safety Act (the Act) outlines the specific responsibilities of employers, workers, supervisors, OHS committees and Worker Health and Safety (WHS) representatives/designates. These workplace parties can demonstrate effective use of the IRS by developing, monitoring and supporting the OHS management system implemented in the workplace.

Supervisors

Supervisors and senior management need to foster an environment in which health and safety is integrated into all aspects of work: tasks, processes and systems. WorkplaceNL's new voluntary Supervisor Health and Safety Certification Training Standard, developed in 2016, can be used to educate supervisors about their legislative role in health and safety, and develop competence in leading, directing and guiding the completion of work.

Supervisors who complete standardized, regulated health and safety training will have greater knowledge of core safety principles and practices. Ultimately, this will lead to a safer work environment for workers.

51%

OHS committees active in 2016.

An engaged OHS committee helps keep you safe at work.

Objective 1

By 2022, WorkplaceNL will continue to promote and help develop safety leadership within workplaces and industry.

STRATEGIC OPPORTUNITIES

1. Support the growth and development of safety sector councils to lead industry-based certification standards and training programs.
2. Recognize safety leadership through an annual awards program for employers and workers.
3. Promote the voluntary Supervisor Health and Safety Certification Training Standard, and develop an online recertification program.
4. Use technology to actively promote health and safety, including mobile application development and other innovative online tools.

5. Enhance the Prevention and Return-to-Work Insurance Management for Employers and Employees (PRIME) Program to ensure senior leaders are engaged in implementing leading safety practices in workplaces, and to develop web services and online tools to improve data availability and decision making.

6. Strengthen social media channels to ensure relevant health and safety information is available to workplaces to make informed decisions.

7. Develop resources for employers to aid in the recognition and prevention of mental stress conditions, such as PTSD, in the workplace, including promoting the implementation of the CSA Psychological Health and Safety Standard.

8. Develop a web portal that contains learning resources and tools to engage workers and employers in safety culture development and safety leadership training.

9. Strengthen supports and learning resources for new businesses to ensure an understanding of workplace injury prevention and OHS legislation.

INDUSTRY COLLABORATION

8 Injury and Illness Priorities

1. Musculoskeletal injuries 2. Occupational disease and illness 3. Falls 4. Serious injuries
5. Young workers 6. Workplace violence 7. Traffic control 8. Psychological health and safety

2. Industry Collaboration

Advancing worker protection through innovative partnerships and integrated service delivery

Workplace injury and illness prevention relies on many stakeholders working together to support employers and workers in reducing safety and health risks.

Employer and Worker Stakeholder Organizations

The interests of employers and workers are represented by many industry and labour organizations in Newfoundland and Labrador. In particular, the Newfoundland and Labrador Federation of Labour and the Newfoundland and Labrador Employers' Council are stakeholders that influence and shape occupational health and safety legislation and policy, and play a key role in creating healthy, safe, productive workplaces.

Safety Sector Councils/ Safety Partners

In Newfoundland and Labrador, four safety sector councils currently promote occupational health and safety within industry: 1) Newfoundland and Labrador Construction Safety Association; 2) Forestry Safety Association of Newfoundland and Labrador; 3) Municipal Safety Council of Newfoundland and Labrador; and 4) Fish Harvesting Safety Association of Newfoundland and Labrador.

These organizations work with employers and workers to share best practices and educate industry about workplace hazards.

Other safety partners, including SafetyNL, Newfoundland and Labrador Occupational Safety and Health Association, and Canadian Society of Safety Engineers–Avalon Chapter, advocate for health and safety at work, at home and in the community. Each of these organizations influences health and safety legislation and controls risk by advancing health and safety practices.

Occupational Health and Safety Council

The Occupational Health and Safety Council is established pursuant to Section 12 of the Act. The duties of the council include providing advice to the Minister of Service NL on any matter relating to occupational health and safety, but especially in the administration of the Act and its regulations.

Educational Institutions, Training Providers and Community Organizations

Engaging more workers and employers in OHS requires reaching beyond the traditional OHS system. We need to develop innovative relationships with educators, municipal governments, the federal government and the private sector to increase the capacity of the system to deliver effective injury prevention programs.

Community groups, such as the Canadian National Institute for the Blind and the Canadian Hard of Hearing Association, contribute to a stronger safety culture through their work on preventing eye injury and hearing loss. In addition, many industry associations impact and shape policy, and influence the development of viable, productive workplaces.

Objective 2

By 2022, WorkplaceNL and its partners will provide the supports necessary to advance industry sector councils and industry-led safety programs and initiatives.

STRATEGIC OPPORTUNITIES

1. Work with safety sector councils to promote certification training standards adoption in all industries.
2. Enhance the Sector Council Program to provide accountability, transparency and clear guidance for safety leadership at the industry level.
3. Promote the development of safety sector councils in high-risk areas such as manufacturing, fish processing and health care.
4. Promote the creation of safe-work practices for high-risk activities within industry, and the development and delivery of industry-based safety training and injury prevention initiatives.
5. Integrate services delivered to mutual clients, especially vulnerable workers and small businesses.
6. Use existing and evolving communication channels and resources to maximize the reach of safety campaigns, and leverage online technology to deliver OHS education and provide hazard information.
7. Work with industry partners to enhance health and safety education for young workers in secondary and post-secondary institutions.
8. Create web-based tools to help employers develop safety programs and promote health and safety audit and inspection tools to assess safety practices implemented in workplaces.
9. Support injury prevention research that has practical application in workplaces.
10. Promote the Health and Safety Awareness Survey as a tool to understanding gaps in health and safety education and training, and share key health and safety performance metrics with employers, workers and industry partners to support strong decision-making and action.

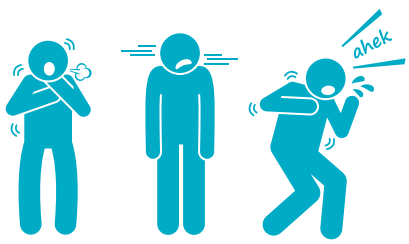
EDUCATION AND TRAINING

8 Injury and Illness Priorities

1. Musculoskeletal injuries 2. Occupational disease and illness 3. Falls 4. Serious injuries
5. Young workers 6. Workplace violence 7. Traffic control 8. Psychological health and safety

3. Education and Training

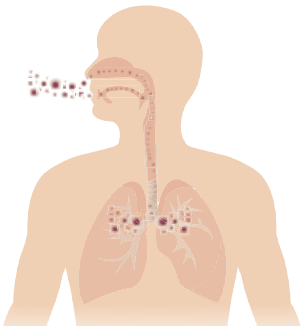
Increasing the competency of all workers to manage risks in the workplace



An occupational disease or illness is a health problem caused by exposure to a workplace health hazard. Workplace health hazards include chemical agents (such as solvent vapours), biological agents (such as mould) and physical agents (such as noise and radiation).

Preventing Occupational Illness

Exposure to workplace health hazards can cause immediate, gradual or delayed reactions or illnesses in the body. Symptoms of some occupational illnesses caused by long-term exposure, including cancers, may not be noticed for 10 or even 40 years after the job has concluded. These illnesses can be devastating physically, emotionally and financially to workers, their families and their communities.



Preventing occupational illness is critical to avoiding these tragedies. Education and training in occupational health is important in controlling exposures, mitigating risks and improving health outcomes.

Improving the Health and Safety of Vulnerable Workers

Vulnerable workers include, but are not limited to, young workers, new Canadians, temporary foreign workers, workers involved in temporary employment and older workers. These workers have a greater risk of exposure to hazards than the rest of the workforce. In many cases, they may not know their rights under the *Act*, and may lack proper training and the experience required to identify hazards. They may also fear losing their jobs or face repercussions for speaking up. Some inexperienced workers may take risks that impact their safety and the safety of others.

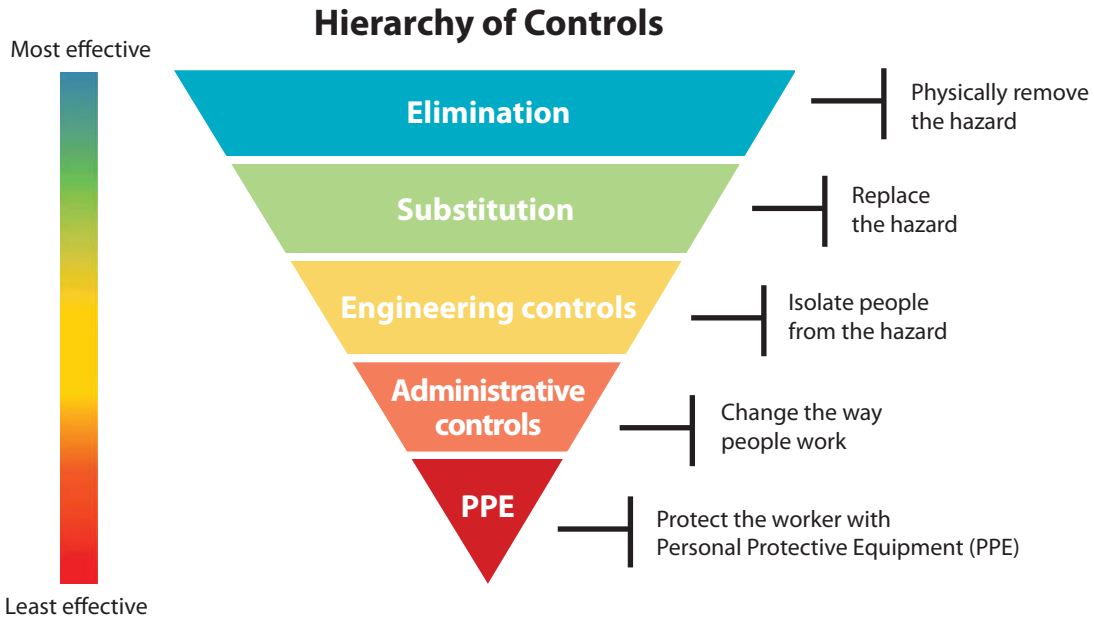
It can be difficult to reach vulnerable workers through traditional means. Many may not be members of industry associations, labour organizations, community groups or safety associations and are thus not engaged in regular safety discussions. Young workers access and consume information differently than their older counterparts.

Some older workers are staying in high-risk or physically demanding jobs longer than they have in the past. Innovative approaches and solutions are required to deliver services and training that meet their needs.

When vulnerable workers sustain an injury at work, providing effective, flexible accommodations should be considered through the early and safe return-to-work process. A supportive, inclusive work environment that is helpful in finding solutions is required.

Certification Training and Supports

Standardized, regulated health and safety training provides workers with the knowledge, skills and competency to perform hazardous tasks. When a workplace hazard cannot be eliminated, certification training is an effective administrative control to help protect workers.



Objective 3

By 2022, WorkplaceNL and its partners will develop and deliver educational and training programs to better protect workers from safety and health risks.

STRATEGIC OPPORTUNITIES

1. Develop awareness campaigns to educate workers and employers on injury and illness priorities, including:
    - Musculoskeletal injuries
    - Occupational disease and illness
    - Falls
    - Serious injuries
    - Young workers
    - Workplace violence
    - Traffic control
    - Psychological health and safety
2. Work with industry to target high-risk activities that increase the probability and severity of injury in workers.
3. Focus on educating and protecting young workers, new workers and temporary foreign workers.
4. Develop new online training for Early and Safe Return to Work (ESRTW), and develop new training standards for Confined Space Rescue and Traffic Control for Supervisors.
5. Work with the Department of Education and Early Childhood Development to:
    - Implement an online health and safety course for all young workers, and integrate it in the Career Development 2201 high school course;
    - Develop a distance learning version of the OHS 3203 high school course;
    - Professionally train teachers for OHS 3203; and
    - Explore the development of a required occupational health and safety course for all post-secondary education students.
6. Enhance health and safety surveillance data collection to enable more informed decisions about education and awareness programs.
7. Implement an online recertification course for OHS committee members, Worker Health and Safety representatives/designates, and supervisors.
8. Promote the Certification Training Registry as an effective tool to monitor required health and safety training in workplaces.
9. Ensure the health and safety certification standards implemented in Newfoundland and Labrador meet or exceed that of other Canadian jurisdictions and are reviewed every five years.
10. Develop an enhanced accreditation process for approved training providers delivering health and safety certification training.
11. Promote more accessible, innovative and flexible training options, while ensuring the highest standards of training, including the use of podcasts, interactive web-based tools and mobile applications.

OHS PROGRAMS AND SYSTEMS

8 Injury and Illness Priorities

1. Musculoskeletal injuries 2. Occupational disease and illness 3. Falls 4. Serious injuries
5. Young workers 6. Workplace violence 7. Traffic control 8. Psychological health and safety

4. OHS Programs and Systems

Designing leading systems to manage safety and health risks

Safety Standards

The adoption of health and safety standards to manage and control risks should be encouraged and promoted within the workplace. To achieve excellence in health and safety management, organizations will need support to implement standards, such as CSA Z1000, OHSAS 18001, or ISO 45001.[1]

Integrated Planning and Service Delivery Model

OHS programs and systems need to become a core component of work design, integrated into all work tasks. Many organizations have an interest in, and are responsible for, OHS-related initiatives, programs or services. Planning and delivering services for injury prevention, compliance and enforcement must be aligned so that workplace parties are consistently supported as they engineer effective OHS programs and systems.

Measuring Health and Safety Performance

Organizations track safety performance to ensure they are meeting their strategic goals, and that interventions are leading to desired outcomes. Tracking also helps identify opportunities for improvement. However, workplaces and system partners differ in what they measure and consider important.

The OHS system in Newfoundland and Labrador relies on the measurements of lagging indicators (e.g., number of fatalities, lost-time incidents) and leading indicators (e.g., workplace inspections completed) to identify trends and to focus on interventions required for safe and healthy workplaces.

[1]Canadian Standards Association Z1000-Occupational Health and Safety Management Systems; Occupational Health and Safety Assessment Series 18001-Occupational Health and Safety Management Certification; International Standards Organization 45001-Occupational Health and Safety Management Systems.

The provincial OHS system will benefit from a common vision of safety success, and a common approach to measuring it, which requires consistent tracking and reporting supplemented with new OHS performance metrics from all system partners.

Access to reliable data will allow all stakeholders to identify and address gaps by monitoring, supporting and guiding program and service delivery.

Sharing more data with system partners will help develop OHS programs that better protect workers and focus attention on hazards with elevated risks. A better understanding of best practices, key performance indicators and the root causes of workplace injury and illness will follow.

Objective 4

By 2022, WorkplaceNL will evaluate OHS programs and systems implemented in workplaces to ensure compliance with the *OHS Act* and Regulations.

STRATEGIC OPPORTUNITIES

1. Promote the adoption of Safety Climate Surveys in workplaces and provide web-based tools to aid in the development of leading indicators in workplaces.

2. Provide employers and workers with timely and accurate information on health and safety performance.

3. Develop new industry and provincial indicators to measure attitudes and awareness of workplace injury and illness prevention.

4. Provide employers and workers with education and guidance in implementing effective OHS programs, and the benefits of effective, productive OHS committees.

5. In consultation with safety partners, develop a new online reporting system for all OHS committees that assesses the effectiveness of OHS committees to identify and control safety and health risks in a timely manner.

6. Provide OHS committees/WHS representatives/designates with support, resources and practical tools.

7. Enhance the auditing of OHS programs, particularly for employers with increased risk of injury.

8. Improve data analysis and surveillance so workers and employers make informed decisions when designing OHS management systems. Use national and provincial data to help identify leading safety practices and emerging trends.

9. Develop online learning resources and tools to measure safety culture and the effectiveness of OHS management systems.

REGULATORY AND ENFORCEMENT PRACTICES

8 Injury and Illness Priorities

1. Musculoskeletal injuries 2. Occupational disease and illness 3. Falls 4. Serious injuries
5. Young workers 6. Workplace violence 7. Traffic control 8. Psychological health and safety

5. Regulatory and Enforcement Practices

Promoting a fair and balanced enforcement framework that protects workers from workplace hazards

Regulatory Leadership

Regulatory leadership involves implementing good enforcement management practices. These practices are demonstrated through the principles of proportionality in applying the law, consistency in approach, openness to the provision of information internally and externally, standards that communicate the desired course of action and a system of monitoring that provides accountability. Each of these factors contributes to maintaining compliance.

The OHS Division is dedicated to ensuring that regulatory and enforcement functions are carried out in an equitable, practical and consistent manner. The effectiveness of legislation in protecting workers depends on the ongoing compliance of those regulated. As well, as work environments change, legislative changes may also be required.

Effective Supports in Completing High Hazard Activities

Some work activities are hazardous by nature, such as working at height, working below ground or working with certain chemicals or other dangerous substances. When a worker enters a hazardous situation without adequate training, supervision or safety equipment, he or she risks serious injury, illness or death.

Effective Compliance Measures

By committing to continuously improving and enhancing the enforcement management process, the OHS Division will maintain consistency in enforcement activity, and in turn, increase legislative compliance within the province.

The OHS Division recognizes that most employers want to comply with the legislation, and that it is important to clearly communicate with

individuals and organizations what is required to do so. The OHS Division strives to assist employers in meeting their legal obligations, without unnecessary expense. The aim is to provide information in an open and transparent manner; where warranted, firm action, including prosecution, will be taken against those individuals and businesses that fail to co-operate and contravene legislative requirements.

Objective 5

By 2022, the OHS Division will enhance its enforcement management process and operational efficiency through the implementation of new strategies that use risk management approaches and by continuing to foster stakeholder collaboration and communication.

STRATEGIC OPPORTUNITIES

1. Conduct a comprehensive review of the Radiation Health and Safety Act and Regulations.
2. Implement approved changes to the Workplace Hazardous Materials Information System (WHMIS) Regulations.
3. Review regulatory training standards for confined space entry, traffic control, and supervisor training to identify opportunities for enhancement.
4. Strategically inspect employers with higher risk of injury.
5. Promote the requirement that every new worker receive a safety orientation in the workplace.
6. Develop and implement enforcement strategies that are representative of the risks in each sector and that highlight identified areas of focus.
7. Strengthen the proactive approach to the inspection program by determining an inspection list for each industry sector.
8. Continue to improve data collection and information exchange with WorkplaceNL, and share relevant enforcement data with sector safety councils, safety organizations and key industry and labour stakeholders.
9. Develop content for hazard alerts and communications on a timely basis. Ensure stakeholders are aware of the risks and have current knowledge and information to reduce accidents and incidents.
10. The OHS Division will work to develop an online inspection reporting system.
11. The OHS Division will continue to develop and implement targeted enforcement strategies for the prevention of known occupational disease.
12. Enhance the planning, monitoring and reporting of enforcement activity.
13. Promote a broader understanding of the Act and Regulations and develop easy-to-understand learning resources for employers and workers.

Moving Forward

WorkplaceNL and the OHS Division look forward to working with safety partners and stakeholders over the next five years to implement this Workplace Injury Prevention Strategy for Newfoundland and Labrador.

Maximizing worker protection and nurturing a strong safety culture are the core tenets of the new strategy. As many stakeholders have indicated, accomplishing these goals will be challenging. It will require dedicated effort, focus and integrated service delivery. Quality education and training that advances worker competency and enables workers to control safety and health risks, combined with a fair and balanced regulatory framework, will enable further reductions in workplace injury rates. The adoption of leading safety OHS management system standards by employers and workers will also systematically control risk and better prevent injury and illness at work.

The core ingredients for success are contained in existing injury prevention programs and legislative framework. However, workers and employers in Newfoundland and Labrador need appropriate supports from government, safety partners and safety sector councils to achieve greater reductions in workplace injury and illness. Reaching our target level of protection will require a balance of education, enforcement and well-engineered health and safety systems.

A stronger safety culture can be developed using leading health and safety principles and practices. It will guide service delivery, formation of innovative partnerships and the management of change. Integrating health and safety into every decision and work task will help shape attitudes and behaviours, and instill the central value that worker protection guides every decision, practice and program.

Our aim is to keep workers safe and to control hazards in the workplace. While the safety performance in our province has improved significantly over the past decade, we can do better with increased commitment, continued investment and best practice programming.

There are no simple solutions and many challenges lie ahead. All stakeholders must seriously consider the future direction of OHS in our province. Our goal is to achieve a balance between reasonable levels of education and enforcement, and to offer adequate supports for workers and employers to sustain impact and positive outcomes.

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APPENDIX F

Data extraction table of included systematic reviews

Data extraction table of included systematic reviews

A more detailed version is available upon request.

Author /Year	Research question	Jurisdiction(s)	Population	Intervention(s)	Outcomes (brief)	Observed effect
Bercier 2015	The purpose of this study was to examine and synthesize the effects of interventions on symptoms of CF, STS, and VT with mental health workers; provide evidence-informed recommendations to inform social work practice; and recommend priorities for future research.	United States of America	Mental health workers	None	None (no studies found)	None (no studies found)
Cocker 2016	This systematic review aimed to: (i) identify existing evidence on interventions to reduce CF in healthcare, and emergency and community service professionals; and (ii) determine the most effective workplace-based strategies for reducing CF, directly or via modifying its recognised individual and organisational risk factors and/or promoting Compassion Satisfaction.	United States of America, Australia, Israel	Healthcare, emergency and community service workers, including nurses, social workers, chaplains, hospice workers, disability sector workers, and miscellaneous medical staff. No studies targeting emergency service workers were identified.	Compassion fatigue interventions, including stress reduction (yoga, mindfulness, structured meditation, music therapy, building resilience, coping, transcranial magnetic stimulation). Multiple/interactive sessions focused on promoting professional self-efficacy, improving theoretical knowledge, and assigning homework tasks, and individual and group exercises, guided imagery, take home materials including print-outs, DVDs and music CDs, and access to educational resources and publications, respectively.	Professional Quality of Life (Pro-QoL), Maslach Burnout Scale [29], or The Resilience Scale	The thirteen included studies demonstrated mixed or no effects. While ten studies reported significant improvement in at least one element of CF, no study reported positive change on all three indicators (STS, BO, CS) and only one study had a follow up period of longer than eight weeks.

Cooklin 2017	1. To systematically review the effectiveness of integrated interventions against the (individual, organizational, psychosocial, or environmental) outcomes; and 2. To investigate whether integrated approaches were more effective against targeted intervention outcomes than those using a more traditional ''nonintegrated'' approach.	Canada, United States of America, Sweden, Ireland, Finland, Japan, Denmark, Netherlands, Germany, Norway	Employers and employees of small and large enterprises	Workplace program(s) implementing integrated approach(es) to worker health, safety, and well-being (i.e., occupational health and safety and well-being, health promotion), defined by study criteria	Employee health promotion; employee injury prevention, management; occupational health and safety management; psychosocial outcomes; organizational costs, direct and indirect	1) Employee injury prevention; psychosocial outcomes: Four studies of moderate to high quality (scores 4–8) showed positive effects on...reduced occupational stress, symptoms of depression, and improved psychological resources. 2) Two studies reported a mixed pattern of effects on occupational stress and psychological resources. 3) Of the nine studies reporting on various cost-related outcomes, findings were equivocal. Five studies reported favorable effects on absenteeism, leave usage, or short-term disability days. Four reported few or no effects on cost outcomes (health care costs, sick leave).
Daniels 2017	RQ1: What role do employment practices play (e.g. training, high investment selection) in the relationship between job redesign and well-being? Do employment practices have a role as interventions to (a) improve job design and hence well-being or (b) as augmenters of interventions to improve job design and hence well-being? RQ2: Does the focus of job redesign matter for improving well-being, for example whether job redesign is targeted at productivity (e.g., through introducing new technologies, for efficiency) or targeted at well-being? RQ3: Do the interventions investigated under RQ1 also influence performance?	Israel, United States of America, Netherlands, United Kingdom, Japan	We considered any studies that focused on well-being in the working population in advanced industrial democracies (e.g. EU-15 countries, USA, Australia, Japan).	A study could be included if: it examined a job redesign intervention and assessed other employment practices	Well-being. Subjective measures of well-being (e.g. self-report surveys) and/or objective measures (e.g. days of sick leave taken) were included. Studies examined outcomes such as burnout, job satisfaction, anxiety, morale, organizational commitment, self-efficacy, work engagement, fatigue, depression; however, the reported outcomes in results were listed as either well-being or job performance	1) Training workers to improve their own jobs - positive 2) Training and job redesign - positive 3) System-wide approaches - positive 4) Training managers in job redesign - insufficient 5) Participatory approaches to job design - mixed effects

	RQ4: What factors influence the successful implementation of interventions investigated under RQ1?					
Dreisen 2016	The primary goals were to (a) assess the overall effectiveness of burnout interventions, (b) assess the effectiveness of burnout interventions for the three commonly measured dimensions of burnout (i.e., emotional exhaustion, depersonalization/cynicism, and reduced personal accomplishment/efficacy), and (c) compare the effectiveness of intervention subtypes.	United States of America, United Kingdom, Italy, Turkey, Sweden, Australia, Netherlands	Mental health providers	I1: support groups or workgroups I2: job training and education I3: Mindfulness I4: Clinical supervision I5: job redesign	Burnout	1) All of the intervention - small, positive, and significantly different from zero. 2) Job training/education - positive reducing burnout and feeling of reduced personal accomplishment/efficacy.
Fernandez 2016	The objective was to summarise the current evidence on strategies to promote mental health at the university, following a setting-based model.	Australia	University students and staff	Policies Social Marketing Academic-based strategies Mandatory courses included in curricula Curriculum infusion Assessment strategies Changes in the curriculum	We included studies that reported on the number of cases of self-reported bullying, whether recorded by perpetrator or victim. We defined the primary outcome as the number of occurrences of bullying perpetration or victimisation, or both. We included dichotomous, categorical, integer and continuous measures of bullying.	Policies effects: include the involvement of employees in decision making and provide opportunities to increase employees' knowledge of mental health and wellbeing. The number of studies found was low and the quality of the evidence was poor, prohibiting any strong recommendation.
Gillen 2017	To explore the effectiveness of workplace interventions to prevent bullying in the workplace. What are the benefits of different ways of trying to prevent bullying in the workplace?	Canada, United States of America, United Kingdom, Australia, Ireland	Employees in paid work within private, public, or voluntary organisations	Interventions aimed at primary prevention of bullying in the workplace. We excluded interventions that were focused on managing behaviours associated with bullying.	Outcome measures related to prevention of workplace bullying, i.e., outcomes that showed a change in the number of reported cases of bullying perpetration,	This review shows that organisational and individual interventions may prevent bullying in the workplace. However, the evidence is of very low quality. We need studies that use better ways to measure the effect of all kinds of interventions to prevent bullying.

					victimisation, or level of absenteeism.	
Ivandic 2017	The aim of the systematic review was to provide an overview of the evidence on the effectiveness of brief interventions targeting mental health and well-being in organizational settings and compare their effects with corresponding interventions of common (i.e., longer) duration.	Australia, Japan, Canada, United States of America, India, Malaysia, China, Poland	Workers, organizational setting	1) Workplace interventions Based on the matching criteria, studies evaluating the following intervention types were included: meditation, stress management, and positive psychology. 2) Brief intervention – consisting of up to five sessions with each session lasting up to an hour (12). Types of brief interventions also varied substantially. Most studies reported on relaxation techniques and stress management interventions, followed by positive psychology interventions, mindfulness meditation, massage, and multidimensional intervention which included relaxation, self-management and mood-management techniques. The assessed outcomes were mainly stress, anxiety symptoms, burnout symptoms, and well-being.	Mental health and well-being outcomes, such as perceived stress, resilience, job satisfaction, depressive and anxiety symptoms, positive and negative affect, and other related measures.	All but one study evaluating brief interventions had high risk of bias. No evidence was found on the effectiveness of brief stress management, relaxation, massage, mindfulness meditation, or multimodal interventions. We found limited evidence on the effectiveness of brief positive psychology interventions.
Jamieson 2016	The aims of this systematic literature review are to (a) overview the characteristics of studies examining the role of mindfulness interventions in facilitating employee health and well-being outcomes, as	Australia	Workers	Mindfulness interventions The most commonly investigated mindfulness intervention in the workplace mindfulness literature is MBSR—a total of 30 (75.0%) studies investigated MBSR, an	Well-being	Not reported

	well as organizational criteria; (b) identify threats to the validity of workplace mindfulness intervention research and propose future directions to address these threats; and (c) suggest ways in which mindfulness interventions in the workplace could be improved, in practice.			adaptation of this form of intervention, or used elements of MBSR in conjunction with another approach (i.e., MBCT). The remaining interventions utilized diverse approaches such as ACT, mindfulness meditation, loving kindness meditation, contemplative practice training, yoga, and mindful reflection.		
Joyce 2016	The present study aimed to carry out a systematic meta-review examining the effectiveness of workplace mental health interventions, defined as any intervention that a workplace may either initiate or facilitate that aims to prevent, treat or rehabilitate a worker with a diagnosis of depression, anxiety or both.	Australia	Workers	Primary: I1 Increased employee control I2 Physical activity I3 workplace health promotion (WHP) Secondary: I4 Workplace screening I5 Counselling I6 Stress management programmes I7 Psychological debriefing Tertiary I8 CBT I9 Exposure therapy I10 Medication	Mental Health: depression and/or anxiety disorders	Moderate evidence for: 1) enhancing employee control, 2) physical activity, 3) improving occupational outcomes. Strong evidence for: 1) CBT-based stress management, 2) against debriefing following trauma, 3) CBT-based programmes.
Knight 2016	RQ1: Are work engagement interventions effective? RQ2: Is intervention type (i.e., whether interventions are personal resource building, job resource building, leadership training programmes, or health promotion) associated with intervention effectiveness?	United States of America, Portugal, Australia, South Africa, Israel, Spain, Finland, Netherlands, Japan, Germany, Sweden	Employees of an organisation, whether group based, individual or online	Health promotion; job resources (physical, social or organisational aspects of the job (e.g. feedback, social support, development opportunities) that can reduce job demands); leadership training; personal resources (‘positive self-evaluations that are linked to resiliency and refer to individuals’ sense of	Work engagement, vigour, dedication, and absorption	Small, positive effect on work engagement, vigour, dedication, and absorption.

				their ability to control and impact upon their environment successfully')		
Kuster 2017	To compare the effects of computer-based interventions versus in-person interventions for preventing and reducing stress in workers.	N/A	Full-time, part-time, or self-employed working individuals over 18 years of age.	Any type of worker-focused web-based stress management intervention, aimed at preventing or reducing work-related stress with techniques such as CBT, relaxation, time management, or problem- solving skills training. These interventions had to be delivered via email, a website, or a stand-alone computer programme, and they had to be compared to a face-to-face stress management intervention with the same content (e.g. web-based CBT versus face-to-face CBT).	Work-related stress, burnout	Low-quality evidence with conflicting results, when comparing the effectiveness of computer-based stress management interventions with in-person stress management interventions in employees.
Lee 2014	A systematic review was undertaken to examine the current evidence base for workplace interventions addressing mental health problems in male-dominated industries.	Australia, Japan, Finland	Male-dominated industries, defined as an industry in which there are greater than 70 percent male workers.	Improving mental health literacy and knowledge, increasing social support, improving access to treatment, providing education for managers and addressing workload issues.	Mental illness, mental health, depression, stress	Limited evidence but suggests that effective interventions to address anxiety and depression in male-dominated industries include: improving mental health literacy and knowledge, increasing social support, improving access to treatment, providing education for managers and addressing workload issues.
Naghieh 2015	To evaluate the effectiveness of organisational interventions for improving wellbeing and reducing work-related stress in teachers.	United States of America, Australia, China	Teachers working at primary and secondary schools, serving children aged between 4 and 18 years.	Organisational interventions for employee wellbeing target the stressors in the work environment, rather than the stress response of the individual employee. They aim to alter the psychosocial work environment by changing some aspect of the organisation, such as	Self-reported depression, stress.	Low-quality evidence that organisational interventions lead to improvements in teacher well-being and retention rates

				structures, policies, processes, climate, programmes, roles, tasks, etc.		
Pezaro 2017	To identify interventions designed to support midwives and/or student midwives in work-related psychological distress, and explore any outcomes and experiences associated with their use.	Australia, United Kingdom	Midwives and student midwives, using the International confederation of midwives' definition that a midwife is a person who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title 'midwife'	I1: Mindfulness and stress management programs I2: Clinical supervision given by a clinical psychologist I3: Work-based resilience workshops partnered with a mentoring program	Work-related psychological distress	Results are not reported by outcome. All studies reported evidence for positive outcomes…well-being, reduced stress, enhanced confidence, self-confidence, and self care, positive impacts on anxiety
Ruotsalainen 2015	To evaluate the effectiveness of work- and person-directed interventions compared to no intervention or alternative interventions in preventing stress at work in healthcare workers	Nineteen studies had been carried out in Europe, another 24 in North America, eight in Asia, three in the Middle East, two in South America and two in Australia	Healthcare workers officially employed in any healthcare setting or at student nurses or physicians otherwise in training to become a professional who were also doing clinical work. This excluded studies in which the participants were simply caregivers and were not employed by a	Improving mental health literacy and knowledge, increasing social support, improving access to treatment, providing education for managers and addressing workload issues.	Occupational stress, burnout, anxiety, depression	Low-quality evidence that changing work schedules may lead to a reduction of stress. Other organisational interventions have no effect on stress levels.

			healthcare organisation.			
Stratton 2017	We aimed to identify all published, peer reviewed, clinical trials including randomized controlled trials (RCTs), controlled trials & pre/post trials using an eHealth intervention targeted at employees that reported outcomes on a standardized mental health measure of depression, anxiety and/or stress	Australia, UK, USA, Finland, Sweden, Austria, Switzerland, Germany, Netherlands, Japan, China	Various sectors of employees, including healthcare, information technology, education, construction, etc.	All eHealth Interventions including CBT, stress management, mindfulness, and cognitive/assertion training	Anxiety, depression, stress	1) Overall - a small positive effect at both post intervention (g = 0.24, 95% CI 0.13 to 0.35) and follow up (g = 0.23, 95% CI 0.03 to 0.42). 2) Mindfulness based interventions (g = 0.60, 95% CI 0.34 to 0.85, n = 6) showed larger effects than the Cognitive Behaviour Therapy (CBT) based (g = 0.15, 95% CI 0.02 to 0.29, n = 11) and Stress Management based (g = 0.17, 95 CI -0.01 to 0.34, n = 6) interventions. 3) The Stress Management interventions however differed by whether delivered to universal or targeted groups with a moderately large effect size at both postintervention (g = 0.64, 95% CI 0.54 to 0.85) and follow-up (g = 0.69, 95% CI 0.06 to 1.33) in targeted groups, but no effect in unselected groups.

APPENDIX G

Data extraction table of included primary studies

Data extraction table of included primary studies

A more detailed version is available upon request.

Author /Year	Country	Research question	Population	Industrial sector	Workplace	Intervention (brief)	Outcomes (brief)	Observed effect
Addley 2014	United Kingdom	This randomized controlled trial examined the effects of two HRA interventions on lifestyle parameters, mental health and work ability in a UK context.	Employees (Administrative Assistant, Administrative Officer and Executive Officer grades)	Government	Northern Ireland Civil Service (NICS) from the Department of Finance and Personnel (DFP)	Lifestyle and physical activity assessment (LPAA) programme	Mental health including well-being; work ability	No change: mental health, work ability
Allexandre 2016	United States of America	To (1) assess whether the WSM program can be an effective and engaging stress management program in the workplace and (2) determine the extent to which adding group support improves engagement, retention, and effectiveness.	Call center employees (debt collectors, customer service or fraud representatives)	Retail	Call center employees (debt collectors, customer service or fraud representatives) located in Ohio.	Web-based stress management (WSM) and Weekly Group Meeting (WSMg1)	Stress and anxiety, productivity	Improved: perceived stress No change: productivity
Andersen 2017	Denmark	This aim of this study was to investigate the effect of workplace physical exercise on psychosocial factors among workers with chronic musculoskeletal pain.	Slaughterhouse workers with upper limb chronic musculoskeletal pain	Food	Two large slaughterhouses in Denmark	Group-based strength training (physical exercise group) or individual ergonomic training and education (reference group) was provided for 10 weeks.	Social climate; mental health; vitality	Improved: social climate, vitality No change: mental health
Cieslak 2016	Poland	This study aimed at evaluating the influence of the self-	Health and human services professionals	Multiple	Various workplaces, including	The experimental group procedures included techniques which were complementary to	Secondary traumatic stress; secondary	Improved: secondary traumatic stress (STS),

		efficacy enhancing intervention on secondary traumatic stress (STS) and secondary posttraumatic growth (SPTG) among health and human services workers exposed indirectly to traumatic events.	exposed indirectly to a traumatic event at work		hospitals, therapy clinics, education, police offices, etc.	face-to-face cognitive behavior treatment, such as activity planning, skill training, and cognitive bias modification.	posttraumatic growth; self efficacy	secondary posttraumatic growth, self-efficacy
Dimoff 2018	Canada	The purpose of this study is to help better understand what workplace leaders can do to promote mental health and increase employees' willingness to seek out resources.	Leaders from two companies	Multiple	A small publishing company and a small property management company	A leader-focused mental health training to help leaders (a) recognize the warning signs of a struggling employee, (b) promote mental health in the workplace, and (c) engage in behaviors that support employee mental health and well-being.	Stigma; warning sign recognition; communication; use of resources	Improved: warning sign recognition, communication, use of resources No change: stigma
Figl-Hertlein 2014	Austria	To undertake a pilot study to explore the potential effects of a physiotherapy-directed occupational health programme individualised for school teachers, develop study methodology and gather preliminary data to establish a 'proof of concept' to inform future studies.	School teachers	Educatoin	Austrian regional secondary schools	An individualised physiotherapy-directed occupational health programme (six 30-minute sessions) related to ergonomics and stress management conducted over a 5-month semester.	Overall health (physical and mental); work-related stress	No significant differences: overall health (physical and mental); work-related stress
Gartner 2013	Netherlands	To study the effectiveness of a mental module for workers' health	Nurses and allied health care professionals, for example,	Healthcare	Dutch academic medical center	The intervention included screening for work functioning impairments and mental health complaints. Positively screened	Help-Seeking Behavior; Impaired Work Functioning; Distress; Need for Recovery After	Improved: work functioning, depression, anxiety, PTSD, risky drinking behaviour

		surveillance for health care workers. The aim of this study was to investigate whether the mental module for WHS for nurses and allied health care professionals stimulates help-seeking behavior and improves work functioning and mental health.	physiotherapists, occupational therapists, speech therapists, or dietitians			workers were invited to visit their occupational physician.	Work; Risky Drinking Behavior; Depression and Anxiety; Posttraumatic Stress Disorder (PTSD)	Unclear: help-seeking behaviour (it seems that it went up for intervention group and then later was lower than the control group), need for recovery
Glass 2017	United States of America	The manuscript presenst the findings from a randomized community based trial that evaluated the effectiveness of a computer-based workplace violence and harassment program to prevent and respond to workplace violence/harassment with Oregon-based female homecare workers in a consumer-driven model.	Homecare workers in Oregon	Healthcare	Home care work	The intervention group received computer-based training with homecare worker peer facilitation (CBT + peer), which included the content in the CBT presented above with additional activities related to calming exercises, assertive speaking exercises, body language exercises, role playing in different scenarios with feedback. The control group received Computer based training only (CBT).	Confidence in responding to violence and harassment; health and work outcomes (burnout)	Improved: confidence in response No change: burnout, health measures
Gussenhoven 2017	Netherlands	The aim of this study was to evaluate the effectiveness of a vocational enablement protocol (VEP) on need for recovery (NFR) after work as	Adult employees (18 years and above) experiencing hearing difficulties and restrictions at work due to their hearing loss	Multiple	Various workplaces	Vocational Enablement Protocol (VEP). The VEP is a comprehensive, multidisciplinary program of care that includes vocational and audiological components.	Need for recovery; communication strategies; distress; self-efficacy	Improved: communication strategies including “self acceptance” No change: need for recovery, distress, self-efficacy

		compared with usual care for employees with hearing difficulties.						
Jensen 2016	Denmark	The aim of this randomized trial was to investigate the effect of the MHFA training with regard to confidence in help-giving behavior as primary outcome in Danish employees and NGO-volunteers.	Employees and volunteers at ten different workplaces, including public, private and nongovernmental organizations (NGOs).	Multiple	Public, private and nongovernmental organizations (NGOs)	The Australian educational intervention Mental Health First Aid (MHFA) in a Danish context. Study design was a randomized trial with a waitlist control group. The intervention group was compared with the control group at 6-month follow-up.	Confidence in providing help; increased knowledge; destigmatizing attitudes	Improved: confidence in providing help; knowledge in recognizing mental health; making contact No change: attitudes; help offered
Kuehl 2014	United States of America	This randomized prospective trial aimed to assess the feasibility and efficacy of a team-based worksite health and safety intervention for law enforcement personnel.	Law enforcement personnel, including both sworn and civilian staff	Public services	One police department and two sheriff's offices from Oregon and southwest Washington	Participants in the intervention group attended weekly, peer-led sessions delivered from a scripted team-based health and safety curriculum. Curriculum addressed: exercise, nutrition, stress, sleep, body weight, injury, and other unhealthy lifestyle behaviors such as smoking and heavy alcohol use.	Sleep; stress; burnout; health	Improved: sleep, stress, overall health No change: Burnout
Maatouk 2018	Germany	This multicentre, randomised controlled trial (RCT) aimed to evaluate the efficacy of a small-group intervention promoting successful ageing at work in older nurses (aged >=45).	Nurses	Healthcare	The medical hospitals of the University of Heidelberg, Duesseldorf, and Ulm as well as a community hospital in Aalen	A small-group intervention of seven weekly sessions of 120 min with a booster session after six weeks	Well-being, quality of life; irritation; depression, anxiety symptoms	Improved: mental health related QoL, irritation No change: well-being, depression, anxiety symptoms
Mache 2017	Germany	The pilot study focused on strengthening physicians' psychosocial skills and analyzed the effects of	Junior gynecologists	Healthcare	Hospital	Coping skills training	Perceived stress; emotional exhaustion; resilience; job satisfaction	Improved: occupational stress, emotional exhaustion, emotional regulation, resilience, job satisfaction

		innovative training for junior gynecologists working in German hospitals.						
Mache 2018	Germany	The aim of this study was to implement and evaluate a mental health promotion program for junior physicians working in emergency medicine.	70 junior physicians working in emergency medicine	Healthcare	Clinic departments of emergency medicine	Mental health training which ions included psychoeducation (theoretical input, watching videos, oral group discussions, experiential exercises, and home assignments).	Stress; emotional exhaustion, job satisfaction, work engagement	Improved: stress, emotional exhaustion, job satisfaction, work engagement
Michel 2014	Germany	We developed and evaluated an online self-training intervention teaching employees how to use mindfulness as a cognitive–emotional strategy for segmenting private life from work by preventing and surmounting disturbing work-related cognitions, emotions, and depleted energy levels.	Participants in various occupations recruited by flyers distributed in a small and a medium-sized southern German city	Multiple	Multiple: health and social services, processing and manufacturing, finance and insurance, and science and education	The intervention was free online training and exercises in mindfulness-based stress reduction and mindfulness-based cognitive behavioural therapy. It included 3 modules that covered guided mindfulness meditation and daily exercises.	Psychological detachment from work; work-family conflict; satisfaction with work/life balance	Improved: psychological detachment from work; work-family conflict; satisfaction with work/life balance
Milligan-Saville 2017	Australia	We aimed to investigate the effect of mental health training on managers' knowledge, attitudes, confidence, and behaviour towards employees with mental health problems, and its	Managers at the level of duty commander (DC) or equivalent	Public services	Fire and Rescue New South Wales (FRNSW), Sydney, NSW, Australia.	The RESPECT Manager Training Programme, which combined mental health knowledge and communication training.	Sickness absence; attitude change; communication behaviours	Improved: Sickness absence, mental health knowledge

		effect on employee sickness absence.						
Milner 2018	Australia	The current study aims to assess whether an intervention designed to reduce stigma against mental health problems was associated with lower self-stigma.	Male construction workers	Construction	Incolink, a social enterprise in the commercial building, construction and civil allied industries	Contact+Connect program: Resources were provided via smart phones which gave information on stigma, mental health, information on help seeking, and links to sources of help, whilst also encouraging the establishment and maintenance of long-term contact with others.	Stigma of depression	Improved: self-stigma of depression
Moffitt 2014	United Kingdom	The purpose of this paper is to evaluate the impact on managers of three mental health promotion interventions. First, a locally developed course entitled "Looking after Wellbeing at Work" (LWW), second, an internationally developed training course: Mental Health First Aid (MHFA). Third, an hour-long leaflet session (LS).	Northumberland Fire and Rescue Service	Public services	Fire and Rescue Departments	The intervention was called Looking after Wellbeing at Work (LWW) and was developed with local mental health practitioners and service users. Facilitators worked from a manual that emphasized the health, ethical, and business case for promoting wellbeing. It demonstrated how to deal with personal stress and stress of colleagues or managed staff. It used relevant case studies for fire services.	Attitudes to mental illness; knowledge about mental health problems	Improved: attitudes to mental illness; knowledge about mental health problems
Moll 2018	Canada	This study sought to evaluate whether a contact-based workplace education program was more effective than standard mental health literacy training in promoting	Any full- or part-time employee within the organization who was willing to be randomly assigned to 1 of the 2 interventions, and who agreed to	Healthcare	Two multi-site hospitals in Ontario	The Beyond Silence program, which was developed by the primary author to address the unique educational and support needs of healthcare workers. It includes examples and resources that are customised for healthcare organizations.	Help-seeking behaviour; attitudes; mental health literacy	Improved: mental health literacy, stigmatized beliefs No change: help-seeking behaviour

		early intervention and support for healthcare employees with mental health issues.	attend the sessions outside of their work hours					
Müller 2015	Germany	Our present study aimed to develop, implement, and evaluate a randomized controlled occupational health intervention that is based on the selection, optimization, and compensation (SOC) model.	Registered nurses	Healthcare	Community hospital	Selection, optimization, and compensation (SOC) training was facilitated by a female trainer and a female student assistant. Specific training materials included manuals with information on work stress, SOC, goal selection, and action planning; worksheets for a structured goal evaluation and step-by-step action plan; and a diary to monitor the personal projects.	Mental well-being; work ability; job control	Improved: mental well-being, job control No change: work ability
Myers 2017	United States of America	The purpose of this study was to provide an initial evaluation of the efficacy of Fun For Wellness (FFW) to increase multidimensional well-being in a universal sample.	Employees at a major research university in the southeast of the USA	Education	Major research university in the southeast of the USA	Fun For Wellness (FFW) is a new online intervention program that uses interactive and scenario-based learning to promote growth in subjective well-being. Participants who were randomly assigned to the FFW group were provided with 30 days (i.e., from T1 to T2) of 24 h access to up to 152 challenges designed to promote multidimensional well-being.	Well-being (various categories)	Improved: interpersonal well-being; psychological well-being No change: occupational well-being
Oude Hengel 2014	Netherlands	The present study aimed to evaluate both the cost-effectiveness and financial return of an intervention program in the construction industry versus usual practice.	All workers who perform actual construction work were invited to participate in the study	Construction	Six construction companies, which specialize in house, commercial or industrial building	Training sessions with a physical therapist to reduce physical workload, an instrument to raise awareness of the importance of rest breaks to reduce fatigue (Rest-Break tool), and two empowerment training sessions to improve the range of influence at the worksite.	Mental Health	Improved: mental health (however, not significant)

Persson Asplund 2017	Sweden	The aim of this randomised controlled trial (RCT) was to evaluate the efficacy of a guided internet-based stress management intervention (iSMI) among distressed managers compared with an attention control group (AC) with full access to treatment-as-usual.	First-line and middle managers.	Multiple	Healthcare, IT, communication and educational sector	The iSMI programme was designed to facilitate change in three dimensions; the individual, the work-environment and the work-family interface. It incorporated contemporary CBT techniques such as behaviour activation, exposure, emotion regulation, values, acceptance and methods from recovery from work training, boundary tactics in the work-home interface and positive management.	Perceived stress; depression; insomnia; absenteeism; presenteeism	Improved: perceived stress, depression, insomnia, No change: absenteeism, presenteeism
Pidd 2015	Australia	Workforce entry is a key transition period. It offers an ideal, but under-utilised opportunity to implement intervention strategies to prevent mental health and substance use problems among young people. A brief psychological wellbeing and substance use intervention targeting a high-risk group – apprentice chefs – was undertaken to explore this opportunity.	Commercial cookery trainees and were enrolled at TAFE colleges located in a large Australian city	Education	All were undertaking a 3-year training course and participated in the study at the beginning of their first year of training. These trainees attended training 1 day per week at TAFE college premises and worked full time as apprentice chefs 4 days per week.	A brief psychological wellbeing and substance use intervention. The intervention group received two training sessions. The first focused on enhancing copying and communication skills, and the second focused on understanding and reducing risk of alcohol and other drug-related harms.	Communication and coping skills; well-being	Improved: communication and coping skills No significant differences: well-being
Puig-Ribera 2017	Spain	This study aimed to evaluate the effectiveness of the Walk@WorkSpain (W@WS) program in	Administrative and academic university campus staff with low and moderate	Education	Six campuses in four Spanish Universities	The intervention was a 19-week workplace web-based intervention (Walk@WorkSpain) which aims to encourage employees to progressively sit	Mental well-being (including presenteeism, work efficiency)	Improved: presenteeism, work efficiency No change: mental well-being

		relation to psychosocial outcomes for presenteeism and mental well-being in Spanish sedentary office employees.	physical activity levels			less and move more during the workday. Participants could access the W@WS website that had additional incentives, such as (a) logging daily step counts into a personal account and receiving feedback on the achievement of goals through visual graphics and prompts, (b) social networking for sharing experiences and, (c) educational materials on the health benefits of 'sitting less and moving more'.		
Reavley 2014	Australia	The purpose of this study was to assess whether a multifaceted intervention could improve mental health literacy, facilitate help seeking and reduce psychological distress and alcohol misuse in staff of a multi-campus university in Australia.	Victoria University staff	Education	A multi-campus institution offering a broad mix of courses, including vocational education courses (technical and trades), as well as higher education courses	Interventions (which were whole-of-campus) included e-mails, posters, campus events, factsheets/booklets and mental health first aid training courses.	Depression and anxiety levels; alcohol use	No significant effects: depression and anxiety levels, alcohol use
Saelid 2016	Norway	The aim of this randomized controlled trial is to test whether CWS (Coping with Strain) has positive mental health effects. We hypothesized that participation in a CWS course delivered at the workplace may strengthen an employee's self-	Nurses, school-nurses, nursing assistants, teachers, consultants and secretaries in the public services.	Healthcare	Employees in public services in four municipalities in Norway	Employees were randomized into Intervention Group 1 (IG1), which immediately participated in CWS, or Intervention Group 2 (IG2), which functioned as a control group for six months until its participation in CWS. The follow-up period lasted for four years in both IG1 and IG2.	Depression; self-efficacy; self-esteem; vitality	Improved: self-efficacy, self-esteem, vitality Unclear: depression symptoms

		esteem, self-efficacy and vitality in the short term and the long term.						
Shann 2018	Australia	The aim of the current study was to investigate whether an online intervention could reduce leaders' depression-related stigma and develop their understanding and skills in relation to managing depression in the workplace.	196 organizational leaders	Multiple	Various workplaces including private sector, public sector, and not-for-profit sector	An online intervention was designed and developed by Beyondblue, which aimed to provide leaders with information, tools, and practical actions to create a mentally healthy workplace, reduce depression stigma, and look after their own mental health. The intervention covered the spectrum of common mental health problems experienced in the workplace, with a particular emphasis on depression.	Stigma, training transfer	Improved: stigma *Training transfer: results dependent on organizational culture
Stansfield 2015	United Kingdom	To investigate the feasibility of recruitment, adherence and likely effectiveness of an e-learning intervention for managers to improve employees' well-being and reduce sickness absence.	Managers of an NHS Mental Health Trust	Healthcare	Four workplaces belonging to one National Health Service (NHS) Mental Health Trust	The Anderson Peak Performance e-learning package 'Managing Employee Pressure at Work', an established e-learning health promotion programme for managers with a focus on the six management standards domains: Change, Control, Demands, Relationship, Role and Support. The programme was delivered in weekly to two weekly modules over a 3-month period.	Well-being; sick leave; psychological distress	Improved: well-being, sick leave
Tonarelli 2017	Italy	The overall aim of this research is to evaluate the impact of an expressive writing protocol on coping strategies, emotions and relationships, and	Nurses, psychologists, doctors and other healthcare professionals	Healthcare	The Reggio Emilia Operational Units and the Home Care and Residential Care Centre of Bologna, Italy	The intervention procedure in the experimental group was an expressive writing protocol, while the control group was given a neutral writing protocol (Figure 1). Expressive writing is a tool through which the subject	Coping strategies, working satisfaction	Improved: coping strategies Unclear: work satisfaction

		on work satisfaction of health care professionals.				describes his/her most profound thoughts and feelings about emotional events.		
Van Berkel 2014	Netherlands	The aim of the present workplace health promotion study was to evaluate the effectiveness of a targeted worksite mindfulness-related multi-component health promotion intervention on work engagement, mental health (general mental health and need for recovery) and mindfulness.	An employee was considered eligible when having signed informed consent, not being on sick leave for more than 4 weeks, and not being pregnant at the time of recruitment.	Education	2 Dutch research institutes	A targeted mindfulness-related training, followed by e-coaching. The total duration of the intervention was 6 months.	Work engagement; general mental health; mindfulness	No change: work engagement, mental health, need for recovery, mindfulness
Wesemann 2016	Germany and Afghanistan	The aim of this study was to compare parameters including attitude toward PTSD, knowledge of PTSD, PTSD-specific symptoms, and current mental state before and after predeployment training and on completion of the tour of duty.	Members of the military at a high risk of sustaining military-specific traumata on operations	Military	Medical military unit to be deployed abroad in Afghanistan	Chaos Driven Situations Management Retrieval System (CHARLY): a computer-aided training platform with a biofeedback interface. Training focuses on individual resources such as awareness and acceptance of mental injuries, psychoeducation, protective mindset, coping strategies such as relaxation, and distancing techniques as well as constructive communication in the peer group.	Mental state; attitude; PTSD	Improved: attitude; PTSD knowledge For mental state, both groups showed deterioration post-deployment, but intervention group scores were better

APPENDIX H

Search Strategies

Search strategies

MEDLINE

Searched 8 August, 2018

Database: Ovid MEDLINE: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE® Daily and Ovid MEDLINE® <1946-Present>

Search Strategy:

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214 (educat* adj3 "work-life balance").tw,kf. (8)
215 (initiative* adj3 "work-life balance").tw,kf. (2)
216 (promotion* adj3 "work-life balance").tw,kf. (7)
217 (policy adj3 "work-life balance").tw,kf. (4)
218 (policies adj3 "work-life balance").tw,kf. (6)
219 (strateg* adj3 "work-life balance").tw,kf. (10)
220 (intervention* adj3 "work-life balance").tw,kf. (2)
221 (program* adj3 "work-life balance").tw,kf. (8)
222 (tool* adj3 "work-life balance").tw,kf. (1)
223 (campaign* adj3 workload*).tw,kf. (3)
224 (educat* adj3 workload*).tw,kf. (117)
225 (initiative* adj3 workload*).tw,kf. (5)
226 (promotion* adj3 workload*).tw,kf. (7)
227 (policy adj3 workload*).tw,kf. (17)
228 (policies adj3 workload*).tw,kf. (12)
229 (strateg* adj3 workload*).tw,kf. (54)
230 (intervention* adj3 workload*).tw,kf. (62)
231 (program* adj3 workload*).tw,kf. (78)
232 (tool* adj3 workload*).tw,kf. (90)
233 health promotion/ and mental health/ (1104)
234 occupational health/ and mental health/ (641)
235 health policy/ and mental health/ (426)
236 or/11-235 (54127)
237 exp Mental Health/ (31402)
238 mental health.tw,kf. (124513)
239 Aggression/ or aggress*.tw,kf. (195633)
240 Agonistic behavior/ (1690)
241 Bullying/ (2910)
242 (bully* or bullied).tw,kf. (4741)
243 harass*.tw,kf. (3188)
244 harassment, non-sexual/ (24)
245 violence.tw,kf. (42065)
246 intimidation*.tw,kf. (483)
247 PTSD.tw,kf. (20570)
248 post-traumatic stress disorder?.tw,kf. (9495)
249 Stress Disorders, Post-Traumatic/ (28500)
250 Stress Disorders, Traumatic/ (614)
251 Stress Disorders, Traumatic, Acute/ (427)
252 Workplace Violence/ (566)
253 Absenteeism/ (8510)
254 Absenteeism.tw,kf. (5190)
255 presenteeism.tw,kf. (900)
256 (attendance adj2 work).tw,kf. (135)
257 (benefit? adj2 duration).tw,kf. (331)

258 compensation claim? cost?.tw,kf. (14)
259 (claim* adj2 cost?).tw,kf. (543)
260 compensation cost?.tw,kf. (228)
261 continuance cost?.tw,kf. (0)
262 continuance rate?.tw,kf. (14)
263 fit note?.tw,kf. (52)
264 health-related work role functioning.tw,kf. (0)
265 liability reduction.tw,kf. (11)
266 long-term disabilit*.tw,kf. (2348)
267 longterm disabilit*.tw,kf. (18)
268 long-term insurance.tw,kf. (26)
269 lost time.tw,kf. (573)
270 (lost adj2 "work day?").tw,kf. (266)
271 (lost adj2 workday?).tw,kf. (322)
272 Grievance$.tw,kf. (598)
273 Complaint$.tw,kf. (78254)
274 safety order$.tw,kf. (8)
275 Productiv*.tw,kf. (79558)
276 turnover.tw,kf. (88806)
277 Morale.tw,kf. (2782)
278 healthy workplace*.tw,kf. (202)
279 (respect* adj3 workplace*).tw,kf. (135)
280 short term disabilit$.tw,kf. (244)
281 Sick Leave/ (5227)
282 sick list$.tw,kf. (620)
283 (sick$ adj2 absence?).tw,kf. (2380)
284 social exclusion.tw,kf. (1451)
285 time loss.tw,kf. (869)
286 time lost.tw,kf. (725)
287 (work* adj2 participation).tw,kf. (1303)
288 appreciation.tw,kf. (16797)
289 "well-being".tw,kf. (62604)
290 wellbeing.tw,kf. (11667)
291 isolation.tw,kf. (229532)
292 loneliness.tw,kf. (4853)
293 ("job security" or "job insecurity").tw,kf. (1064)
294 over-promotion.tw,kf. (8)
295 under-promotion.tw,kf. (13)
296 employee satisf*.tw,kf. (339)
297 employee participat*.tw,kf. (171)
298 communication.tw,kf. (200802)
299 Employee engage*.tw,kf. (190)
300 Organizational justice.tw,kf. (236)
301 fairness.tw,kf. (3137)

302 "Work-life balance".tw,kf. (908)
303 (Family adj3 health).tw,kf. (12924)
304 "health and safety".tw,kf. (8008)
305 work engagement/ (78)
306 sexual harassment/ (1490)
307 exp occupational stress/ [includes burnout and compassion fatigue] (10146)
308 (job adj3 stress).tw,kf. (2536)
309 (work adj3 stress).tw,kf. (5096)
310 (job adj3 strain).tw,kf. (1397)
311 (work adj3 strain).tw,kf. (984)
312 (psychologic* adj3 health).tw,kf. (8347)
313 (psychologic* adj3 safe*).tw,kf. (368)
314 psychological injur*.tw,kf. (136)
315 or/237-314 (1185257)
316 10 and 236 and 315 (5219)
317 limit 316 to yr=2013-2018 (2070)

PsycINFO
Searched 7 August 2018

Database: PsycINFO <1806 to July Week 5 2018>
Search Strategy:
---

1 (Worker? or labo?rer?).ti,ab. (86416)
2 employee?.ti,ab. (58161)
3 employer?.ti,ab. (12962)
4 employment status/ [employment] (14460)
5 employment.ti,ab. (46520)
6 job?.ti,ab. (80656)
7 occupation*.ti,ab. (58440)
8 workplace.ti,ab. [no controlled vocab] (29845)
9 workplace intervention/ (343)
10 or/1-9 (279243)
11 CSA Z1003.ti,ab. (0)
12 (standard adj2 z1003).ti,ab. (0)
13 (campaign* adj3 "demand-control").ti,ab. (0)
14 (educat* adj3 "demand-control").ti,ab. (0)
15 (initiative* adj3 "demand-control").ti,ab. (0)
16 (promotion* adj3 "demand-control").ti,ab. (0)
17 (policy adj3 "demand-control").ti,ab. (0)
18 (policies adj3 "demand-control").ti,ab. (1)
19 (strateg* adj3 "demand-control").ti,ab. (0)
20 (intervention* adj3 "demand-control").ti,ab. (0)
21 (program* adj3 "demand-control").ti,ab. (1)

22 (tool* adj3 "demand-control").ti,ab. (1)
23 (campaign* adj3 "job demand*").ti,ab. (0)
24 (educat* adj3 "job demand*").ti,ab. (10)
25 (initiative* adj3 "job demand*").ti,ab. (0)
26 (promotion* adj3 "job demand*").ti,ab. (1)
27 (policy adj3 "job demand*").ti,ab. (0)
28 (policies adj3 "job demand*").ti,ab. (0)
29 (strateg* adj3 "job demand*").ti,ab. (2)
30 (intervention* adj3 "job demand*").ti,ab. (4)
31 (program* adj3 "job demand*").ti,ab. (0)
32 (tool* adj3 "job demand*").ti,ab. (4)
33 (campaign* adj3 "job control*").ti,ab. (0)
34 (educat* adj3 " job control*").ti,ab. (4)
35 (initiative* adj3 "job control*").ti,ab. (1)
36 (promotion* adj3 "job control*").ti,ab. (0)
37 (policy adj3 "job control*").ti,ab. (1)
38 (policies adj3 "job control*").ti,ab. (0)
39 (strateg* adj3 "job control*").ti,ab. (2)
40 (intervention* adj3 "job control*").ti,ab. (4)
41 (program* adj3 "job control*").ti,ab. (0)
42 (tool* adj3 "job control*").ti,ab. (0)
43 (campaign* adj3 "mental health").ti,ab. (73)
44 (educat* adj3 "mental health").ti,ab. (3045)
45 (initiative* adj3 "mental health").ti,ab. (601)
46 (promotion* adj3 "mental health").ti,ab. (1405)
47 (policy adj3 "mental health").ti,ab. (1935)
48 (policies adj3 "mental health").ti,ab. (552)
49 (strateg* adj3 "mental health").ti,ab. (1016)
50 (intervention* adj3 "mental health").ti,ab. (3448)
51 (program* adj3 "mental health").ti,ab. (4984)
52 (tool* adj3 "mental health").ti,ab. (406)
53 (campaign* adj3 aggress*).ti,ab. (47)
54 (educat* adj3 aggress*).ti,ab. (151)
55 (initiative* adj3 aggress*).ti,ab. (28)
56 (promotion* adj3 aggress*).ti,ab. (34)
57 (policy adj3 aggress*).ti,ab. (66)
58 (policies adj3 aggress*).ti,ab. (62)
59 (strateg* adj3 aggress*).ti,ab. (587)
60 (intervention* adj3 aggress*).ti,ab. (762)
61 (program* adj3 aggress*).ti,ab. (445)
62 (tool* adj3 aggress*).ti,ab. (63)
63 (campaign* adj3 communicat*).ti,ab. (562)
64 (educat* adj3 communicat*).ti,ab. (2435)
65 (initiative* adj3 communicat*).ti,ab. (179)

66 (promotion* adj3 communicat*).ti,ab. (196)
67 (policy adj3 communicat*).ti,ab. (384)
68 (policies adj3 communicat*).ti,ab. (180)
69 (strateg* adj3 communicat*).ti,ab. (4149)
70 (intervention* adj3 communicat*).ti,ab. (1798)
71 (program* adj3 communicat*).ti,ab. (1695)
72 (tool* adj3 communicat*).ti,ab. (1792)
73 (campaign* adj3 engage*).ti,ab. (71)
74 (educat* adj3 engage*).ti,ab. (1867)
75 (initiative* adj3 engage*).ti,ab. (250)
76 (promotion* adj3 engage*).ti,ab. (151)
77 (policy adj3 engage*).ti,ab. (359)
78 (policies adj3 engage*).ti,ab. (61)
79 (strateg* adj3 engage*).ti,ab. (1942)
80 (intervention* adj3 engage*).ti,ab. (1155)
81 (program* adj3 engage*).ti,ab. (1334)
82 (tool* adj3 engage*).ti,ab. (327)
83 (campaign* adj3 harass*).ti,ab. (7)
84 (educat* adj3 harass*).ti,ab. (74)
85 (initiative* adj3 harass*).ti,ab. (5)
86 (promotion* adj3 harass*).ti,ab. (3)
87 (policy adj3 harass*).ti,ab. (59)
88 (policies adj3 harass*).ti,ab. (92)
89 (strateg* adj3 harass*).ti,ab. (42)
90 (intervention* adj3 harass*).ti,ab. (33)
91 (program* adj3 harass*).ti,ab. (41)
92 (tool* adj3 harass*).ti,ab. (6)
93 (campaign* adj3 "health and safety").ti,ab. (2)
94 (educat* adj3 "health and safety").ti,ab. (49)
95 (initiative* adj3 "health and safety").ti,ab. (10)
96 (promotion* adj3 "health and safety").ti,ab. (17)
97 (policy adj3 "health and safety").ti,ab. (18)
98 (policies adj3 "health and safety").ti,ab. (33)
99 (strateg* adj3 "health and safety").ti,ab. (22)
100 (intervention* adj3 "health and safety").ti,ab. (49)
101 (program* adj3 "health and safety").ti,ab. (62)
102 (tool* adj3 "health and safety").ti,ab. (6)
103 (campaign* adj3 isolation).ti,ab. (1)
104 (educat* adj3 isolation).ti,ab. (93)
105 (initiative* adj3 isolation).ti,ab. (3)
106 (promotion* adj3 isolation).ti,ab. (9)
107 (policy adj3 isolation).ti,ab. (15)
108 (policies adj3 isolation).ti,ab. (15)
109 (strateg* adj3 isolation).ti,ab. (67)

110 (intervention* adj3 isolation).ti,ab. (69)
111 (program* adj3 isolation).ti,ab. (53)
112 (tool* adj3 isolation).ti,ab. (12)
113 (campaign* adj3 lonel*).ti,ab. (0)
114 (educat* adj3 lonel*).ti,ab. (38)
115 (initiative* adj3 lonel*).ti,ab. (1)
116 (promotion* adj3 lonel*).ti,ab. (3)
117 (policy adj3 lonel*).ti,ab. (5)
118 (policies adj3 lonel*).ti,ab. (0)
119 (strateg* adj3 lonel*).ti,ab. (58)
120 (intervention* adj3 lonel*).ti,ab. (111)
121 (program* adj3 lonel*).ti,ab. (29)
122 (tool* adj3 lonel*).ti,ab. (8)
123 campaign*.ti,ab. and posttraumatic stress disorder/ (24)
124 educat*.ti,ab. and posttraumatic stress disorder/ (1195)
125 initiative*.ti,ab. and posttraumatic stress disorder/ (99)
126 promotion*.ti,ab. and posttraumatic stress disorder/ (58)
127 policy.ti,ab. and posttraumatic stress disorder/ (340)
128 policies.ti,ab. and posttraumatic stress disorder/ (99)
129 strateg*.ti,ab. and posttraumatic stress disorder/ (1827)
130 intervention*.ti,ab. and posttraumatic stress disorder/ (4669)
131 program*.ti,ab. and posttraumatic stress disorder/ (1838)
132 tool*.ti,ab. and posttraumatic stress disorder/ (670)
133 (campaign* adj3 PTSD).ti,ab. (2)
134 (educat* adj3 PTSD).ti,ab. (64)
135 (initiative* adj3 PTSD*).ti,ab. (2)
136 (promotion* adj3 PTSD).ti,ab. (1)
137 (policy adj3 PTSD).ti,ab. (5)
138 (policies adj3 PTSD).ti,ab. (3)
139 (strateg* adj3 PTSD).ti,ab. (126)
140 (intervention* adj3 PTSD).ti,ab. (422)
141 (program* adj3 PTSD).ti,ab. (253)
142 (tool* adj3 PTSD).ti,ab. (67)
143 (campaign* adj3 "post traumatic stress disorder").ti,ab. (0)
144 (educat* adj3 "post traumatic stress disorder").ti,ab. (5)
145 (initiative* adj3 "post traumatic stress disorder").ti,ab. (0)
146 (promotion* adj3 "post traumatic stress disorder").ti,ab. (0)
147 (policy adj3 "post traumatic stress disorder").ti,ab. (0)
148 (policies adj3 "post traumatic stress disorder").ti,ab. (0)
149 (strateg* adj3 "post traumatic stress disorder").ti,ab. (17)
150 (intervention* adj3 "post traumatic stress disorder").ti,ab. (50)
151 (program* adj3 "post traumatic stress disorder").ti,ab. (26)
152 (tool* adj3 "post traumatic stress disorder").ti,ab. (6)
153 (campaign* adj3 shiftwork).ti,ab. (0)

154 (educat* adj3 shiftwork).ti,ab. (0)
155 (initiative* adj3 shiftwork).ti,ab. (0)
156 (promotion* adj3 shiftwork).ti,ab. (1)
157 (policy adj3 shiftwork).ti,ab. (0)
158 (policies adj3 shiftwork).ti,ab. (2)
159 (strateg* adj3 shiftwork).ti,ab. (2)
160 (intervention* adj3 shiftwork).ti,ab. (2)
161 (program* adj3 shiftwork).ti,ab. (0)
162 (tool* adj3 shiftwork).ti,ab. (0)
163 (campaign* adj3 "shift work").ti,ab. (0)
164 (educat* adj3 "shift work").ti,ab. (4)
165 (initiative* adj3 "shift work").ti,ab. (0)
166 (promotion* adj3 "shift work").ti,ab. (0)
167 (policy adj3 "shift work").ti,ab. (1)
168 (policies adj3 "shift work").ti,ab. (2)
169 (strateg* adj3 "shift work").ti,ab. (5)
170 (intervention* adj3 "shift work").ti,ab. (8)
171 (program* adj3 "shift work").ti,ab. (2)
172 (tool* adj3 "shift work").ti,ab. (0)
173 (campaign* adj3 trauma*).ti,ab. (0)
174 (educat* adj3 trauma*).ti,ab. (274)
175 (initiative* adj3 trauma*).ti,ab. (24)
176 (promotion* adj3 trauma*).ti,ab. (7)
177 (policy adj3 trauma*).ti,ab. (26)
178 (policies adj3 trauma*).ti,ab. (15)
179 (strateg* adj3 trauma*).ti,ab. (305)
180 (intervention* adj3 trauma*).ti,ab. (1484)
181 (program* adj3 trauma*).ti,ab. (428)
182 (tool* adj3 trauma*).ti,ab. (120)
183 (campaign* adj3 violen*).ti,ab. (65)
184 (educat* adj3 violen*).ti,ab. (512)
185 (initiative* adj3 violen*).ti,ab. (136)
186 (promotion* adj3 violen*).ti,ab. (34)
187 (policy adj3 violen*).ti,ab. (264)
188 (policies adj3 violen*).ti,ab. (178)
189 (strateg* adj3 violen*).ti,ab. (561)
190 (intervention* adj3 violen*).ti,ab. (1350)
191 (program* adj3 violen*).ti,ab. (1818)
192 (tool* adj3 violen*).ti,ab. (191)
193 (campaign* adj3 "work-life balance").ti,ab. (0)
194 (educat* adj3 "work-life balance").ti,ab. (7)
195 (initiative* adj3 "work-life balance").ti,ab. (19)
196 (promotion* adj3 "work-life balance").ti,ab. (4)
197 (policy adj3 "work-life balance").ti,ab. (11)

198 (policies adj3 "work-life balance").ti,ab. (40)
199 (strateg* adj3 "work-life balance").ti,ab. (35)
200 (intervention* adj3 "work-life balance").ti,ab. (8)
201 (program* adj3 "work-life balance").ti,ab. (26)
202 (tool* adj3 "work-life balance").ti,ab. (3)
203 (campaign* adj3 workload*).ti,ab. (0)
204 (educat* adj3 workload).ti,ab. (41)
205 (initiative* adj3 workload).ti,ab. (2)
206 (promotion* adj3 workload).ti,ab. (4)
207 (policy adj3 workload).ti,ab. (6)
208 (policies adj3 workload).ti,ab. (5)
209 (strateg* adj3 workload).ti,ab. (38)
210 (intervention* adj3 workload).ti,ab. (3)
211 (program* adj3 workload).ti,ab. (25)
212 (tool* adj3 workload).ti,ab. (40)
213 health promotion/ and mental health/ (1313)
214 occupational health/ and mental health/ (139)
215 health care policy/ and mental health/ (825)
216 or/11-215 (53845)
217 mental health/ (57686)
218 mental health.ti,ab. (157981)
219 relational aggression/ or aggress*.ti,ab. (75099)
220 Aggressive Behavior/ (23826)
221 bullying/ (7280)
222 (bully* or bullied).ti,ab. (9662)
223 exp harassment/ [includes sexual and stalking] (3878)
224 violence.ti,ab. (66065)
225 intimidation.ti,ab. (837)
226 PTSD.ti,ab. (28103)
227 post-traumatic stress disorder?.ti,ab. (8714)
228 posttraumatic stress disorder/ (29489)
229 workplace violence/ (771)
230 EMPLOYEE ABSENTEEISM/ (2152)
231 absenteeism.ti,ab. (3605)
232 presenteeism.ti,ab. (417)
233 (attendance adj2 work).ti,ab. (133)
234 (benefit? adj2 duration).ti,ab. (49)
235 compensation claim? cost?.ti,ab. (7)
236 (claim* adj2 cost?).ti,ab. (125)
237 compensation cost?.ti,ab. (72)
238 continuance cost?.ti,ab. (0)
239 continuance rate?.ti,ab. (4)
240 fit note?.ti,ab. (16)
241 health-related work role functioning.ti,ab. (0)

242 liability reduction.ti,ab. (1)
243 long-term disabilit*.ti,ab. (608)
244 longterm disabilit*.ti,ab. (3)
245 long-term insurance.ti,ab. (7)
246 lost time.ti,ab. (233)
247 (lost adj2 "work day?").ti,ab. (69)
248 (lost adj2 workday?).ti,ab. (80)
249 Grievance$.ti,ab. (1112)
250 Complaint$.ti,ab. (20929)
251 safety order$.ti,ab. (8)
252 Productiv*.ti,ab. (31318)
253 turnover.ti,ab. (11287)
254 Morale.ti,ab. (4677)
255 healthy workplace*.ti,ab. (144)
256 (respect* adj3 workplace*).ti,ab. (94)
257 short term disabilit$.ti,ab. (81)
258 Employee Leave Benefits/ [sick leave] (990)
259 sick list$.ti,ab. (187)
260 (sick$ adj2 absence?).ti,ab. (1024)
261 social exclusion.ti,ab. (2577)
262 time loss.ti,ab. (109)
263 time lost.ti,ab. (166)
264 (work* adj2 participation).ti,ab. (1262)
265 appreciation.ti,ab. (13647)
266 Well Being/ (38185)
267 "well-being".ti,ab. (69583)
268 wellbeing.ti,ab. (10047)
269 isolation.ti,ab. (26103)
270 loneliness.ti,ab. (8211)
271 ("job security" or "job insecurity").ti,ab. (1873)
272 over-promotion.ti,ab. (4)
273 under-promotion.ti,ab. (15)
274 employee satisf*.ti,ab. (697)
275 employee participat*.ti,ab. (485)
276 communication.ti,ab. (143303)
277 Employee engage*.ti,ab. (867)
278 Organizational justice.ti,ab. (1276)
279 fairness/ (2607)
280 "Work-life balance".ti,ab. (1305)
281 (Family adj3 health).ti,ab. (6863)
282 "health and safety".ti,ab. (2688)
283 employee engagement/ (1995)
284 exp occupational stress/ (19932)
285 (job adj3 stress).ti,ab. (3555)

286 (job adj3 strain).ti,ab. (1073)
287 (work adj3 stress).ti,ab. (4721)
288 (work adj3 strain).ti,ab. (587)
289 (psychologic* adj3 (health or safe*)).ti,ab. (10555)
290 psychological injur*.ti,ab. (316)
291 or/217-290 (664114)
292 10 and 216 and 291 (5230)
293 limit 292 to yr="2013-2018" (1987)

Cochrane Library
Searched 21 August 2018

Under Cochrane Reviews tab, chose Browse Reviews and tag 'Health and Safety at Work', and scan results for relevance

- 101 reviews
- 25 protocols

EMBASE
Searched 13 August 2018

Database: Embase <1980 to 2018 Week 33>
Search Strategy:
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1 (Worker? or labo?rer?).tw,kw. (172466)
2 employee?.tw,kw. (45134)
3 employer?.tw,kw. (18756)
4 Employment/ (51547)
5 employment.tw,kw. (55956)
6 job?.tw,kw. (62560)
7 occupation*.tw,kw. (163843)
8 work/ (28763)
9 workplace/ (33954)
10 or/1-9 (462459)
11 CSA Z1003.tw,kw. (0)
12 (standard adj2 z1003).tw,kw. (0)
13 (campaign* adj3 "demand-control").tw,kw. (0)
14 (educat* adj3 "demand-control").tw,kw. (3)
15 (initiative* adj3 "demand-control").tw,kw. (0)
16 (promotion* adj3 "demand-control").tw,kw. (0)
17 (policy adj3 "demand-control").tw,kw. (0)
18 (policies adj3 "demand-control").tw,kw. (3)
19 (strateg* adj3 "demand-control").tw,kw. (1)
20 (intervention* adj3 "demand-control").tw,kw. (0)
21 (program* adj3 "demand-control").tw,kw. (0)
22 (tool* adj3 "demand-control").tw,kw. (0)
23 (campaign* adj3 "job demand*").tw,kw. (0)
24 (educat* adj3 "job demand*").tw,kw. (12)
25 (initiative* adj3 "job demand*").tw,kw. (0)
26 (promotion* adj3 "job demand*").tw,kw. (1)
27 (policy adj3 "job demand*").tw,kw. (0)
28 (policies adj3 "job demand*").tw,kw. (1)
29 (strateg* adj3 "job demand*").tw,kw. (4)
30 (intervention* adj3 "job demand*").tw,kw. (4)
31 (program* adj3 "job demand*").tw,kw. (2)
32 (tool* adj3 "job demand*").tw,kw. (4)
33 (campaign* adj3 "job control*").tw,kw. (0)
34 (educat* adj3 "job control*").tw,kw. (9)
35 (initiative* adj3 "job control*").tw,kw. (0)
36 (promotion* adj3 "job control*").tw,kw. (1)
37 (policy adj3 "job control*").tw,kw. (1)

38 (policies adj3 "job control*").tw,kw. (0)
39 (strateg* adj3 "job control*").tw,kw. (2)
40 (intervention* adj3 "job control*").tw,kw. (3)
41 (program* adj3 "job control*").tw,kw. (0)
42 (tool* adj3 "job control*").tw,kw. (0)
43 (campaign* adj3 "mental health").tw,kw. (73)
44 (educat* adj3 "mental health").tw,kw. (1674)
45 (initiative* adj3 "mental health").tw,kw. (560)
46 (promotion* adj3 "mental health").tw,kw. (1132)
47 (policy adj3 "mental health").tw,kw. (1506)
48 (policies adj3 "mental health").tw,kw. (448)
49 (strateg* adj3 "mental health").tw,kw. (854)
50 (intervention* adj3 "mental health").tw,kw. (2756)
51 (program* adj3 "mental health").tw,kw. (3164)
52 (tool* adj3 "mental health").tw,kw. (373)
53 (campaign* adj3 aggress*).tw,kw. (164)
54 (educat* adj3 aggress*).tw,kw. (292)
55 (initiative* adj3 aggress*).tw,kw. (30)
56 (promotion* adj3 aggress*).tw,kw. (92)
57 (policy adj3 aggress*).tw,kw. (326)
58 (policies adj3 aggress*).tw,kw. (85)
59 (strateg* adj3 aggress*).tw,kw. (2482)
60 (intervention* adj3 aggress*).tw,kw. (3582)
61 (program* adj3 aggress*).tw,kw. (838)
62 (tool* adj3 aggress*).tw,kw. (104)
63 (campaign* adj3 communicat*).tw,kw. (610)
64 (educat* adj3 communicat*).tw,kw. (4320)
65 (initiative* adj3 communicat*).tw,kw. (278)
66 (promotion* adj3 communicat*).tw,kw. (295)
67 (policy adj3 communicat*).tw,kw. (480)
68 (policies adj3 communicat*).tw,kw. (178)
69 (strateg* adj3 communicat*).tw,kw. (4796)
70 (intervention* adj3 communicat*).tw,kw. (2519)
71 (program* adj3 communicat*).tw,kw. (2175)
72 (tool* adj3 communicat*).tw,kw. (3402)
73 (campaign* adj3 engage*).tw,kw. (97)
74 (educat* adj3 engage*).tw,kw. (1511)
75 (initiative* adj3 engage*).tw,kw. (281)
76 (promotion* adj3 engage*).tw,kw. (233)
77 (policy adj3 engage*).tw,kw. (400)
78 (policies adj3 engage*).tw,kw. (50)
79 (strateg* adj3 engage*).tw,kw. (1696)
80 (intervention* adj3 engage*).tw,kw. (1354)
81 (program* adj3 engage*).tw,kw. (1648)

82 (tool* adj3 engage*).tw,kw. (420)
83 (campaign* adj3 harass*).tw,kw. (3)
84 (educat* adj3 harass*).tw,kw. (40)
85 (initiative* adj3 harass*).tw,kw. (0)
86 (promotion* adj3 harass*).tw,kw. (4)
87 (policy adj3 harass*).tw,kw. (19)
88 (policies adj3 harass*).tw,kw. (32)
89 (strateg* adj3 harass*).tw,kw. (15)
90 (intervention* adj3 harass*).tw,kw. (14)
91 (program* adj3 harass*).tw,kw. (17)
92 (tool* adj3 harass*).tw,kw. (4)
93 "campaign* health and safety".tw,kw. (0)
94 (educat* adj3 "health and safety").tw,kw. (111)
95 (initiative* adj3 "health and safety").tw,kw. (40)
96 (promotion* adj3 "health and safety").tw,kw. (62)
97 (policy adj3 "health and safety").tw,kw. (74)
98 (policies adj3 "health and safety").tw,kw. (70)
99 (strateg* adj3 "health and safety").tw,kw. (73)
100 (intervention* adj3 "health and safety").tw,kw. (102)
101 (program* adj3 "health and safety").tw,kw. (331)
102 (tool* adj3 "health and safety").tw,kw. (32)
103 (campaign* adj3 isolation).tw,kw. (15)
104 (educat* adj3 isolation).tw,kw. (167)
105 (initiative* adj3 isolation).tw,kw. (13)
106 (promotion* adj3 isolation).tw,kw. (21)
107 (policy adj3 isolation).tw,kw. (143)
108 (policies adj3 isolation).tw,kw. (77)
109 (strateg* adj3 isolation).tw,kw. (857)
110 (intervention* adj3 isolation).tw,kw. (188)
111 (program* adj3 isolation).tw,kw. (148)
112 (tool* adj3 isolation).tw,kw. (342)
113 (campaign* adj3 lonel*).tw,kw. (0)
114 (educat* adj3 lonel*).tw,kw. (35)
115 (initiative* adj3 lonel*).tw,kw. (0)
116 (promotion* adj3 lonel*).tw,kw. (1)
117 (policy adj3 lonel*).tw,kw. (2)
118 (policies adj3 lonel*).tw,lw. (0)
119 (strateg* adj3 lonel*).tw,kw. (24)
120 (intervention* adj3 lonel*).tw,kw. (85)
121 (program* adj3 lonel*).tw,kw. (17)
122 (tool* adj3 lonel*).tw,kw. (4)
123 (campaign* adj3 PTSD).tw,kw. (3)
124 (educat* adj3 PTSD).tw,kw. (78)
125 (initiative* adj3 PTSD).tw,kw. (4)

126 (promotion* adj3 PTSD).tw,kw. (2)
127 (policy adj3 PTSD).tw,kw. (3)
128 (policies adj3 PTSD).tw,kw. (2)
129 (strateg* adj3 PTSD).tw,kw. (132)
130 (intervention* adj3 PTSD).tw,kw. (402)
131 (program* adj3 PTSD).tw,kw. (176)
132 (tool* adj3 PTSD).tw,kw. (83)
133 campaign*.tw,kw. and Posttraumatic stress disorder/ (71)
134 educat*.tw,kw. and Posttraumatic stress disorder/ (2180)
135 initiative*.tw,kw. and Posttraumatic stress disorder/ (246)
136 promotion*.tw,kw. and Posttraumatic stress disorder/ (125)
137 policy.tw,kw. and Posttraumatic stress disorder/ (514)
138 policies.tw,kw. and Posttraumatic stress disorder/ (176)
139 strateg*.tw,kw. and Posttraumatic stress disorder/ (2684)
140 intervention*.tw,kw. and Posttraumatic stress disorder/ (7140)
141 program*.tw,kw. and Posttraumatic stress disorder/ (2674)
142 tool*.tw,kw. and Posttraumatic stress disorder/ (1276)
143 (campaign* adj3 "post traumatic stress disorder").tw,kw. (0)
144 (educat* adj3 "post traumatic stress disorder").tw,kw. (3)
145 (initiative* adj3 "post traumatic stress disorder").tw,kw. (0)
146 (promotion* adj3 "post traumatic stress disorder").tw,kw. (0)
147 (policy adj3 "post traumatic stress disorder").tw,kw. (0)
148 (policies adj3 "post traumatic stress disorder").tw,kw. (1)
149 (strateg* adj3 "post traumatic stress disorder").tw,kw. (27)
150 (intervention* adj3 "post traumatic stress disorder").tw,kw. (54)
151 (program* adj3 "post traumatic stress disorder").tw,kw. (13)
152 (tool* adj3 "post traumatic stress disorder").tw,kw. (10)
153 (campaign* adj3 shiftwork).tw,kw. (0)
154 (educat* adj3 shiftwork).tw,kw. (5)
155 (initiative* adj3 shiftwork).tw,kw. (0)
156 (promotion* adj3 shiftwork).tw,kw. (0)
157 (policy adj3 shiftwork).tw,kw. (1)
158 (policies adj3 shiftwork).tw,kw. (1)
159 (strateg* adj3 shiftwork).tw,kw. (7)
160 (intervention* adj3 shiftwork).tw,kw. (6)
161 (program* adj3 shiftwork).tw,kw. (1)
162 (tool* adj3 shiftwork).tw,kw. (0)
163 (campaign* adj3 "shift work").tw,kw. (0)
164 (educat* adj3 "shift work").tw,kw. (33)
165 (initiative* adj3 "shift work").tw,kw. (0)
166 (promotion* adj3 "shift-work").tw,kw. (4)
167 (policy adj3 "shift work").tw,kw. (1)
168 (policies adj3 "shift work").tw,kw. (2)
169 (strateg* adj3 "shift work").tw,kw. (15)

170 (intervention* adj3 "shift work").tw,kw. (12)
171 (program* adj3 "shift work").tw,kw. (6)
172 (tool* adj3 "shift work").tw,kw. (1)
173 (campaign* adj3 trauma*).tw,kw. (12)
174 (educat* adj3 trauma*).tw,kw. (533)
175 (initiative* adj3 trauma*).tw,kw. (82)
176 (promotion* adj3 trauma*).tw,kw. (17)
177 (policy adj3 trauma*).tw,kw. (81)
178 (policies adj3 trauma*).tw,kw. (28)
179 (strateg* adj3 trauma*).tw,kw. (690)
180 (intervention* adj3 trauma*).tw,kw. (2301)
181 (program* adj3 trauma*).tw,kw. (928)
182 (tool* adj3 trauma*).tw,kw. (408)
183 (campaign* adj3 violen*).tw,kw. (44)
184 (educat* adj3 violen*).tw,kw. (390)
185 (initiative* adj3 violen*).tw,kw. (89)
186 (promotion* adj3 violen*).tw,kw. (31)
187 (policy adj3 violen*).tw,kw. (133)
188 (policies adj3 violen*).tw,kw. (138)
189 (strateg* adj3 violen*).tw,kw. (376)
190 (intervention* adj3 violen*).tw,kw. (925)
191 (program* adj3 violen*).tw,kw. (1021)
192 (tool* adj3 violen*).tw,kw. (144)
193 (campaign* adj3 "work-life balance").tw,kw. (0)
194 (educat* adj3 "work-life balance").tw,kw. (13)
195 (initiative* adj3 "work-life balance").tw,kw. (3)
196 (promotion* adj3 "work-life balance").tw,kw. (6)
197 (policy adj3 "work-life balance").tw,kw. (2)
198 (policies adj3 "work-life balance").tw,kw. (8)
199 (strateg* adj3 "work-life balance").tw,kw. (17)
200 (intervention* adj3 "work-life balance").tw,kw. (3)
201 (program* adj3 "work-life balance").tw,kw. (12)
202 (tool* adj3 "work-life balance").tw,kw. (2)
203 (campaign* adj3 workload*).tw,kw. (5)
204 (educat* adj3 workload*).tw,kw. (132)
205 (initiative* adj3 workload*).tw,kw. (9)
206 (promotion* adj3 workload*).tw,kw. (9)
207 (policy adj3 workload*).tw,kw. (23)
208 (policies adj3 workload*).tw,kw. (11)
209 (strateg* adj3 workload*).tw,kw. (64)
210 (intervention* adj3 workload*).tw,kw. (100)
211 (program* adj3 workload*).tw,kw. (100)
212 (tool* adj3 workload*).tw,kw. (121)
213 health promotion/ and mental health/ (2437)

214 occupational health/ and mental health/ (1143)
215 health care policy/ and mental health/ (3114)
216 or/11-215 (71223)
217 Mental Health/ (104373)
218 psychological well-being/ (11915)
219 mental health.tw,kw. (139746)
220 Aggression/ or aggress*.tw,kw. (257511)
221 agonistic behavior/ (36)
222 bullying/ (4881)
223 (bully* or bullied).tw,kw. (5387)
224 harassment/ (157)
225 harass*.tw,kw. (3370)
226 violence.tw,kw. (46579)
227 intimidation.tw,kw. (524)
228 PTSD.tw,kw. (25773)
229 post-traumatic stress disorder*.tw,kw. (12249)
230 Posttraumatic stress disorder/ (47553)
231 workplace violence/ (964)
232 absenteeism/ (14218)
233 Absenteeism.tw,kw. (6550)
234 presenteeism.tw,kw. (1573)
235 (attendance adj2 work).tw,kw. (183)
236 (benefit? adj2 duration).tw,kw. (491)
237 compensation claim? cost?.tw,kw. (15)
238 (claim* adj2 cost?).tw,kw. (720)
239 compensation cost?.tw,kw. (284)
240 continuance cost?.tw,kw. (0)
241 continuance rate?.tw,kw. (17)
242 fit note?.tw,kw. (57)
243 health-related work role functioning.tw,kw. (0)
244 liability reduction.tw,kw. (8)
245 long-term disabilit*.tw,kw. (3279)
246 longterm disabilit*.tw,kw. (78)
247 long-term insurance.tw,kw. (28)
248 lost time.tw,kw. (673)
249 (lost adj2 "work day?").tw,kw. (367)
250 (lost adj2 workday?).tw,kw. (407)
251 Grievance$.tw,kw. (521)
252 Complaint$.tw,kw. (110406)
253 safety order$.tw,kw. (16)
254 Productiv*.tw,kw. (89107)
255 turnover.tw,kw. (94527)
256 Morale.tw,kw. (2994)
257 healthy workplace*.tw,kw. (217)

258 (respect* adj3 workplace*).tw,kw. (150)
259 short term disabilit$.tw,kw. (362)
260 medical leave/ [for sick leave] (5314)
261 sick list$.tw,kw. (636)
262 (sick$ adj2 absence?).tw,kw. (2490)
263 social exclusion.tw,kw. (1750)
264 time loss.tw,kw. (971)
265 time lost.tw,kw. (917)
266 (work* adj2 participation).tw,kw. (1600)
267 appreciation.tw,kw. (18926)
268 "well-being".tw,kw. (73631)
269 wellbeing.tw,kw. (17580)
270 isolation.tw,kw. (234877)
271 loneliness.tw,kw. (5472)
272 ("job security" or "job insecurity").tw,kw. (1125)
273 over-promotion.tw,kw. (8)
274 under-promotion.tw,kw. (15)
275 employee satisf*.tw,kw. (414)
276 employee participat*.tw,kw. (192)
277 communication.tw,kw. (231614)
278 Employee engage*.tw,kw. (207)
279 Organizational justice.tw,kw. (226)
280 fairness.tw,kw. (3285)
281 "Work-life balance".tw,kw. (1089)
282 (Family adj3 health).tw,kw. (13358)
283 "health and safety".tw,kw. (9584)
284 work engagement.tw,kw. [no Emtree term] (513)
285 exp sexual harassment/ [includes sexual bullying and frotteurism] (2258)
286 job stress/ [Emtree for occupational stress] (6189)
287 (job adj3 stress).tw,kw. (2939)
288 (work adj3 stress).tw,kw. (6142)
289 (work adj3 strain).tw,kw. (1070)
290 (job adj3 strain).tw,kw. (1579)
291 (psychologic* adj3 health).tw,kw. (10241)
292 (psychologic* adj3 safe*).tw,kw. (418)
293 psychological injur*.tw,kw. (166)
294 or/217-293 (1401633)
295 10 and 216 and 294 (6976)
296 limit 295 to yr=2013-2018 (2843)