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RNAO
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L'Association des infirmières et infirmiers autorisés de l'Ontario

NURSING BEST PRACTICE GUIDELINES PROGRAM

Healthy Work Environments Best Practice Guidelines

Workplace Health, Safety and Well-being of the Nurse

Ontario

Greetings from Doris Grinspun, Executive Director Registered Nurses' Association of Ontario

It is with great pleasure that the Registered Nurses' Association of Ontario releases the "Workplace Health, Safety and Well-being of the Nurse" Guideline. This is one of a series of six Best Practice Guidelines (BPGs) on Healthy Work Environments (HWE), developed by the nursing community. The aim of these guidelines is to provide the best available evidence to support the creation of thriving work environments.

Evidence-based Healthy Work Environments BPGs, when applied, will serve to support the excellence in service that nurses are committed to delivering in their day-to-day practice. RNAO is delighted to be able to provide this key resource to you.

We offer our endless gratitude to the many individuals and organizations that are making our vision for HWE BPGs a reality. To the Government of Ontario and Health Canada for recognizing RNAO's ability to lead this program and providing generous funding. To Donna Tucker – Program Director from 2003 to 2005, and Irmajean Bajnok – Director, International Affairs and Best Practice Guidelines Program and the Program's lead since 2005, for providing wisdom and working intensely to advance the production of these HWE BPGs. To each and all HWE BPG leaders and in particular, for this BPG, Panel Chair Mary Ferguson-Paré, Interim Co-Chairs Janet Roberts and Mickey Kerr, and Panel Coordinator Sue Bookey-Bassett, for providing superb stewardship, commitment and above all exquisite expertise. Thanks also go to the amazing Panel Members who generously contributed their time and knowledge. We could not have delivered such a quality resource without you!

We thank in advance the entire nursing community, committed and passionate about excellence in nursing care and healthy work environments, who will now adopt these BPGs and implement them in their worksites. We ask that you evaluate their impact and tell us what works and what doesn't, so that we continuously learn from you, and revise these guidelines informed by evidence and practice. Partnerships such as this one are destined to produce splendid results – learning communities – all eager to network and share expertise. The resulting synergy will be felt within the BPG movement, in the workplaces, and by people who receive nursing care.

Creating healthy work environments is both a collective and an individual responsibility. Successful uptake of these guidelines requires the concerted effort of nurse administrators, staff and advanced practice nurses, nurses in policy, education and research, and health care colleagues from other disciplines across the organization. It also requires full institutional support from CEO's and their Boards. We ask that you share this guideline with all. There is much we can learn from one another.

Together, we can ensure that health organizations including nurses and all other health care workers, build healthy work environments. This is central to ensuring quality patient care. Let's make health care providers, their organizations and the people they serve the real winners of this important effort!

Doris Grinspun, RN, MSN, PhD (c), O.Ont.

Executive Director
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Responsibility for Development

The Registered Nurses' Association of Ontario (RNAO), with funding from the Ministry of Health and Long-Term Care and in partnership with Health Canada has embarked on a multi-year project of healthy work environments best practice guidelines development, pilot implementation, evaluation and dissemination that will result in the development of six guidelines developed by six expert panels. This guideline was developed by an expert panel convened by the RNAO, conducting its work independent of any bias or influence from funding agencies.

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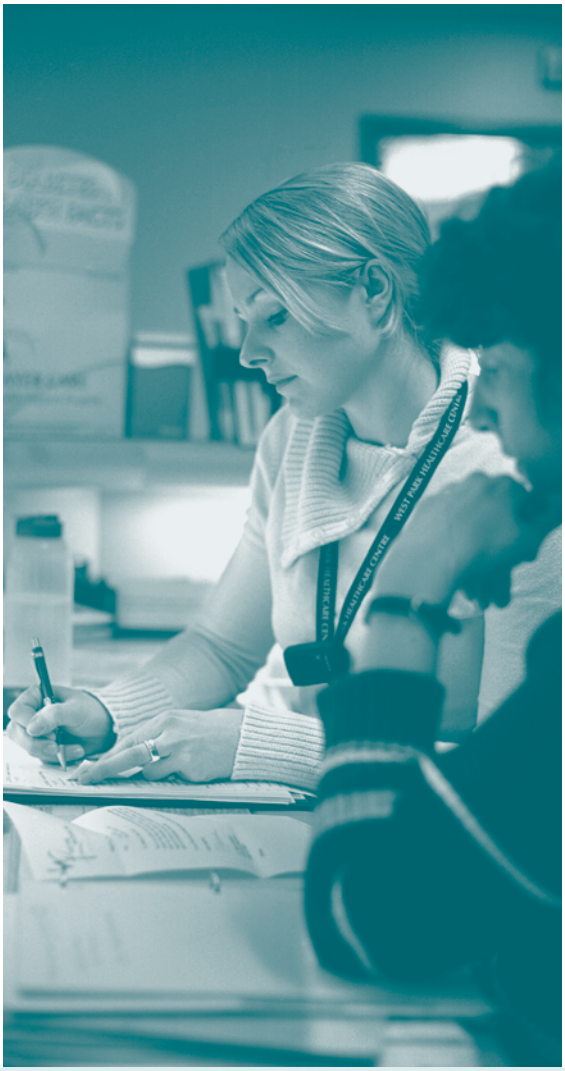

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Background to the Healthy Work Environments Best Practice Guidelines Project

In July of 2003 the Registered Nurses' Association of Ontario (RNAO), with funding from the Ontario Ministry of Health and Long-Term Care, (MOHLTC) working in partnership with Health Canada, Office of Nursing Policy, commenced the development of evidence-based best practice guidelines in order to create healthy work environments[G] for nurses.[G] Just as in clinical decision-making, it is important that those focusing on creating healthy work environments make decisions based on the best evidence possible.

The Healthy Work Environments Best Practice Guidelines[G] Project is a response to priority needs identified by the Joint Provincial Nursing Committee (JPNC) and the Canadian Nursing Advisory Committee.[1] The idea of developing and widely distributing a healthy work environment guide was first proposed in *Ensuring the care will be there: Report on nursing recruitment and retention in Ontario*[2] submitted to MOHLTC in 2000 and approved by JPNC.

Health care systems are under mounting pressure to control costs and increase productivity while responding to increasing demands from growing and aging populations, advancing technology and more sophisticated consumerism. In Canada, health care reform is currently focused on the primary goals identified in the Federal/Provincial/Territorial First Ministers' Agreement 2000,[3] and the Health Accords of 2003[4] and 2004[5]:

- the provision of timely access to health services on the basis of need;
- high quality, effective, patient/client[G]-centered and safe health services; and
- a sustainable and affordable health care system.

Nurses are a vital component in achieving these goals. A sufficient supply of nurses is central to sustain affordable access to safe, timely health care. Achievement of healthy work environments for nurses is critical to the safety, recruitment and retention of nurses.

Numerous reports and articles have documented the challenges in recruiting and retaining a healthy nursing workforce.[2, 6-10] Some have suggested that the basis for the current nursing shortage is the result of unhealthy work environments.[11-14] Strategies that enhance the workplaces of nurses are required to repair the damage left from a decade of relentless restructuring and downsizing.

There is a growing understanding of the relationship between nurses' work environments, patient/client outcomes and organizational and system performance.[15-17] Numerous studies have shown a strong link between nurse staffing and patient/client outcomes.[18-28] The evidence shows that healthy work environments yield financial benefits to organizations with respect to reductions in absenteeism, lost productivity, organizational health care costs,[29] and costs arising from adverse patient/client[G] outcomes.[30]

Achievement of healthy work environments for nurses requires *transformational change*, with "interventions that target underlying workplace and organizational factors".[31] It is with this intention that we have developed these guidelines. We believe that full implementation will make a difference for nurses, their patients/clients and the organizations and communities in which they practice. It is anticipated that a focus on creating healthy work environments will benefit not only nurses but other members of the health care team. We also believe that best practice guidelines can be successfully implemented only where there are adequate planning processes, resources, organizational and administrative supports, and appropriate facilitation.

The project will result in six Healthy Work Environments Best Practice Guidelines

- Collaborative Practice Among Nursing Teams
- Developing and Sustaining Effective Staffing and Workload Practices
- Developing and Sustaining Nursing Leadership
- Embracing Cultural Diversity in Health Care: Developing Cultural Competence
- Professionalism in Nursing
- Workplace Health, Safety and Well-being of the Nurse

> *"A healthy work environment is…*
>
> *…a practice setting that maximizes the health and well-being of nurses, quality patient/client outcomes, organizational performance and societal outcomes."*

Organizing Framework for the Healthy Work Environments Best Practice Guidelines Project

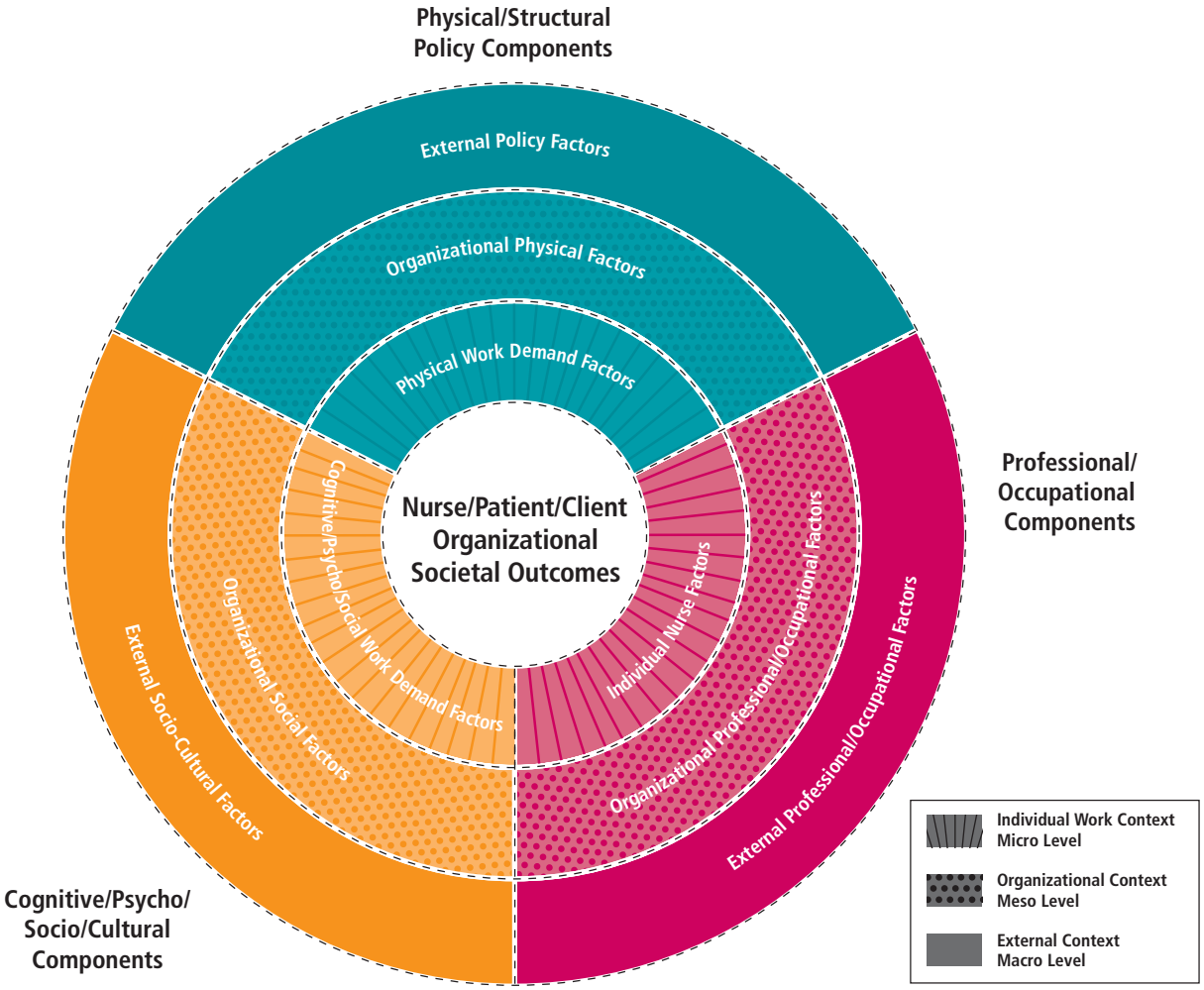

Figure 1. Conceptual Model for Healthy Work Environments for Nurses – Components, Factors & Outcomes[i-iii]

A healthy work environment for nurses is complex and multidimensional, comprised of numerous components and relationships among the components. A comprehensive model is needed to guide the development, implementation and evaluation of a systematic approach to enhancing the work environment of nurses. Healthy work environments for nurses are defined as practice settings that maximize the health and well-being of the nurse, quality patient/client outcomes, organizational performance and societal outcomes.

The Comprehensive Conceptual Model for Healthy Work Environments for Nurses presents the healthy workplace as a product of the interdependence among individual (micro level), organizational (meso level) and external (macro level) system determinants as shown above in the three outer circles. At the core of the circles are the expected beneficiaries of healthy work environments for nurses – nurses, patients/clients, organizations and systems, and society as a whole, including healthier communities.[iv] The lines within the model are dotted to indicate the synergistic interactions among all levels and components of the model.

The model suggests that the individual's functioning is mediated and influenced by interactions between the individual and her/his environment. Thus, interventions to promote healthy work environments must be aimed at multiple levels and components of the system. Similarly, interventions must influence not only the factors within the system and the interactions among these factors but also influence the system itself.[v,vi]

The assumptions underlying the model are as follows:

- healthy work environments are essential for quality, safe patient/client care;
- the model is applicable to all practice settings and all domains of nursing;
- individual, organizational and external system level factors are the determinants of healthy work environments for nurses;
- factors at all three levels impact the health and well-being of nurses, quality patient/client outcomes, organizational and system performance, and societal outcomes either individually or through synergistic interactions;
- at each level, there are physical/structural policy components, cognitive/psycho/social/cultural components and professional/occupational components; and
- the professional/occupational factors are unique to each profession, while the remaining factors are generic for all professions/occupations.

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i Adapted from DeJoy, DM & Southern, DJ. (1993). An Integrative perspective on work-site health promotion. *Journal of Medicine,* 35(12): December, 1221-1230; modified by Laschinger, MacDonald & Shamian (2001); and further modified by Griffin, El-Jardali, Tucker, Grinspun, Bajnok, & Shamian (2003).

ii Baumann, A., O'Brien-Pallas, L., Armstrong-Stassen, M., Blythe, J., Bourbonnais, R., Cameron, S., Irvine Doran D., et al. (2001, June). *Commitment and care: The benefits of a healthy workplace for nurses, their patients, and the system.* Ottawa, Canada: Canadian Health Services Research Foundation and The Change Foundation.

iii O'Brien-Pallas, L., & Baumann, A. (1992). Quality of nursing worklife issues: A unifying framework. *Canadian Journal of Nursing Administration,* 5(2):12-16.

iv Hancock, T. (2000). The Evolution, Healthy Communities vs. "Health". *Canadian Health Care Management,* 100(2):21-23.

v Green, LW., Richard, L. and Potvin, L. (1996). Ecological foundation of health promotion. *American Journal of Health Promotion,* 10(4): March/April, 270-281.

vi Grinspun, D. (2000). *Taking care of the bottom line: shifting paradigms in hospital management.* In Diana L. Gustafson (ed.), *Care and Consequence: Health Care Reform and Its Impact on Canadian Women.* Halifax, Nova Scotia, Canada. Fernwood Publishing.

Physical/Structural Policy Components

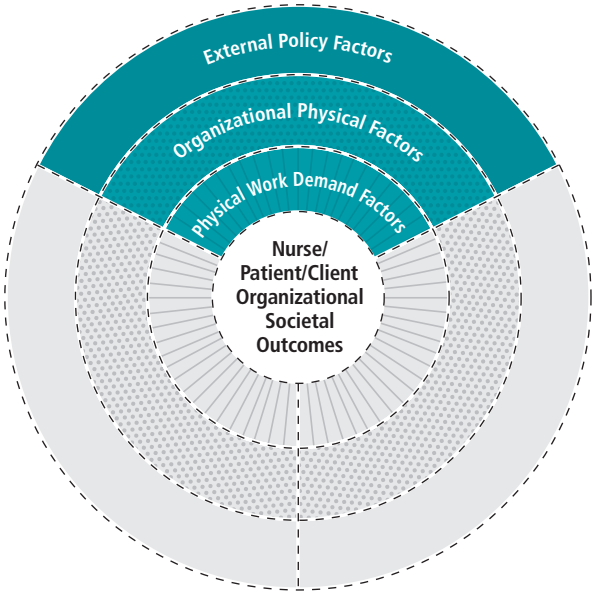

Figure 1A

Physical/Structural Policy Components

- At the individual level, the Physical Work Demand Factors include the requirements of the work which necessitate physical capabilities and effort on the part of the individual.[vii] Included among these factors are workload, changing schedules and shifts, heavy lifting, exposure to hazardous and infectious substances, and threats to personal safety.
- At the organizational level, the Organizational Physical Factors include the physical characteristics and the physical environment of the organization and also the organizational structures and processes created to respond to the physical demands of the work. Included among these factors are staffing practices, flexible and self-scheduling, access to functioning lifting equipment, occupational health and safety polices, and security personnel.
- At the system or external level, the External Policy Factors include health care delivery models, funding, and legislative, trade, economic and political frameworks (e.g. migration policies, health system reform) external to the organization.

vii Grinspun, D. (2002). *The Social Construction of Nursing Caring.* Unpublished Doctoral Dissertation Proposal. York University, North York, Ontario.

Cognitive/Psycho/Socio/Cultural Components

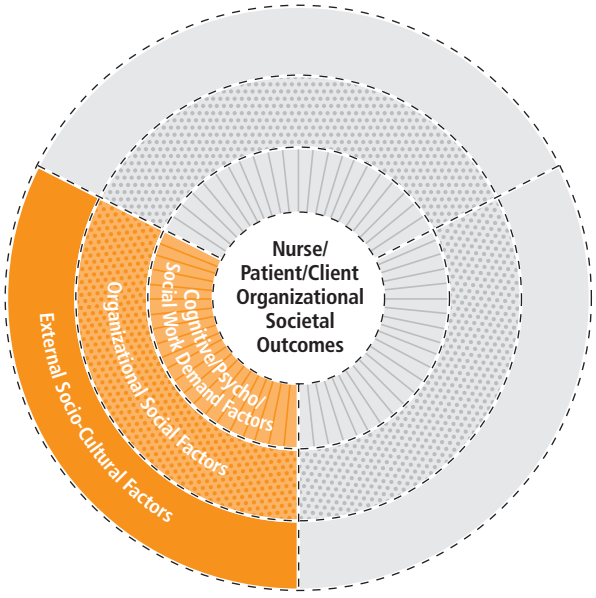

Figure 1B

Cognitive/Psycho/Socio/Cultural Components

- At the individual level, the Cognitive and Psycho-social Work Demand Factors include the requirements of the work which necessitate cognitive, psychological and social capabilities and effort (e.g. clinical knowledge, effective coping skills, communication skills) on the part of the individual.[vii] Included among these factors are clinical complexity, job security, team relationships, emotional demands, role clarity, and role strain.
- At the organizational level, the Organizational Social Factors are related to organizational climate, culture, and values. Included among these factors are organizational stability, communication practices and structures, labour/management relations, and a culture of continuous learning and support.
- At the system level, the External Socio-cultural Factors include consumer trends, changing care preferences, changing roles of the family, diversity of the population and providers, and changing demographics – all of which influence how organizations and individuals operate.

Professional/Occupational Components

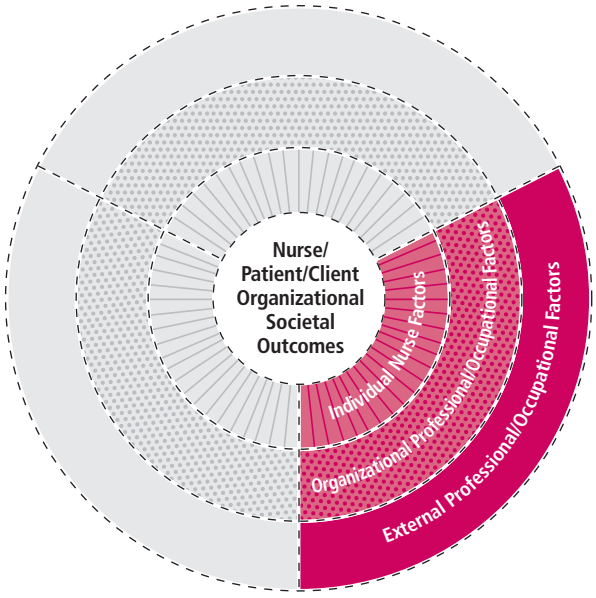

Figure 1C

Professional/Occupational Components

- At the individual level, the Individual Nurse Factors include the personal attributes and/or acquired skills and knowledge of the nurse which determine how she/he responds to the physical, cognitive and psycho-social demands of work.[vii] Included among these factors are commitment to patient/client care, the organization and the profession; personal values and ethics; reflective practice; resilience, adaptability and self confidence; and familywork/life balance.
- At the organizational level, the Organizational Professional/Occupational Factors are characteristic of the nature and role of the profession/occupation. Included among these factors are the scope of practice, level of autonomy and control over practice, and intradisciplinary relationships.
- At the system or external level, the External Professional/Occupational Factors include policies and regulations at the provincial/territorial, national and international level which influence health and social policy and role socializations within and across disciplines and domains.

Background Context of the Guideline of Workplace Health, Safety and Well-Being of the Nurse

In Canada, more than 16 million nursing hours are lost to injury and illness annually. In fact, nurses have a substantially higher rate of absenteeism than the national average.[32] This enormous tally of lost hours due to illness and injury, much of which could be prevented, translates into almost 9,000 full-time nursing positions lost across Canada each year. At a time when the health care system is overburdened from a chronic shortage of nursing staff, the further shortage caused by absenteeism and injury is a testament to the need for action to improve the work environment for nurses.

A number of underlying factors contribute to this situation over and above the current shortage of staff, including the type of work nurses do and the environments in which they practice. It is undoubtedly a challenge for health care administrators to dramatically change the work of nurses, but it is within their ability to work with nursing leaders to identify strategies that decrease stressful working conditions and create practice environments that promote the health and well-being of nurses. As the RNAO continues to address the national nursing shortage, the manner in which the RNAO deals with the high rates of illness and absenteeism will no doubt affect the quality of care within the entire health care system.

Creating and maintaining healthy workplaces will be critical if nurses are to be successfully recruited and retained. Thus, this guideline has been developed to identify sources of occupational stress and injury that negatively influence the health, well-being and quality of work life for nurses. Ensuring the health, safety and well-being of the current and future nursing workforce is vital to the future of the health care system.

This guideline was based on existing theory and evidence relating to the following themes: 1) a comprehensive definition of the terms "health" and "well-being"; 2) legislation regarding workplace health[G] and safety; and 3) nurses' connectedness[G] with their work.

1. Comprehensive Definition of the Terms "Health" and "Well-Being"

As defined by the World Health Organization (WHO), health is much more than the absence of illness; it is an important force in our daily lives, and is influenced by life circumstances, beliefs, actions, culture, and social, economic and physical environments.[33,34] Health is a vehicle that enables and facilitates meaningful living.

"Well-being" is defined, for the purposes of this guideline, as the extent to which a person is able to experience physical, mental and psychosocial health. Psychological well-being, is defined as the extent to which a person feels "enthusiastic, active, and alert".[35] Thomsen and colleagues[36] have characterized well-being from both individual and organizational perspectives. Individual well-being was measured in terms of professional fulfillment, mental energy and lack of work-related exhaustion. Organizational well-being was measured in terms of efficiency, personal development, autonomy, goal quality, workload, leadership and work climate. Positive self esteem mediates the level of mental energy and predicts positive professional fulfillment and decreased work exhaustion. In addition, Perry found that nurses who believe

that they have provided high quality care and have made strong connections with patients/clients feel very satisfied with their professional work life.[37] This guideline includes recommendations aimed at enhancing both organizational and individual nurses' well-being.

2. Legislation Regarding Workplace Health and Safety

Workplace health and safety[G] is a legislated requirement for all employers across Canada. Workplaces are subject to provincial or federal legislation, depending on geographic location and type of business. Health care organizations operate under provincial legislation.

Occupational health and safety legislation provides the *minimum requirement* for health and safety. Best practices must meet the minimum requirements, but ideally should go beyond them. It is a part of doing business, rather than a dispensable "program". Workplaces with a safe and healthy workplace[G] culture have generally incorporated health and safety as part of the overall business plan for the organization. Providing safe and healthy working conditions for employees is one of the best investments a business can make. Aside from the personal benefits to employees, maintaining a safe and healthy working environment also improves productivity, reduces absenteeism and most importantly, increases employee morale. Knowing the employer is striving to provide a safe and healthy working environment and improve employee health makes a significant difference to employees' levels of confidence and trust.[38]

Safe, satisfied and productive employees are more likely to remain in their jobs and generate superior work. This in turn decreases costs associated with training and production and increases the value of the business.

For the purposes of this document, the concept of workplace health and safety includes:

- **Occupational health and safety initiatives that focus on prevention of injuries and illnesses and elimination or control of hazards.**
- **Health promotion/wellness activities.**
- **Supportive organizational culture[G] and leadership practices.**
- **Employee assistance programs to assist employees with personal issues.**
- **Ability management programs including early intervention and return to work initiatives.**

3. Nurses' Connectedness with their Work

It is clear when considering the Healthy Work Environment (HWE) model that underlies this guideline, that all aspects of healthy work environments are connected, related and interdependent. These recommendations regarding the health, safety and well-being of nurses, express the belief that the foundation of nurse wellness within the context of professional practice is strengthened by connectedness. Connectedness is the feeling of being fully engaged and a part of the whole organization or workplace setting.[40] The practice of nursing is simultaneously scientific and humanistic in nature. Nurses utilize knowledge in an effort to provide scientifically sound and humanistic care. Connection at all levels of individual and organizational practice is needed to achieve health not only for patients/clients, but also for nurses as well.

Unfortunately, due to a variety of historical, financial, organizational, and professional factors, the literature demonstrates that nurses are reporting poorer than expected health and wellness, and increased risks to their personal safety.[41-44] Consequently, high rates of nurse absenteeism, injury and disability, poor nurse health, and poor patient/client outcomes have all been consistently reported in the literature.[45]

While it is ultimately the responsibility of an employer to ensure the health, safety and well-being of its employees, an important prerequisite to a healthy work environment is active engagement by all members of an organization. To become a leader in the provision of a healthy work environment, recognition of the joint responsibility for the changes needed to achieve this goal is required. With the special skills, education and quality of their employees, health care organizations are perhaps uniquely situated to exploit this shared governance model to achieve success in the health and safety arena. If nurses will accept a share of the responsibility for the current state of affairs (poor nurse health, emotional disconnectedness, organizational disarray, professional powerlessness), then they will also hold and accept the responsibility to reclaim a sense of professional wholeness within the practice of nursing. Re-establishing this sense of a holistic nursing[G] practice through a shared responsibility model for nurse health in the workplace will no doubt facilitate the changes needed to help them achieve the necessary gains.

Summary

This document seeks to guide the reader to an understanding of issues pertaining to the health, safety and well-being of the nurse. Recommendations are designed to address organizational changes that will promote the health, safety and well-being of the nurse and engage decision makers at all levels. These recommendations are based upon the most recent and rigorous empirical literature available to date, as well as the work of experts in the field of nurse and employee health and wellness.

Purpose and Scope

This guideline differs from other RNAO Best Practice Guidelines in that it involves the complex components of nurses' health. As such, it speaks to more than the occupational health and safety programs implemented by most employers. The members of this panel determined that many factors contribute to the overall health and well-being of individual nurses, including the physical design and organizational culture of the workplace environment, the individual nurse's health practices and responsibility for her/his own health, and the legislation required by employers regarding Occupational Health and Safety (OH&S).

This guideline addresses the many factors that contribute to nurses' health, safety and well-being and makes specific recommendations that may influence the overall health and well-being of the individual nurse. This guideline also goes beyond global recommendations – such as developing broad-based strategies for nursing recruitment and retention – and includes recommendations specific to organizations, nursing education programs, researchers and, at the systems level, accrediting organizations.

The recommendations have been grouped according to the following themes:

- **Organization Practice** recommendations[G] are directed toward organizations/nursing employers.
- **Research** recommendations are directed toward individual researchers as well as research to be done from a policy perspective.
- **Education** recommendations[G] are directed toward both individual nurse educators and academic institutions/nursing programs.
- **System** recommendations are directed toward accrediting organizations and governments to gain their assistance in implementing strategies to create healthy work environments for nurses.

This best practice guideline has been developed to identify and describe:

1. What organizational systems and supports promote and enhance the health[G], well-being and safety of nurses in their workplace?
2. What is the impact of health, well-being and safety-focused environments for nurses on quality of outcomes for patients/clients, nurses, organizations and systems?
3. How can nursing education institutions and nurse researchers influence the health, well-being and safety of nurses?

Target Audience

The guideline is relevant to all domains of nursing (clinical practice, administration, education, research and policy) and all practice settings where nurses are employed. Specific targets include: organizations and nursing employers; nursing leaders; human resource professionals and occupational health and safety committees within organizations; nurse educators within academic institutions; and researchers and policy makers.

How to Use This Document

This healthy work environment best practice guideline is an evidence-based document that describes:

- Recommendations for organizations/nursing employers to create healthy work environments that ensure the promotion of health, well-being and safety of nurses.
- Recommendations for researchers to: 1) evaluate the effectiveness of workplace interventions aimed at improving nurse health, safety and well-being; and 2) to develop and disseminate new knowledge regarding best practices for creating healthy work environments.
- Recommendations for Nursing Educators and Academic Programs to begin integrating theory related to health, safety and well-being into the core curriculum of nursing education programs.
- Recommendations for governing bodies to play a key role in influencing health and safety standards in health care organizations.

This guideline is not intended to be read and applied all at once but, rather, to be reviewed and reflected upon, and then applied as appropriate to your organization or situation. It is recognized that organizations vary by size and sector. In this regard, it is noted that the implementation of these recommendations will employ different approaches to incorporate into their specific work environments. For example, not all organizations have dedicated Occupational Health and Safety personnel. Therefore, implementation of recommendations may fall to other personnel, i.e. human resources professionals, line managers or directors of care. There is no single method for implementation; creative approaches will be a part of the process. Here are some suggestions to begin the process:

1. **Study the model.** *The Workplace Health, Safety and Well-Being of the Nurse* best practice guideline is built upon a conceptual model that was created to allow users to understand the relationships between and among the key factors involved in nursing work environments. Understanding the model, described in the previous pages, (pp14-18), is critical to using the guideline effectively.

2. **Identify an area of focus.** Once you have studied the model, we suggest that you identify an area of focus for yourself, your situation, or your organization, that you believe requires attention to enhance the health, safety and well-being of the nurse.

3. **Read the recommendations and the summary of research for your area of focus.** For each major element of the model, a number of evidence-based recommendations are offered. The recommendations are statements of what organizations/researchers/educators/governing bodies should do to promote healthy work environments. The literature supporting these recommendations is briefly summarized; readers may find this instructive to gaining understanding of the rationale and methodology of the recommendations.

4. **Focus on the recommendations or desired behaviours that seem most applicable to you and your current situation.** The recommendations contained in this document are not meant to be applied as rules, but rather as tools to assist individuals or organizations in making decisions that improve the health, safety and well-being of nurses in their workplaces, recognizing everyone's unique culture, climate and situational challenges. In some cases there is great deal of information to consider. Readers may want to explore further and identify those behaviours that need to be analyzed and/or strengthened in specific workplace situations.

5. **Make a plan.** Having selected a small number of recommendations, behaviours for attention and strategies to successfully implement them, consider the suggestions offered. Make a tentative plan for what you might actually do to begin to address your area of focus. If you require more information, you may wish to refer to some of the references cited, the evaluation instruments identified in Appendix D or the helpful websites listed in Appendix E.

6. **Discuss the plan with others.** Take the time to solicit input into your plan from people whom it might affect, those whose engagement will be critical to its success, and from trusted advisors, who will all provide feedback on the appropriateness of your ideas. For the intervention to be most effective, support is required from multiple levels within the organization/program unit.

7. **Revise your plan and get started:** It is important to begin, and then make adjustments as you go. The development of effective new health and safety practices is a life-long quest.

Enjoy the journey!

Summary of the Recommendations for Workplace Health, Safety and Well-Being of the Nurse Guideline

	RECOMMENDATION
Organization Practice Recommendations	1.0 Organizations/nursing employers create and design environments and systems that promote safe and healthy workplaces, including such strategies as: ■ Creating a culture, climate and practices that support, promote and maintain staff health, well-being and safety. ■ Ensuring that the organization's annual budget includes adequate resources (human and fiscal) to implement and evaluate health and safety initiatives. ■ Establishing organizational practices that foster mutual responsibility and accountability by individual nurses and organizational leaders to ensure a safe work environment.
	1.1 Organizations/nursing employers create work environments where human and fiscal resources match the demands of the work environment.
	1.2 Organizations/nursing employers implement a comprehensive Occupational Health and Safety Management System, based on the applicable legislation, regulations and best practice guidelines.
	2.0 Organizations/nursing employers are aware of the impact of organizational changes (such as restructuring and downsizing) on the health, safety and well-being of nurses and be responsible and accountable for implementing appropriate supportive measures.
	2.1 Organizations/nursing employers form partnerships and work with researchers to conduct evaluations of specific interventions aimed at improving nurses' health and well-being.
	3.0 Organizations/nursing employers implement and maintain education and training programs aimed at increasing awareness of health and safety issues for nurses. (e.g. safe-lift initiative, employee rights under OSHA, hazard awareness, etc.).
	3.1 Organizations/nursing employers provide ongoing training and education programs to ensure staff possess the knowledge to recognize, evaluate, and control or eliminate hazardous work situations.
	3.2 Organizations/nursing employers employ qualified individuals with knowledge and expertise in health and safety, policy and legislative requirements to lead training and education programs.
	3.3 Organizations/nursing employers promote and support initiatives related to the physical and mental health and well-being of the nurse. This includes, but is not limited to, fitness programs, health promotion and wellness activities, and fitness-to-work initiatives.
	3.4 Organizations/nursing employers provide nurses with opportunities for personal, professional and spiritual development with regard to healthy work environments, professional competencies and work/life balance.

	RECOMMENDATION
Organization Practice Recommendations	4.0 Workplace health and safety best practices be embedded/integrated across all sectors of the health care system.
	4.1 Organizations/nursing employers engage in knowledge transfer activities that promote best practices regarding the health, safety and well-being of nurses.
	4.2 Organizations/nursing employers support and contribute to the development of health and safety indicators at the local, provincial and national level to assist in data collection and comparable analysis across the health care sector.
	4.3 Organizations/nursing employers develop standardized databases for sharing best practices related to nurse health, safety and well-being.
Research Recommendations	5.0 Researchers actively collaborate with health care partners to demonstrate the effectiveness of interventions aimed at improving nurse health, safety and well-being using rigorous research and evaluation methodologies.
	6.0 Researchers make full use of existing databases on nurse health, including the National Survey on the Work and Health of Nurses, in order to improve understanding of the key factors contributing to healthy work environments for nurses and to develop and test best practice indicators.
Education Recommendations	7.0 Nursing education institutions model the integration of health, safety and well-being into their own workplace culture.
	8.0 Nursing education institutions incorporate information about the health, safety and well-being of the nurse into the core curriculum of nursing education programs.
System Recommendations	9.0 Governing/accreditation bodies incorporate the Organization Practice Recommendations from this RNAO Healthy Work Environments Best Practice Guideline in their quality health and safety standards for health care service and education organizations.

Sources and Types of Evidence on Workplace Health, Safety and Well-Being of the Nurse

Sources of Evidence

The search for evidence in the literature on the relationship of organizational structures, processes and programs that support the health, wellness and safety of the nurse and healthy work environments yielded meta-analyses, descriptive co-relational studies, qualitative studies and expert opinion, but few controlled studies. This is consistent with the challenges of conducting controlled studies in health care organizations. Although this guideline is written for nurses in all settings, the majority of studies in the literature were conducted in urban hospitals. Studies related to work environment, (academic, community and long-term care settings) were included in the guideline when available and appropriate; however, further research in these practice settings is urgently needed.

Sources included:

- A systematic review of the literature (1994 to December 2005) on Workplace Health and Safety for Nurses was conducted by the Joanna Briggs Institute (JBI) of Australia in late 2004 and mid-2005.[46]

JBI followed a seven-step process that commenced with broad search terms and the development of a protocol and further search terms that were validated by the Panel Chair. Studies identified through the search process that were deemed relevant to the review (based on title and abstract) were retrieved and further assessed for relevance. Studies that met the inclusion criteria were grouped according to study type (e.g. qualitative, experimental) and assessed by two independent reviewers for methodological quality using a critical appraisal instrument according to study type. The instruments used were part of the System for Unified Management, Assessment and Review of Information software, which is specifically designed to manage, appraise, analyze and synthesize data.

- Additional literature outside of the JBI systematic review protocol was retrieved by panel members that was considered relevant and essential to supporting the development of these recommendations. Relevance was based on studies that addressed workplace health, safety and well-being of the nurse as well as current legislation pertaining to occupational health and safety standards.

Rating of Evidence

Current procedure in creating best practice guidelines involves identifying the strength of the supporting evidence.[47] Prevailing systems of grading evidence rate systematic reviews of randomized controlled trials (RCTs) as the "gold standard".[48] However, not all questions of interest are amenable to the methods of RCT, particularly where the subjects cannot be randomized or the variables of interest are pre-existing or difficult to isolate. This is particularly true of behavioural and organizational research, in which controlled studies are difficult to design due to continuously changing organizational structures and processes. Health care professionals are concerned with more than cause and effect relationships and recognize a wide range of approaches to generate knowledge for practice. The evidence contained in this guideline has been rated using an adaptation of the traditional levels of evidence used by the Cochrane Collaboration[49] and the Scottish Intercollegiate Guidelines Network.[50]

Evidence Rating System

Type of Evidence	Description
A	Evidence obtained from controlled studies, meta-analyses
A1	Systematic Review[G]
B	Evidence obtained from descriptive co-relational studies[G]
C	Evidence obtained from qualitative research[G]
D	Evidence obtained from expert opinion[G]
D1	Integrative Reviews
D2	Critical Reviews

Organization Practice Recommendations

These recommendations are intended to influence and, as such, are targeted to employers and boards, as well as the individual nurse.

1.0	Organizations/nursing employers create and design environments and systems that promote safe and healthy workplaces, including such strategies as:

- Creating a culture, climate and practices that support, promote and maintain staff health, well-being and safety.
- Ensuring that the organization's annual budget includes adequate resources (human and fiscal) to implement and evaluate health and safety initiatives.
- Establishing organizational practices that foster mutual responsibility and accountability by individual nurses and organizational leaders to ensure a safe work environment including protection from violence.

Discussion of Evidence[a]

Creating a culture, climate and practices that support, promote and maintain staff health, well-being and safety.

"Workplace health and safety of the nurse is crucial if nurses are to provide the best possible care to their patients and if they are to be enticed to enter/remain in the nursing workforce. Failure to do so in the current environment of a nursing shortage will be detrimental to the remaining nurses and to the health care system and specifically to patients, the recipients of nurse care."[46]

The terms organizational culture and organizational climate appear simultaneously in the literature related to healthy/quality work environments, and have been described as perhaps the most difficult organizational concepts to define.[51] However, it is important to differentiate between the two concepts in order to understand their relationship to the work environment.

Definitions of organizational culture emphasize the shared beliefs, values, assumptions, symbols, ceremonies and rituals that define an organization's culture and norms.[52] Organizational culture encompasses both the formal and informal rules that govern the organization; i.e. the ways of "being" and "doing" in the organization.[41,53] While culture is reflected in the verbal and non-verbal behaviour of individuals, it is aggregated at the level of their organizational unit. "Culture is a characteristic of the organization, not of individuals".[54]

a Type of Evidence
There is B and D type evidence for this recommendation

In contrast, definitions of organizational climate often focus on general dimensions of the environment (such as leadership) or specific dimensions (such as safety climate[G]). In simple terms, organizational climate refers to how it "feels" to work in a particular environment, or the "atmosphere of the workplace".[55] Climate evolves out of the same elements as culture; however, it is shallower than culture, and forms more quickly and alters more rapidly.[56] Organizational culture and climate are influenced by individual, organizational and external factors.[52]

The safety culture in the health care setting has characteristics different from those in other industries. The recent emphasis on safety culture in health care environments is patient/client oriented.[43] Large budgets have been allocated for patient/client safety initiatives to change negative outcomes resulting from patients/clients injuries.[43] Patient/Client safety has been a priority on the research agenda over the past five years.[43] However, nurse safety has only become a priority as a result of increasing evidence related to violence in the workplace and nurses' poor state of health, and recruitment and retention issues.[1,41,57-59] Nurse safety has also become a priority because of its impact being on patient/client outcomes and public health.[41,60] "The new paradigm of safety culture proposes that if a hospital is unsafe for its health care workers, it can be unsafe for its patients/clients also. Patient/Client safety and health care worker safety are parallels and should not be in conflict or competition for budget priorities or political importance within the institution".[43] In systems there are conflicting priorities both patient/client and employee safety are at risk. There is anecdotal and qualitative evidence supporting the fact that attending to the well-being of health care workers results in safer and better quality patient/client care.[60] Nurse well-being depends on cultural change in the value placed on nurses and nursing, and on making structural changes that allow nurses greater input into the planning and delivery of health care services.[8]

Organizational Culture and Nursing Outcomes

Much of the research on climate and culture focuses on nursing outcomes such as job satisfaction[G], stress, burnout and autonomy. In nursing work environments, it is crucial that health and safety be at the heart of the workplace in order for nurses to provide the best possible patient/client care. Therefore, approaches to achieve and maintain a suitable level of workplace health and safety based on the prevention, identification and resolution of potential risks (both physical and psychological) are required.[46] Organizations with a strong and visible commitment to safety have a positive impact on the health and safety of workers.[16] Leadership and organizational culture of the employer have been identified in the literature as crucial to the establishment of a suitable healthy and safe work environment for health care workers.[61]

Where the organizational climate is favourable to nurses, they are less likely to leave their work settings. Organizational climate includes the intrinsic factors that characterize the workplace environment (e.g. reputation of the organization, opportunity for advancement and personal impressions of the workplace environment). Nurses refer to their organization as being supportive or non-supportive of their actions. A climate that is supportive of nursing includes teamwork, a sense of personal importance and freedom to ask questions. Satisfied nursing personnel described their organizational climate as high in responsibility, warmth, support and identity.[62]

Nurse Turnover

Nurse turnover is influenced by characteristics associated with workload, management style, empowerment and autonomy, promotion opportunities and flexible scheduling.[63] Research has demonstrated that the more autonomy, work empowerment and resources nurses had and the stronger the leadership present at work, the more likely they were to be satisfied with their current position.[58] Research also indicates that high nurse turnover adversely affects nursing workload, work environment and delivery of health care services. Nurse turnover includes both direct and indirect costs to the organization. Direct costs include advertising, recruiting and hiring. Indirect costs include nurse termination, orientation and training, and decreased productivity of new staff. Nurse turnover may also contribute to decreased morale and group productivity.[63] The reported costs associated with replacing nurses are $10,000 to $60,000 per nurse depending on the specialty. The total cost for a newly hired nurse averages $15,825, while the cost of reduced productivity ranges from $5,245 to $16,102.[63] Therefore, researchers recommend that administrative and policy interventions to improve quality of worklife and workplace culture are imperative for long-term resolution.[41]

The literature identifies potential strategies to achieve a healthy workplace culture, which include the following:

- creating a balance between leadership and employee participation and involving nurses in health and safety committees and initiatives (e.g. joint Occupational Health and Safety Committee);
- mentoring, succession planning and provision of career opportunities;[46]
- creating an open, blame-free culture to identify workplace hazards and report "near misses" and workplace incidents.
- incorporating key values such as respect, honesty, feedback, trust and cooperation in order to foster a safe working environment;[46]
- creating a culture where staff feel "psychologically safe" in order to advocate for their patients/clients and to "whistle blow" if necessary to protect themselves and their patients/clients;[64]
- implementing policies for bullying, harassment, aggression and assault;
- supporting staff health and well-being via specific programs (e.g. social supports[G], personal growth and change, health practices, leaves of absence; and
- individual nurses accepting accountability for their own work-life balance.[46]

Establishing organizational practices that foster mutual responsibility and accountability by individual nurses and organizational leaders to ensure a safe work environment including protection from violence.
According to the Canadian Labour and Business Centre,[32] three strategies are recommended for improving work environments:

1. initiatives related to the physical work environment (appropriate equipment and training availability);
2. initiatives related to the physical health of the employee (fitness and weight loss programs); and
3. initiatives related to mental health/stress/psychosocial concerns (stress management programs, and programs to deal with family and workplace issues).

Workplace Hazards

Nurses' practice environments often contain biological, chemical, physical and psychological hazards. These factors put nurses at risk for job burnout, stress, work-related illnesses and injuries, blood-borne pathogen exposure, infectious disease exposure and musculoskeletal disorders.[16,46,60,65] As such, nursing employers and individual nurses are both responsible for minimizing where possible or eliminating these hazards in the workplace. Individual nurses must accept responsibility for self-protection by incorporating specific behaviours into daily nursing practice that provide them with potentially life-saving self-defense measures, while recognizing that their employer is responsible for providing mechanisms to ensure these behaviours are carried out. According to OSHA guidelines, every employed nurse has the right to a work setting free from hazards or physical injury,[46] (e.g. control of needle stick injuries is possible through the implementation of a systems prevention model).

If a nurse's actions are compromised by an increased workload, faulty equipment or psychological stress, outcomes such as longer wait times and hospital stays, health care associated infections, and pressure ulcers are more likely for the patient/client.[44,66] Higher nurse absenteeism has also been associated with poorer patient outcomes.[44,66]

Risks to nurses' safety may vary depending on the work environment, e.g. acute-care nurses in a hospital setting are exposed to different threats to their safety than are community nurses who enter client places of residence or schools. Community nurses don't always know what they will be confronted when they enter their place of work. However, nursing agencies can communicate to patients/clients the responsibilities of both client and family to maintain a safe home environment where the services are being provided and assist staff to be prepared to address workplace challenges to maximize personal safety while minimizing care and service disruption.

Nurses and Workplace Violence[G]

Violence in the workplace is a key factor affecting nurses' decisions to remain in a nursing career. Research indicates that workplace violence is a major occupational health hazard in the health care sector and negatively influences retention rates.[57,58] Violence is a significant problem in both hospital and community-based health care environments and afflicts a wide range of health care occupations. However, authorities and researchers worldwide concur that members of the nursing profession are most at risk.[67]

The *"Canadian Survey of Nurses from Three Occupational Groups"* report highlighted several key findings regarding nurses' experiences with violence in the workplace and its effect on their intent to stay in the nursing profession.[68] Key findings include:

- Nurses who expected job instability and had experienced violence at work were also more likely to be dissatisfied with their current position, putting them at risk for leaving their job and thus creating retention issues for the employer.

- Nurse absenteeism is related to violence at work. Administrators, educators and leaders must deal with workplace violence and safety issues more consistently and establish a zero tolerance environment where violence will not be condoned and safety is a priority.
- Practicing a healthy lifestyle improved both the physical and mental health of nurses.
- Work environments affect nurses' physical and mental health. Decreased health is linked with working involuntary overtime. Decreased physical and mental health in nurses was found where violence was present in the workplace.
- Nurses anticipating job instability were less likely to be physically healthy.
- Frequent shift changes affected nurses' mental health.

The International Council of Nurses is a founding member of the International Labour Office (ILO) / International Council of Nurses (ICN) / World Health Organization (WHO) / Public Services International (PSI) Joint Programme on Workplace Violence in the Health Sector. Guidelines related to workplace violence can be found at the ICN website at: http://www.icn.ch.sewworkplace.htm.

"Violence in the workplace is a hazard confronted by nurses working in all health care sectors".[57] Violence can take many forms – aggression, harassment, bullying, intimidation and assault, and is directly co-related with sick leave, burnout and low employee retention rates.[1,41] Sixty-seven per cent of nurses surveyed by the Ontario Nurses Association reported experiencing verbal abuse on the job; 36% said they had been physically abused and 11% had been sexually abused.[69] Although available statistics indicate that violence in the workplace is ubiquitous, it may be underreported and under-evaluated.[57] It is critical that organizations/nursing employers recognize the magnitude of violence in nursing workplaces and develop and implement strategies to address the nursing shortage caused by violence.[70] Failure to address violence in nurses' workplaces will have profound implications for the future of health care delivery.[71]

Strategies to decrease the risk of violence in the workplace include: firm policies on abusive behaviour; lifeline buzzers for community nurses; more support staff for dealing with patients/clients and families; and counseling services and official policies and procedures for reporting abusive behaviour.[41] According to the Canadian Health Services Research Foundation's report on progress made with regard to health, safety and violence[41], site-specific safety programs are common, but overall assessments of health care workplaces are not. Zero-tolerance and harassment policies are common in acute care settings, but some nurses still experience abuse as part of their job.[41] While some nurses accept the fact that they may be exposed to danger in the form of violence, Henderson[71] found that the most hurtful aspects of that danger is the lack of support from the other health professionals and administrators with whom they work. By law, organizations/nursing employers must follow the minimum required Occupational Health and Safety Legislation; however, it is evident that more specific anti-violence policies are needed in the various health care sectors to protect nurses and prevent loss of nurses to the profession, as a result of workplace violence. Nurses' well-being is critical to the provision of health care services on an international level; therefore, it is essential that cooperative endeavours are initiated by governments, professional associations, educators, employers and researchers to mitigate violence against nurses now and for the future.[46] In many cases, system level approaches are needed to effectively address violence in the workplace.[72]

Nursing Leadership

Nursing leaders play a key role in creating a positive safety climate. The literature indicates that a nurse manager's leadership style has a direct impact on the job satisfaction of their direct reports. A significant relationship was observed between supervisor support and job satisfaction (vis à vis social rewards and psychological rewards). A lack of managerial support was associated with low levels of job satisfaction and negative mood states.[73,74] A separate study revealed that supervisor support had a significant negative relationship with near injury, reported injury and staff turnover, and a significant, positive relationship with job autonomy.[75] Social support from supervisors, friends and family was found to have a significant negative relationship with depression, absences and burnout.[73] Nurses require strong leadership at every level of the health care system hierarchy, including direct supervision of nursing practice at the bedside.[41]

To achieve a goal of the safest possible health care system, all leaders and practitioners must have a clear understanding of their individual and collective responsibilities to provide resources and shape the structures and values by which the system operates.[76] Thus, nursing employers must work with governments and funding agencies to advocate for the appropriate human and fiscal resources required to implement and sustain safe work policies and practices.

The evidence regarding evaluation of specific interventions aimed at improving the work environment for nurses is scarce. However, an abundance of literature indicates the negative impact of the work environment on nurses. It is now time to move forward in evaluating strategies and workplace interventions aimed at improving nurses' health and well-being.

In summary, "nurses can be more productive and healthy in safe, ergonomically sound work environments, with access to supplies, services and the technology they need to improve efficiency, and worklife enhancements to decrease stress and ease the home-work interface".[8]

1.1	Organizations / nursing employers create work environments where human and fiscal resources match the demands of the work environment.

Discussion of Evidence[b]

Many research studies cite nursing workload as a major reason why nurses leave their jobs.[41,77] Various factors, both human and fiscal, have implications for nursing workload (e.g. changing population health needs, reduced availability of acute care hospital beds). In addition, patients/clients require a greater intensity of care but the number of nurses on a given shift has not increased accordingly.

This guideline asserts that workload remains a challenge for practicing nurses in all sectors. To prevent further attrition from the profession, organizations/nursing employers must examine closely workload issues in their environments and develop strategies to match the nursing demographic needs with patient/client population needs. This guideline will discuss workload at a broad level. For more details

b Type of Evidence
There is B, C and D type evidence for this recommendation

regarding creating and sustaining more effective staffing and workload practices, please refer to the RNAO BPG entitled *"Developing and Sustaining Effective Staffing and Workload Practices"*.

The British Columbia health authorities report on progress toward creating healthy work environment for their employees indicated that although workplace health and safety are recognized as an important issue, they do not receive the requisite attention. Specifically, the promotion of healthy work environments is limited by budgets and focus. Efforts have been made to improve physical aspects of the work environment, but less attention has been paid to the psychological aspects of the work environment. Limited or no resources have been provided to maintain and evaluate the impact of healthy work environment initiatives on nurses' health. Strategies to reduce nursing workload, and to offer support to nurses on long-term and short-term illness leave, must be well established.[68]

Nurses often report not having the appropriate equipment to provide safe patient/client care. They also report that they spend a great deal of time locating equipment or arranging for its repair and maintenance. This is a source of frustration and dissatisfaction for nurses, as these tasks remove them from providing direct patient/client care. Provision of adequate fiscal resources could allow for appropriate equipment and utilization of appropriate personnel (such as a technician) to source equipment and arrange repair as needed. Nurses should be provided with the tools to perform their job optimally including: up-to-date, functioning equipment; better staffing; and assistance with administrative work.[78] In this context, up-to-date, functioning equipment refers to both equipment to provide patient/client care and to protect nurses from injury or infection.

Nurses' demanding work schedules – long hours, heavy lifting and low staffing – have all been linked to injury and decreased quality of life. Many nurses report working long stretches of workdays without a day off. This prevents nurses from addressing their own health needs, particularly the need for rest, exercise, and other stress reduction and preventive activities.[72] Nursing schedules should be adjusted to faciliate proper rest and recuperation. Long shifts and working other than dayshifts contribute to nurse musculoskeletal disorders and injuries.[79] In addition, nurses' work and workspace should be designed to prevent and mitigate errors.[59]

Nurses may often be putting themselves at risk for serious harm (e.g. the nurse who works overtime to fill a staffing need – cannot abandon the patient/client), yet is finishing their fourth twelve-hour shift in a row and is exhausted. This situation not only puts the nurse at risk for injury due to fatigue, but also puts the patient/client at risk for medical error.[80,81] A number of nursing associations have developed position statements to guide nurses regarding their rights and responsibilities related to occupational health and safety in order to protect themselves.[57,82,83] The American Nurses Association states that "nurses should not have to risk their lives and health while caring for patients".[84] However, because of the nature of caring for the sick and vulnerable, nurses themselves, the public and employers expect nurses to work in situations that clearly expose them to high risk or injuries despite labour legislation that protects workers.[85] In these cases nurses put themselves at risk by placing patients'/clients' needs ahead of their own, thereby jeopardizing their personal health and safety. For example nurses put themselves at possible risk for long-term health problems by continuing to work despite the presence of substantial neck, shoulder, back and buttock pain and high degrees of emotional exhaustion.[86]

This tendency for nurses to continue their assigned work or shift even though they may be physically or psychologically compromised has been termed the "Nightingale Effect".[87] This phenomenon, historically associated with the nursing profession, causes nurses to pay more attention to patients than themselves, and leads to increased risk or injury.[43,87]

The philosophical literature describes nurses' strong commitment to their profession, which perhaps stems from early nursing philosophy such as that espoused in the Nightingale Pledge.[43] The pledge required nurses to publicly affirm that they would devote themselves to the welfare of those committed to their care. Fitzgerald & Van Hooft,[88] studied "love in nursing" concluded that it reflected "the willingness and commitment of the nurse to want the good of the other before self, without reciprocity". Pask[89] explores the deeper meaning behind why nurses self-sacrifice and concludes that nurses act for the good of their patients/clients while suffering the effects of constraining influences upon them. Pask advocates that nurses who sacrifice themselves illustrate dedication to their patients/clients and subsequently make themselves vulnerable to harm.

It is important for health care work places to recognize the impact that lack of sufficient human and fiscal resources can have on nurses creating negative outcomes for both nurses and patients. Nurses are important human capital; it is crucial to invest in their safety and well-being, as the welfare of patients/clients ultimately depends on the excellence of nurses' work.[8]

1.2	Organizations/nursing employers implement a comprehensive Occupational Health and Safety Management System, based on the applicable legislation, regulations and best practice guidelines.

Discussion of Evidence[c]

Appendix E (p. 81) provides an example of an Occupational Health and Safety Management System. The purpose of an Occupational Health and Safety Management System is to identify, assess and control workplace hazards. It must include assessment for all risks, e.g. workplace violence, client aggression, exposure, stress, slips/falls and musculoskeletal disorders (MSDs). In 2004, MSDs were the most frequently reported injury type in the Ontario health care sector, accounting for 54% of all lost-time injuries (LTIs). Forty percent of these LTIs were directly attributed to client handling. Further, 42% of all Workplace Safety and Insurance Board (WSIB) claim costs were related to Musculoskeletal Disorders (MSD) as a result of client handling accidents. Hospital and long-term care organizations accounted for 46% and 26%, respectively, of all lost-time injuries in health care.[90] The health care sector occupies 40% of the lost time injury rates due to workplace violence – the highest rate, compared with other provincial sectors (i.e. education, mining, industry). Eight percent of WSIB LTIs in the health care and community services sectors in 2004 were workplace violence incidents. The majority of these claims occurred in nursing homes, hospitals and group homes.

c Type of Evidence
There is B, C and D type evidence for this recommendation

Appendix E provides readers with a comprehensive list of resources, definitions, legislation and specific details regarding occupational health and safety management systems and resources. The appendix is intended to be a resource for employers, individual nurses, human resources professionals, nurses educators and others to help inform them about occupational health and safety programs.

2.0	Organizations/nursing employers are aware of the impact of organizational changes (such as restructuring and downsizing) on the health, safety and well-being of nurses and be responsible and accountable for implementing appropriate supportive measures.

Discussion of Evidence[d]

The literature is abundant with evidence that demonstrates the impact of hospital restructuring and downsizing on nurse and organization outcomes. Nurses are reporting higher stress levels, high job insecurity levels and poor morale.[8,91] Sources of work-related stress include: physical stress; mental stress, such as future workplace threat; increased workload; inability to work preferred hours; and workplace violence.[41,92]

Restructuring and downsizing is reported to be occurring increasingly in the workplace and is suggested to have an impact on the health and well-being of nurses.[92] Several studies have found a significant negative co-relation between hospital restructuring and nurses' health.[41,44,91-93] Nurses who report more extensive restructuring in their workplaces; experienced lower levels of job satisfaction, greater emotional exhaustion, and higher levels of depression, burnout and anxiety.[94,95] Nurses in these studies also expressed concern that restructuring contributed to the deterioration of the nursing work environment and further compounded the existing nursing shortage. Nurses reported feeling pressured by employers and colleagues into working beyond their normal shifts,[41] and described the workplace as "chaotic" as they struggled to cope with constant and rapid change.[96] Many nurses believed that the deterioration in working conditions had jeopardized nurses' health, and patient/client safety and well-being.[91] Lundstrom[16] noted that nurses' "stress affects patient outcomes and frequency of patient incidents" (p. 97).

Blythe, Baumann and Giovanetti[97] found that restructuring contributed to nurses feeling that their work relationships had become more fragmented, and that the work environment was unpredictable. As well, many felt the policies associated with restructuring disempowered nurses. The results of this study revealed that many nurses felt that restructuring policies "prevented nurses from controlling their career" and that they "could not fulfill their professional roles" (p.64).

It is important for organizations/nursing employers to be aware of the impact of restructuring and downsizing on nurses in order to develop strategies to support nurses in the workplace, with the intention of retaining them in the workforce. Although it may be difficult to quantify the benefits of workplace safety programs, the Canadian Labour and Business Centre suggests that "workplace safety pays".[32] Benefits to employees include improved physical and mental health, better work-life balance, less stress and fewer injuries.

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d Type of Evidence
There is B, C and D type evidence for this recommendation

Organizations should incorporate supportive measures to prevent problems with employee health and job performance. Nurses are frequently exposed to intense and emotionally draining situations that, over time, can take a personal toll. Social support refers to the structural aspects of social relationships and the channels through which pragmatic help, as well as emotional and psychological support, can be exchanged between individuals.[98] Supportive practices from the organization have also been described as influencing the promotion of health, wellness and safety of nurses.[99,100] The role of social integration was described as influencing the physical and emotional well-being of nurses.[98]

2.1	Organizations/nursing employers form partnerships and work with researchers to conduct evaluations of specific interventions aimed at improving nurses' health and well-being.

Discussion of Evidence[e]

Nurses lift and handle people as an integral part of nursing care, and lifting has contributed to back injuries in nurses. Thus, the development of safer handling practices is essential for the safety of nurses. There is a need to evaluate the growing body of research from a range of disciplines in order to establish an evidence base for the moving and handling of patients/clients. Training in safer handling techniques must be considered as part of a safer system of work within an ergonomic framework.[101] Organizations need to work with researchers (such as the Institute for Work and Health) to evaluate the effectiveness of strategies (such as the Ontario Ministry of Health and Long-Term Care [MOHLTC] lift initiative) in reducing nurses back or lift-related injuries.

Partnerships with researchers to document best practice is vital. Rigorous evaluation of health promotion interventions is essential to determine their impact on nurses' health, safety and well-being.[102]

The health care system cannot afford to lose nurses to injury or job dissatisfaction. To keep nurses in the workforce, new strategies aimed at improving nurses' health and well-being must be implemented by employers. Specific strategies – such as new staffing models, or new patient/client care delivery models – should be evaluated with regard to their impact on nurses' health and well-being. In addition, education programs, fitness programs and other health promotion strategies that are implemented in the workplace also must include measurement of their impact on nurses' health and well-being.[8]

e Type of Evidence
There is B, C and D type evidence for this recommendation

3.0	Organizations/nursing employers implement and maintain education and training programs aimed at increasing awareness of health and safety issues for nurses. (e.g. safe-lift initiative, rights under OSHA, hazard awareness, etc.).
3.1	Organizations/nursing employers provide ongoing training programs and education programs to ensure staff possess the knowledge to recognize, evaluate and control or eliminate hazardous work situations.
3.2	Organizations/nursing employers employ qualified individuals with the knowledge and expertise in health and safety, policy and legislative requirements to lead training and education programs.

Discussion of Evidence[f]

Training and Education Programs

"To establish a safe environment for nurses, organizations must provide nurses with the knowledge to recognize and evaluate hazards, and facilitate the development of skill sets for confronting hazardous situations".[46] By using varied educational strategies, nurses are informed and able to avoid hazardous situations. Therefore, educational strategies are regarded as one of the supports from organizations that promote the safety and wellness of nurses. Few empirical studies were found that evaluated the specific impact of educational programs on nurses' safety and wellness. Studies that were found addressed a range of education and training programs, from one-hour sessions to three-day educational and training programs. The studies found also encompassed educational strategies aimed at: improving the prevention and management of patient/client aggression; the impact of a training program on the prevention of low back pain among nurses, nursing assistants and cleaning staff; the impact of an abuse prevention training program on nursing assistants; and the effectiveness of an educational intervention aimed at reducing distress in nurses working in a medium security setting who were physically assaulted by their patients/clients.[46]

f Type of Evidence
There is B, C and D type evidence for this recommendation

In a study on promoting personal safety in community health, four educational strategies were used to promote wellness and safety of nurses. The strategies were: checklists, small group learning activities, web-based learning modules on personal safety, and problem-based educational strategies to promote learning for professional practice situations.[103] The checklist focused on the knowledge domain, addressing awareness of safety risks, relevant policies, and responsibilities and rights of nurses, practitioners and organizations. Small group learning activities provided an environment for sharing understanding and differences in attitudes that contribute to critique and reflection by nurses. The web-based module on personal safety was reported to educate nurses with regard to principles and rationales required for logical reasoning. The problem-based learning tutorial is an educational strategy to promote learning for professional practice situations that promotes wellness and safety of nurses.[103] A study by Fanello et al.[104] described the evaluation of a training program for the prevention of low back pain among hospital employees and included a recommendation to consider the specific needs associated with each job category.

These studies reported encouraging results. For example, an education program aimed at a specific element of workplace safety such as safe handling practice, that included both theory and ongoing coaching resulted in decreased lower back pain among nurses and other staff, for up to two years following the intervention.[104] In a similar manner, a study addressing impact on student nurses of a three-day education and training session related to personal safety showed positive results on immediate and longer term follow up.[105] Furthermore, the use of education and training tools, including role-playing, designed to increase knowledge of communication strategies in nurses aids demonstrated a positive impact on turnover rates.[106] Finally, one pre-post design study of an abuse prevention training program incorporating discussion, role-playing and self-testing showed no difference in burnout rates for nurses, although it did have a significant positive effect on attitude towards the residents and ability to manage conflict.[107] However, it is important to note that not all education and training programs were shown to be effective. Those that appeared most effective included programs that focused on a specific topic, included education, role-playing and/or practice with a coaching component and follow up. One study, albeit with a small sample size, that used only a self-directed approach with no follow up was not effective in reducing distress levels in nurses working with physically abusive patients in medium security settings.[108] It should be noted that this discussion is based on a very few education studies included in the systematic review in this area. Further research that helps reinforce which type of education is most effective in creating health and safety in the workplace is warranted.

3.3	Organizations/nursing employers promote and support initiatives related to the physical and mental health and well-being of the nurse. This includes, but is not limited to, fitness programs, health promotion and wellness activities, and fitness-to-work initiatives.

Discussion of Evidence[g]

A substantial body of evidence outside the health care sector has shown that providing a work environment that is supportive of employees' physical and mental health is beneficial to both employer and employee. How healthy people feel affects their job satisfaction and productivity, and how satisfied people are with their job affects their overall health status. A positive outcome results in:

- improved productivity
- fewer insurance and workers compensation claims
- decreased absenteeism
- fewer accidents
- reduced staff turnover and subsequent recruitment and training costs
- improved staff attitudes and higher morale

Traditional workplace health promotion programs have focused on delivering healthy lifestyle sessions or health and safety training. The evidence now shows that workplace health promotion programs are more effective when a wider, organizational approach is used. This entails establishing and integrating a sustainable program of activities that reflect the employees and the organization on a variety of issues, as well as addressing the many factors that affect employee well-being, including organizational change initiatives; occupational health and safety; and voluntary health practices.[109] Anecdotally, it appears that health care employers are beginning to implement more strategies aimed at creating healthier work environments such as stress reduction programs and critical incident debriefing. Fewer studies discuss the impact of such programs in health care workplaces.[110]

A case study by Lamontagne[111] describes the implementation of a wellness program at Seven Oaks General Hospital in Winnipeg Manitoba. Initial impact on employees showed change in lifestyle behaviors, improved employee morale, improved communication between staff and managers, and high participation rates in wellness programs. The literature reporting on the evaluation of such interventions has not been established to provide evidence regarding current strategies being implemented. That may be because programs may not be actively measuring and/or reporting outcomes or because changes in employee health status will only be noted over longer periods of time. However, the literature acknowledges the challenges involved in implementing workplace health promotion programs when dealing with organizations such as hospitals, which operate around the clock.[32] More evidence is needed to evaluate the impact of workplace wellness and health promotion programs on nurses and other health care employees.

g Type of Evidence
There is B, C and D type evidence for this recommendation

To ensure that nurses receive appropriate training and education related to safety in the workplace, organizations/nursing employers must commit both human and financial resources to such initiatives. In addition, workplace health and safety programs should be designed and delivered by qualified individuals who have expertise in occupational health and safety programs such as an Occupational Health Nurse or an Occupational Health and Safety Specialist.[99,112] Occupational health nurses can facilitate the needed changes in nurses' work environments by using established relationships with management and nursing, supported by data, to improve the health and well-being of nurses.[72] In addition, any programs should be customized to the uniqueness of the work environment, i.e. acute care hospital versus long-term care or community health facility, and the specific learning needs of individual nurses.[99]

Organizations that do not have in-house occupational health specialists should consider forming partnerships or contractual relationships with those who have expertise in the health and safety field. Nurses should attend programs to promote assertiveness and improve nurses' ability to communicate with nursing colleagues, doctors, and administrators. Managerial skills acquired would reduce stress from bureaucratic and organizational tasks on the ward.

In order to create healthier work environments, it is suggested that organizations/nursing employers consult relevant legislation (e.g. Occupational Health and Safety Standards, CCHSA Standards – see Appendix E) to help address an organization's legal obligations and implement organizational policies and objectives by anticipating, recognizing, assessing and controlling workplace hazards.[113] Similarly, another strategic approach for establishing and maintaining a safe and healthy workplace – a health and safety management system – can help put in place health and safety policies and programs for an organization.[110]

3.4	Organizations/nursing employers provide nurses with opportunities for personal, professional and spiritual development with regard to healthy work environments, professional competencies, and work/life balance.

Discussion of Evidence[h]

Personal and Professional Development: Work/Life Balance

Studies examining nurses' retention and intent to stay in their jobs indicate that opportunities to grow professionally and personally are important factors for nurses. Career development and life-long learning activities promote job satisfaction, increased retention and provision of high-quality patient/client care.[63,114] Perceived interest in one's career development and feelings of being valued influence nurses' intent to stay.[115]

Organizations can play a significant role in assisting nurses with personal and professional development strategies. By incorporating career planning and development into the strategic plan, organizations can contribute to the development of career-resilient employees, which is a priority to ensure a healthy future for nursing.[114]

h Type of Evidence
There is B, C and D type evidence for this recommendation

However, it is important to acknowledge that the change in the social contract between employers and employees has shifted from the expectation of a "job for life," where the employer played a patriarchal role regarding how work was to be done, to the current philosophy of constant transition and change, where employees take more responsibility for their career planning.[113] "The responsibility for a person's own career planning must be that of the individual, but the responsibility for the success of a career development culture requires the active support and involvement of three principal actors: top management, supervisors and employees themselves".[114,116] Much of the recruitment and retention literature speaks of short-term recruitment or retention strategies. However, it is only when the organization itself changes and focuses on individual employee's career resilience that employers will be equipped to recruit and retain over the long term.[114]

When considering recruitment and retention initiatives, organizations/nursing employers must consider the multi-generational composition of the nursing workforce and customize strategies based on generational preferences and needs. For example, not all nurses may want the same type of professional development opportunities. Younger nurses may prefer on-line educational opportunities whereas mid- or late-career nurses may want classroom style learning opportunities. The impact of global migration also has an impact on the types of professional development programs employers might offer. Nurses from other countries may have different learning needs and organizations must develop programs to meet these varied needs to retain them.[117]

Nurses indicate they want improved work-life balance. It is proposed that work-life balance contributes to positive job satisfaction, decreased stress and burnout and therefore nurses will remain healthier. In order to help nurses achieve work-life balance, nursing leaders and researchers need to have an understanding of what the concept of work-life balance means to nurses. Employers should engage in dialogue with employees to assess what nurses seek in this regard. Further research is required to explore what strategies will be effective at helping nurses balance their work and home lives. Needs may vary by education, generation, gender and cultural background.

Thus, both employers and individual nurses must take responsibility for professional development and to help nurses find meaning and satisfaction in their career planning and development. Job satisfaction contributes significantly to professional fulfillment, mental energy, decreased stress and lack of work-related exhaustion. Nurses who are satisfied with their jobs are less likely to leave.[41]

Holistic Nursing

Holistic nursing recognizes the need to care for the whole person: in body, mind and spirit. Practicing holistic nursing requires nurses to integrate self-care, self-responsibility, spirituality and reflection in their lives.[118] In keeping with this nurses must be able to care for themselves first before they can facilitate the healing of others.

Some health care organizations have incorporated the concepts of holistic nursing into care delivery models with the aim of improving patient/client satisfaction as well as professional, career and spiritual satisfaction for nurses.[119] Further research is required to determine both patient/client and nurse outcomes when implementing holistic nursing practices.

4.0	Workplace health and safety best practices be embedded/integrated across all sectors of the health care system.
4.1	Organizations/nursing employers engage in knowledge transfer activities that promote best practices regarding the health, safety and well-being of nurses.
4.2	Organizations/nursing employers support and contribute to the development of health and safety indicators at the local, provincial and national level to assist in data collection and comparable analysis across the health care sector.
4.3	Organizations/nursing employers develop standardized databases for sharing best practices related to nurse health, safety and well-being.

Discussion of Evidence[i]

Workplace Health and Safety Best Practices

Compared with other employment sectors, the health care sector has lagged behind in implementing workplace health and safety programs.[41,90,120] As the global shortage of health care providers continues to grow, it is critical that employers value the contributions of all health care providers. As a country that values its health care system, retaining health care workers is essential to ensuring quality services such as safe systems, decreased wait times and access to service.[121] As nurses and other health care providers work in various sectors of the health care system, it is critical that efforts to maintain the health of nurses include all sectors i.e. acute care, home care, long-term care, public health and others. Organizations/nursing employers should refer to the work of the Quality Worklife Quality Healthcare Collaborative[121] and the Canadian Council on Health Services Accreditation (CCHSA)[122] for recommendations and strategies to integrate best practices regarding employee health and safety into their organizational strategic and operating plans.

When promoting a climate of health and safety, organizations should use a comprehensive systems approach taking into account organizational factors, physical and psychological hazards. A multiple pronged approach is the best way to improve the health care workplace, patient/client and worker safety.[60]

Engaging in comprehensive initiatives such as promoting a climate of health and safety requires a well-thought out and planned strategy. The use of a logic model may assist organizations in drafting plans to carry out such initiatives. They are diagrams that show the major components of a program and assist in

i Type of Evidence
There is B, C and D type evidence for this recommendation

providing stakeholders with a "road map" describing the sequence of related events connecting the need for the planned program with the program/initiative's desired results.[123] Logic models can be used to conceptualize actions[124] and can be used with multiple stakeholder groups to plan, implement and evaluate programs/initiatives. They can also be helpful in stimulating both creative and critical thinking when organizations embark on innovations.

Appendix D contains two examples of how a logic model might be used by organizations to implement recommendations from this best practice guide. On page 78, the first logic model shows how various inputs and activities and can result in short, intermediate and long-term outcomes. In this case, the long-term outcome being a culture of health, safety and well-being for nurses in the work environment. This example could be applied to recommendations 4.0-4.3.

In the second example on page 80, the logic model depicts how a nursing academic institution might use various inputs and activities to contribute to individual nurse, organizational and system outcomes regarding creating work environments to support the health, safety, and well-being of nurses. This model could potentially apply to recommendations 7.0 and 8.0.

Knowledge Transfer

Effective health services rely on a foundation of research-based evidence. While quality care improvements are dependent on the application of evidence, incorporating them into the practice setting is often challenging.[125] The knowledge utilization literature is concerned with the study of how a new idea or research finding is adopted, implemented, rejected or makes an impact on how an individual or group thinks or acts. Knowledge utilization research has focused on examining ways to narrow the gap between researchers and practitioners and to increase the use of research in practice.

Knowledge transfer (also referred to as knowledge exchange) is a "process by which relevant research information is made available and accessible for practice, planning, and policy-making through interactive engagement with audiences. Knowledge transfer is supported by user-friendly materials and a communication strategy that enhances the credibility of the organization. Where relevant, knowledge transfer reinforces key messages from the research".[126]

Knowledge transfer activities include a variety of strategies, and organizations should engage in activities that are customized to meet the organization's needs. Strategies may include:

- distribution of education materials and conference presentations
- use of knowledge brokers
- communities of practice

To bring this to an operational level, organizations can participate in knowledge transfer activities in two ways:

1. By being the recipient of new information, e.g. Chief Nurse Officer receives new research reports on the health status of nurses. She/He then engages in activities that facilitate the transfer of knowledge/findings to colleagues within the organization with the goal of changing practices/policy.
2. By sharing findings/success stories about keeping nurses healthy via publications or conference. Further collaboration and dialogue with researchers and policy-makers may then influence practice at a higher level. Knowledge transfer is only one step in development of practice change and does not in and of itself lead to sustained changes in day to day nursing practice; rather, it contributes to a basis for evidence-based practice.[127] Therefore, it is important for organizations/nursing employers in conjunction with governments, associations, educators and researchers to evaluate and share findings regarding best practices in creating healthier workplaces for nurses.

Health and Safety Indicators and Databases

As the health care sector moves toward creating healthier health care workplaces, various organizations are beginning to establish indicators related to healthy workplaces. Some of these indicators could also be measures of nurses' health and safety. For example, the literature to date cites indicators such as: turnover, burnout, stress, disability claims, workplace injuries and absenteeism as reflections of nurses' health.[86,96,112,128] Suggested indicators for healthy health care workplaces include: turnover rates, vacancy rates, training and professional development opportunities, overtime worked, absenteeism, workers compensation lost time incidents rates, and health provider satisfaction.[121] The CCHSA[122] standards have also incorporated quality of worklife indicators in their assessment tools for health care organizations. In order to accurately determine the current health and safety concerns of health care professionals, including nurses, valid and reliable indicators need to be determined and documented accordingly. Only then can health care leaders begin to make workplace changes that are evidence-based and will truly make a difference to employee health and safety. It is crucial that organizations/nursing employers collect and document comparable data in order to predict current and future health human resources needs.

As organizations/nursing employers implement and evaluate strategies aimed at creating healthy workplaces for nurses, they need to document and share their successes and challenges along with related outcomes via appropriate media and knowledge transfer strategies. The creation of new knowledge based on the evaluation of workplace interventions should be shared in order for planned and evidence-based change to take place.

Research Recommendations

5.0	Researchers actively collaborate with health care partners to demonstrate the effectiveness of interventions aimed at improving nurse health, safety and well-being using rigorous research and evaluation methodologies.

Discussion of Evidence[j]

"The Institute of Medicine and the Agency for Health Care Research and Quality have targeted the safety of the work environment as a priority, recognizing that the safety and well-being of health care providers are essential to their providing high-quality and safe patient care".[16] While researchers must continue to explore factors that contribute to nurse health through the various types of observational and co-relational research designs that typically predominate academic research activity in the area of work and health research (not just in nursing), they also need to focus on developing new methods for demonstrating the effectiveness of strategies aimed at improving nurses' health. Research on healthy work environments for nurses therefore needs to be expanded from exploring nurses' health and the list of factors that are possibly contributing to it, and focus on developing practical applications from the findings of such studies. Researchers should recognize the need for accommodations in study designs and methodologies, and consider the potential for mixed methods (combining qualitative and quantitative) as well as more traditional evaluative research.[129,130] While this is clearly a call for more intervention and evaluation research, such a call must be tempered with the caveat that workplace research is inherently difficult.[131] The breadth and depth of the challenges that must be overcome when studying the health of nurses in the highly complex workplaces found in health care organizations, has perhaps been the main contributor to the scarcity of high-quality evidence regarding healthy work environments for nurses. Very few, if any, of the recommendations found in this guideline could be based on what most researchers would consider to be high quality research evidence.

As outlined by Cole et al.[131] and Green & Caracelli,[129] a number of challenges arise when conducting evaluative research in an environment where the topic of research, or even the significance of its findings, are understandably not the main focus for people working in that setting. These challenges should not, however, be seen as adequate justification for failing to conduct rigorous evaluations of interventions aimed at improving the work environments for nurses. In the absence of such evaluations, the likelihood of establishing evidence-based best practices for healthy work environments remains remote. Despite the challenges, careful evaluations can still be conducted, which could make significant contributions to the literature and policy on healthy work environments. Guidelines[130] are available that can help researchers design high-quality evaluations of interventions. Nurses and nursing organizations are understandably preoccupied with the health and well being of their clients, but there are limits to what can be done by the people involved. So while researchers must recognize the challenges that the workplace holds for them from a methodological perspective, and work to develop strategies that can overcome these obstacles, health care organizations should also understand that by becoming an active research partner they can do much to help researchers overcome these challenges. The presence of active champions from within an

j Type of Evidence
There is C, D, D1 and D2 type evidence for this recommendation

organization can significantly improve the uptake and effectiveness of an intervention.[131] Health care organizations that join together with researchers to form collaborative partnerships aimed at demonstrating the effectiveness of healthy work environment interventions will benefit the most from such research. Collaborative research programs have been formed in other areas (e.g. the Community-University Research Alliances, jointly sponsored by the Canadian Institute for Health Research and the Social Sciences and Health Research Council, High-quality intervention research is beginning to emerge in the health care sector[133] but more needs to be done to establish the kind of healthy work environments that are needed.

6.0	Researchers make full use of existing databases on nurses' health, including the National Survey on the Work and Health of Nurses, in order to improve understanding of the key factors contributing to healthy work environments for nurses and to develop and test best practice indicators.

Discussion of Evidence[k]

It is vital that researchers continue to access data about the health of nurses from a variety of sources, and where possible, compare of nurse workforce health with reference data from non-nurses, i.e. researchers should make direct use of the new National Survey on the Work and Health of Nurses (NSWHN)[45,128] and other national data sources such as the Canada Community Health Survey and the Workplace Employment Survey. These high-quality health resources can provide researchers with a wealth of information about the factors contributing to nurse health and thus help contribute to the development of best practice indicators that can be used by policy makers to effect the transition needed in varied nursing workplaces.[134] These datasets can also be used to make contrasts with occupations and professions outside the health care milieu, thereby providing additional insights. Thus, researchers should also collaborate with national accreditation boards to help integrate health and safety indicators into the standard accreditation process and encourage health care workplaces and organizations to monitor nurse health through the use of best practice indicators (i.e. surveillance).

Part of the rationale for developing and launching the NSWHN stemmed from the model of nurse health developed by Kerr, Laschinger, Almost, et al.[96] Their paper argued that, based on the extent of the activity and resources that had already been allocated or dedicated to nurse health issues, a strong, focused and dedicated effort to establish a method for monitoring the health and work environments of health care providers should begin. It was further argued that since nurses provide the bulk of direct patient/client care in the health care system, the initiative should begin with nurses before expanding to other health care workers. Through the wide variety of initiatives and the emerging body of risk factor research on nurse health, nurses are positioned to be leaders in this area. If researchers continue to refine, expand and make extensive analytic use out of existing data sources (such as NSWHN), they will eventually be equipped to provide tools to better guide and evaluate interventions designed to improve nurse health. However, this much needed research activity to develop tools for change should not be delayed. "Waiting until we agree on how and where to act among all the different human resource components of the system could very well lead to continued cries of inactivity on a critical issue that may already have been studied as much as it can be before immediate action becomes the next logical step."[96]

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k Type of Evidence
There is B, C, D, D1 and D2 type evidence for this recommendation

Education Recommendations

7.0	Nursing education institutions model the integration of health, safety and well-being in their workplace culture.

Discussion of Evidence[l]

Students and faculty are influenced by the health, safety and well-being of their learning and work environments. Similar to nurses in workplace environments, it is imperative that faculty and students have access to healthy work environments and supportive practice environments.[46] Moreover, university settings have been established as models for knowledge and expertise. Hence, these educational institutions are in an ideal position to investigate, implement and model healthy work environment research and policy for the benefit of students, faculty and graduating nurses.

Students

Student retention, stress and abuse are reported in the literature and are of significant importance. Nursing students encounter stress in the clinical setting as a result of actions of clinical faculty, actions of nursing staff peers, implementing nursing interventions, preparing for clinical assignments and encountering new clinical rotations.[135] Nursing students practice fewer health promoting behaviours than other students.[136] Some students experience verbal and academic abuse.[137,138]

Faculty

To meet the increasing demands for nurses through increased student enrollment the faculty complement must also be augmented. Similar to the demographic factors affecting the overall nurse population, the average age of nursing faculty is also increasing. The projection of the number of nursing faculty who are eligible to retire in the next five to 10 years is increasing, putting a tremendous burden on the need to produce more qualified nurses to assume educational roles.[1,139] Faculty members are working harder to meet educational requirements for more students per faculty member. Faculty risk for psychological illness is greater than the general population (50% versus 19% respectively), psychological strain is higher among contract faculty and job satisfaction is lower than other occupational groups. Thirty percent of academics reported working more that 55 hours per week. Organizational factors that best predicted psychological strain were staffing pressures (current student/staff ratio for academic staff, percentage staff cuts and grant cuts for general staff). The best predictors of job satisfaction were procedural fairness, trust in heads, trust in senior management and autonomy.[140]

Faculty can mitigate symptoms of student psychological injury and promote student wellness through faculty-student collaboration.[141] Faculty and students can transform education through working and learning together in non-traditional ways. Re-orientating the student-teacher relationship to form a partnership in learning enables practices that engender caring, listening, acceptance and relationship-building.[142] Student-teacher connection creates positive outcomes for students' learning experiences and

l Type of Evidence
There is C and D type evidence for this recommendation

professional socialization in addition to less tangible benefits including knowledge, trust, respect and mutuality. Students enjoy a supportive learning environment, gain insight into potential and seem more able to fulfill personal and professional potential.[143] Psychological and functional faculty support as perceived by nursing students was associated with student retention and program completion.[144]

Clinical Placements

A great deal of student learning is conducted in the clinical setting. Hence, the importance of mentors, preceptors and staff RNs as role models for student wellness cannot be understated. Donaldson and Carter[145] found that students assimilate role model behaviours for integration into their practice. Promoting and supporting knowledge about healthy work environments for mentors and preceptors is recommended as a way to enhance student exposure to these principles while also providing this valuable knowledge to practicing nurses.[146]

Senior university executive and faculty commitment is vital to the development of a model that promotes healthy university work and learning environments. This commitment would involve embedding health into organizational culture, decision making and policy development at all levels.[3] Organizational changes recommended in this guideline apply to university settings also. Incorporating health, safety and well-being into the academic accreditation process could help these institutions achieve a leadership role in this area.

8.0	Nursing education institutions incorporate health, safety and well-being of the nurse into the core curriculum of nursing education programs.

Discussion of Evidence[m]

In order to establish healthy and safe working environments for nurses, students must learn the fundamental elements that contribute to the development and maintenance of these environments. Many of the principles already exist within the educational milieu, both in the classroom and in partnership with clinical placement organizations. However, this recommendation states that the curriculum explicitly acknowledge the importance of health, safety and wellness of the nurse so that these behaviours become an automatic and instinctive part of the student/nurse practice. It is necessary that health, wellness and safety become part of the culture of learning and of the professional practice of nursing. In order to accomplish this, it is important that these attributes and behaviours be explicitly embedded in curriculum from the beginning.

m Type of Evidence
There is D type evidence for this recommendation

It is suggested that these RNAO Healthy Work Environment BPG's act as a starting point for curriculum change and development. While it is recognized that most institutions already struggle to cope with the delivery of existing, multi-faceted curricula, it is essential that the health, safety and well-being of future nurses be directly addressed in their education. Thus, future nursing curriculum should include the following content areas:

- ergonomics
- safe work procedures
- personal protective equipment
- WHMIS and other health and safety legislation and regulations related to health care
- environment assessment/hazard recognition
- self-care and self-advocacy
- development of effective coping, stress management and communication skills
- effective team skills, negotiation and conflict resolution skills
- assessment of work environments for healthy work environment benchmarks
- ability to assess one's self and others for signs and symptoms of burnout
- violence prevention
- holistic nursing practices that enable an optimal level of connectedness
- implications of organizational factors as determinants of nurse health, safety and well-being
- strategies to participate in building policy that promotes health, safety and well-being of the nurse

This could provide students with a basic knowledge of the dynamics and essential elements of healthy work environments. Not only can nursing students reinforce healthy work environments, they can also identify those work environments that may benefit from interventions designed to enhance the integrity of that environment, thereby contributing to the health, safety and well-being of students and nurses.

It is crucial that students have information on how to protect themselves as they prepare to enter the workforce. This is supported by the literature: "Preparation for clinical placements/rotations must include sufficient education regarding the context of the work site and incorporate methods for enhancing safe care delivery by students, such as orientation, teamwork, disclosure policies and ongoing preceptor support for learners".[76] A recent study by Cho, Laschinger et al.[146] found that 66% of new nurses (less than two years into the job) were experiencing symptoms of burnout and many were leaving their jobs within two years of graduation. Therefore, it is imperative that education to help nurses prevent burnout and deal with workplace stress be incorporated into their undergraduate nursing programs.

As a result of reports and research inquests and enquires related to the extent of patient harm in health care, patient safety is a priority health care goal.[140] In this regard patient/client safety is now being addressed in nursing education programs with the intent of improving patient/client care and creating safer systems for health care services.[147] As violence in the workplace becomes more evident concepts of workplace health and safety must be integrated into curricula to prepare nurses to work safely in the complex environments in which they practice.

System Recommendations

9.0	Governing/accreditation bodies incorporate the Organization Practice Recommendations from this RNAO Healthy Work Environments Best Practice Guideline in their quality health and safety standards for health care service and education organizations.

Discussion of Evidence[n]

Unhealthy workplaces in health care settings not only put both patients and health care workers at risk but also cost hundreds of millions of dollars.[110] The state of health of health care workplaces in Canada and indeed in many other countries is an issue that has been hidden for too long.[148] It is time for policy makers, funders, governments, managers and care providers to join forces and collaborate to create a safer, healthier system for the sake of patients and the health care workforce.[148]

The Quality Worklife-Quality Healthcare Collaborative (QWQHC) is a coalition of 10 Canadian national health care organizations and over 45 quality work/life experts who have come together to develop and implement a national strategy to create healthier health care workplaces.[110] The goal is to address this issue as a national priority in order to have a system that is both safe for patients and able to attract and retain health care workers.

The Canadian Council on Health Services Accreditation (CCHSA) is committed to improving the quality of worklife for nurses and other health care workers. Accreditation is a vehicle to enable the implementation of proven strategies and facilitate the measurement of improvements.[149] The CCHSA worklife strategy incorporates components of a healthy work environment and its links to staff, organization and patient/client outcomes and are being. New standards are being developed that will incorporate these elements into the CCHSA accreditation process which will begin in 2007. These standards will specifically address issues related to: worklife balance; appropriate use of health human resources based on knowledge and skill; ensuring a physically safe and healthy work environment for health care workers; and initiating practices to enhance patient/client safety.

n Type of Evidence
There is B, C and D type evidence for this recommendation

Process For Reviewing and Updating the Healthy Work Environments Best Practice Guidelines

The Registered Nurses' Association of Ontario proposes to update the Healthy Work Environment Best Practice Guidelines as follows:

1. Each healthy work environment best practice guideline will be reviewed by a team of specialists (Review Team) in the topic area to be completed every five years following the last set of revisions.
2. During the period between development and revision, RNAO Healthy Work Environment project staff will regularly monitor for new systematic reviews and studies in the field.
3. Based on the results of the monitor, project staff may recommend an earlier revision period. Appropriate consultation with a team of members comprising original panel members and other specialists in the field will help inform the decision to review and revise the guideline earlier than the five-year milestone.
4. Six months prior to the five-year review milestone, the project staff will commence the planning of the review process by:
   a) Inviting specialists in the field to participate in the Review Team. The Review Team will be comprised of members from the original panel as well as other recommended specialists.
   b) Compiling feedback received, questions encountered during the dissemination phase as well as other comments and experiences of implementation sites.
   c) Compiling relevant literature.
   d) Developing detailed work plan with target dates and deliverables.
5. The revised guideline will undergo dissemination based on established structures and processes.

Numbered References

1. Canadian Nursing Advisory Committee. (2002). *Our health, our Future: Creating Quality Workplaces for Canadian Nurses. Final Report of the Canadian Nursing Advisory Committee.* Ottawa, ON: Advisory Committee on Health Human Resources.

2. Registered Nurses' Association of Ontario and Registered Practical Nurses Association of Ontario. (2000). *Ensuring the Care Will Be There: Report on Nursing Recruitment and Retention in Ontario.* Toronto, ON: Author.

3. Canadian Intergovernmental Conference Secretariat. *First Minister's meeting communiqué on health news release.* Ottawa, ON: September 11, 2000.

4. Health Canada. (2003). *First Ministers' Accord on Health Care Renewal.* Retrieved May 5, 2005 from: http://www.healthservices.gov.bc.ca/bchealthcare /publications/health_accord.pdf.

5. First Ministers' meeting on the future of health care (2004). Retrieved from: Nov 2004 – June 2005: http://www.hc-sc.gc.ca/english/hca2003/fmm/index.html

6. Council of Ontario University Programs in Nursing. (2002). *Position Statement on Nursing Clinical Education.* Toronto, ON: Author.

7. Canadian Nurses Association. (2002). *Planning for the Future: Nursing Human Resource Projections.* Ottawa, ON: Author.

8. Baumann A, O'Brien-Pallas L, Armstrong-Stassen M, et al. (2001). Commitment and Care: *The Benefits of a Healthy Workplace for Nurses, Their Patients and the System.* Ottawa, ON: Canadian Health Services Research Foundation and The Change Foundation.

9. Association of Colleges of Applied Arts and Technology. (2001). *The 2001 Environmental Scan for the Association of Colleges of Applied Arts and Technology of Ontario.* Toronto, ON: Author.

10. Nursing Task Force. (1991). *Good Nursing, Good Health: An Investment for the 21st Century.* Toronto, ON: Ontario Ministry of Health and Long-Term Care.

11. Shindul-Rothschild J. (1994). Restructuring, redesign, rationing and nurses' morale: A qualitative study of the impact of competitive financing. *Journal of Emergency Nursing.* 20(6):497-504.

12. Grinspun D. (2000). *Taking care of the bottom line: Shifting paradigms in hospital management. In: Gustafson DL, ed. Care and Consequences.* Halifax, NS: Fernwood Publishing.

13. Grinspun D. (2002). *The Social Construction of Nursing Caring. Unpublished Doctoral Dissertation Proposal.* North York, ON: York University.

14. Dunleavy J, Shamian J, & Thomson D. (2003). Workplace pressures: Handcuffed by cutbacks. *Canadian Nurse.* 99(3):23-26.

15. Dugan J, Lauer E, Bouquot Z, Dutro B, Smith M, & Widmeyer G. (1996). Stressful nurses: The effect on patient outcomes. *Journal of Nursing Care Quality.* 10(3):46-58.

16. Lundstrom T, Pugliese G, Bartley J, Cos J, & Guither C. (2002). Organizational and environmental factors that affect worker health and safety and patient outcomes. *American Journal of Infection Control.* 30(2):93-106.

17. Estabrooks C, Midodzi W, Cummings G, Ricker K, & Giovannetti P. (2005). The impact of hospital nursing characteristics on 30-day mortality. *Nursing Research.* 54(2):74-84.

18. Needleman J, Buerhaus PL, Mattke S, Stewart M, & Zelevinsky K. (2002). Nurse staffing levels and the quality of care in hospitals. *New England Journal of Medicine.* 346(22):1715-1722.

19. Person S, Allison J, Kiefe C, et al. (2004). Nurse staffing and mortality for Medicare patients with acute myocardial infarction. *Medical Care.* 42(1):4-12.

20. Blegen MA, & Vaughn T. (1998). A multi-site study of nurse staffing and patient occurrences. *Nursing Economic$* 16(4):196-203.

21. Sasichay-Akkadechanunt T, Scalzi C, & Jawad A. (2003). The relationship between nurse staffing and patient outcomes. *Journal of Nursing Administration.* 23(9):478-485.

22. Tourangeau A, Giovannetti P, Tu J, & Wood M. (2002). Nursing-related determinants of 30-day mortality for hospitalized patients. *Canadian Journal of Nursing Reseach.* 33(4):71-88.

23. Needleman J, & Buerhaus P. (2003). Nurse staffing and patient safety: Current knowledge and implications for action. (Editorial). *International Journal of Quality Health Care.* 15(4):275-277.

24. American Nurses Association. (2000). *Nurse Staffing and Patient Outcomes in the Inpatient Hospital Setting.* Washington, DC: American Nurses Publishing.

25. Kovner C, & Gergen P. (1998). Nurse staffing levels and adverse events following surgery in US hospitals. *Journal of Nursing Scholarship.* 30(4):315-321.

26. Sovie M, & Jawad A. (2001). Hospital restructuring and its impact on outcomes. *Journal of Nursing Administration.* 31(12):588-600.

27. Yang K. (2003). Relationships between nurse staffing and patient outcomes. *Journal of Nursing Research.* 11(3):149-158.

28. Cho S, Ketefian S, Barkauskas V, & Smith D. (2003). The effects of nurse staffing on adverse events, morbidity, mortality and medical costs. *Nursing Research.* 52(2):71-79.

29. Aldana S. (2001). Financial impact of health promotion programs: A comprehensive review of the literature. *American Journal of Health Promotion.* 15(5):296-320.

30. United States Agency for Health Care Research and Quality. (2003). *The Effect of Health Care Working Conditions on Patient Safety. Summary, Evidence Report /Technology Assessment.* Rockville, MD: United States Agency for Health Care Research and Quality. Report Number 74.

31. Lowe G. (2004). *Thriving on Healthy: Reaping the Benefits in our Workplaces.* Keynote presentation at the Registered Nurses Association of Ontario 4th Annual International Conference; Healthy Workplaces in Action: Thriving in Challenge. November 17, 2004, Markham, ON.

32. Canadian Labour and Business Centre. (2002). *Twelve Case Studies on Innovative Workplace Health Initiatives: Summary of Key Conclusions.* Canadian Labour and Business Centre: Ottawa, ON.

33. World Health Organization (WHO). What is the WHO definition of Health? http://www.who.int/suggestions/faq/en/ Accessed October 17, 2007

34. Ontario Hospital Association. (1997). *Healthy Hospital Initiative.* Ontario Hospital Association: Toronto, ON.

35. Harris GE & Cameron JE. (2005). Multiple Dimensions of Organizational Identification and Commitment as Predictors of Turnover Intentions and Psychological Well-Being. *Canadian Journal of Behavioural Science/Revue canadienne des Sciences du comportement.* 37(3):159-169.

36. Thomsen S, Arnetz B, Nolan P, Loares J & Dallender J. (1999). Individual and organizational well-being in psychiatric nursing: A cross sectional study. *Journal of Advanced Nursing.* 30(3):749-757.

37. Perry B. (2005). Core nursing values brought to life through stories. *Nursing Standard.* 20(7):41-48.

38. Cestnick K. (2006). *Quality and healthy workplaces: Human Resources must play a critical role. National Quality Institute.* Available at: http://www.nqi.ca/articles/article_details.aspx?ID=581. Accessed August 25, 2007.

39. U.S Department of Labor Occupational Safety and Health Administration. (2002, Fall). Safety and Health Add Value. To Your Business. To Your Workplace. To Your Life. *Job Safety and Health Quarterly.* Retrieved from http://www.osha.gov/Publications/JSHQ/fall2002html/safety_health.htm

40. Golberg B. (1988).Connection: An exploration of spirituality in nursing care. *Journal of Advanced Nursing.* 27(4):836-842.

41. Canadian Health Services Research Foundation. (2006). *What's Ailing our Nurses? A Discussion of the Major Issues Affecting Nursing Human Resources in Canada.* Canadian Health Services Research Foundation: Ottawa, ON.

42. Canadian Institute for Health Information. (2001). *Canada's Health Care Providers.* Ottawa, ON: Author.

43. Hooper J, & Charney W. (2005). Creation of a safety culture: Reducing workplace injuries in a rural hospital setting. *American Association of Occupational Health Nurses Journal.* 53(9):394-398.

44. Zboril-Benson LR. (2002). Why nurses are calling in sick: the impact of health-care restructuring. *Canadian Journal of Nursing Research.* 33(4):89-107.

45. Statistics Canada, Health Canada, Canadian Institute for Health Information. (2006). Findings from the 2005 National Survey of the Work and Health of Nurses. Ottawa, ON.

46. Jordan Z, Laschinger H, Long L, Pearson A, Porritt K & Tucker D. (2004) *A Comprehensive Systematic Review of Evidence on Developing and Sustaining Nursing Leadership that Fosters a Healthy Work Environment in Health Care.* Joanna Briggs Institute. Retrieved from http://www.joannabriggs.edu.au/pubs/systematic_reviews.php?

47. Moynihan R. (2004). *Evaluating health services: A reporter covers the science of research synthesis.* Millbank Memorial Fund. Retrieved November 22, 2004 from: http://www.milbank.org/reports/2004Moynihan/Moynihan.pdf

48. Pearson A, Laschinger, H, Porritt K, et al. (2004). A comprehensive systematic review of evidence on developing and sustaining nursing leadership that fosters a healthy work environment in health care. *Health Care Reports.* Adelaide, Australia: The Joanna Briggs Institute.

49. Cochrane & systematic reviews website. *Cochrane Collaboration, Cochrane Consumer Network, Cochrane and systematic reviews: Levels of evidence for health care interventions.* Available at: http://www.cochrane.org/consumers/sysrev.htm#levels. Accessed: May 7, 2005.

50. Scottish Intercollegiate Guidelines Network. *Levels of evidence and grades of recommendations in: A Guideline Developers' Handbook.* Available at: http://www.sign.ac.uk/guidelines/fulltext/50/section6.html#2. Accessed May 7, 2005.

51. Hatch, M. (1997). *Organization Theory: Modern, Symbolic and Postmodern Perspectives.* Oxford, UK: Oxford University Press: Oxford, UK.

52. Tregunno D. (2005). Organizational climate and culture. In: McGillis-Hall L, ed. *Quality Work Environments for Nurse and Patient Safety.* Jones and Bartlett Publishers: Toronto, ON. 67-91.

53. Rukholm E, Lemonade,M, Bailey P, Kaminski V, McLellan B, McGirr M, Palkovits J, Pong R & St. Onge R. (2003). Hospital System Assessment & Redesign for a New Millenium. *Canadian Health Services Research Foundation.*

54. Hofstede G. (1998). Attitudes, values and organizational culture: Disentangling the concepts. *Organization Studies.* 19(3):477-492.

55. Snow J. (2002). Enhancing work climate to improve performance and retain valued employees. *Journal of Nursing Administration.* 32(7/8):393-397.

56. Moran E, & Volkwein J. (1992). The cultural approach to the formation of organizational climate. *Human Relations.* 45(1):19.

57. Ontario Nurses Association. (2003). *Violence in the Workplace: A Guide for ONA Members.* Toronto, ON: Author.

58. O'Brien-Pallas L, Tomblin Murphy G, Laschinger H, White S, Wang S, & McCulloch C. (2005). *Canadian Survey of Nurses from Three Occupational Groups.* The Nursing Sector Study Corporation: Ottawa, ON.

59. Institute of Medicine. (2003). *Keeping Patients Safe: Transforming the Work Environment of Nurses.* Washington, DC: Author.

60. Yassi A, & Hancock T. (2005). Patient safety-worker safety: Building a culture of safety to improve health care worker and patient well-being. *Health Care Quarterly.* 8:32-38.

61. Koehoorn M, Lowe GS, Rondeaus KV, Schellenberg G. & Wagar TH. (2001). *Creating High-Quality Health Care Workplaces.* Canadian Policy Research Networks, Inc: Ottawa, ON.

62. Graham PB. (2000). T*he Effect of Organizational Climate on the Job Satisfaction of New Nursing Graduates.* (Dissertation). University of South Carolina: Columbia, SC.

64. Edmonson A. (1999). Psychological safety and learning behaviour in work teams. *Administrative Science Quarterly.* 44:350-383.

65. McGrath N & Boore RJ. (2003). Occupational stress in nursing. *International Journal of Nursing Studies.* 40:555-565.

66. Rogers B. (2004). Improving safety in health care environment. Institute of Medicine Report. *American Association of Occupational Health Nursing Journal.* 52(10):417-419.

67. Cooper CL, & Swanson N. (2002). *Workplace Violence in the Health Sector: State of the Art.* International Labour Organization, International Council of Nurses, World Health Organization, and Public Services International Joint Programme on Workplace Violence in the Health Sector; 2002. Geneva, Switzerland.

68. O'Brien-Pallas L, Tomblin Murphy G, Kephart G, Laschinger H, & White S. (2004). *Survey of Employers: Health Care Organizations' Senior Nurse Managers.* (This report is part of an overall project entitled Building the Future: An Integrated Strategy for Nursing Human Resources in Canada).

69. Ontario Nurses Association. (2006). Nurses at high risk of abuse – and worse. *ONA Vision.* 33(1):39.

70. Jackson D, Clare JM, & Mannix J. (2002). Who would want to be a nurse? Violence in the workplace-a factor in recruitment and retention. *Journal of Nursing Management.* 10:13-20.

71. Henderson A. (2003). Nurses and workplace violence: Nurses' experiences of verbal and physical abuse at work. *Canadian Journal of Nursing Leadership.* 16(4):82-98.

72. Geiger-Brown J, Trinkoff AM, Nielsen K, Lirtmunlikaporn S, Brady B, & Vasquez EI. (2004). Nurses' perception of their work environment, health and well-being: a qualitative perspective. *American Association of Occupational Health Nurses Journal.* 52(1)16-22.

73. Bennett P, Lowe R, Matthews V, Dourali M, & Tattersall A. (2001), Stress in nurses: coping , managerial support and work demand. *Stress & Health.* 17(1):55-63.

74. Laschinger H, Wang C, McMahon L, & Kaufman D. (1999). Leader behavior impact on staff nurse empowerment, job tension and work effectiveness. *Journal of Nursing Administration.* 29(5):28-38.

75. Hemingway MA, & Smith CS. (1999). Organizational climate and occupational stressors as predictors of withdrawal behaviours and injuries in nurses. *Journal of Occupational Organizational Psychology.* 72(3):285-299.

76. Nicklin W, Mass H, Affonso D, et al. (2004). Patient safety culture and leadership within Canada's academic health centres: Towards the development of a collaborative position paper. *Canadian Journal of Nursing Leadership.* 17(1):22-34.

77. Hayes L, O'Brien-Pallas L, Duffield C, et al. (2006). Nurse turnover: a literature review. *International Journal of Nursing Studies.* 43:237-263.

78. Upenieks, V. (2003). Recruitment and retention strategies: A Magnet hospital prevention model. *Nursing Economics.* 21(1):7-13,23.

79. Lipscomb JA, Trinkoff AM, Geiger-Brown J, & Brady B. (2002). Work schedule characteristics and reported musculoskeletal disorders of registered nurses. *Scandinavian Journal of Work, Environment Health.* 28(6):394-401.

80. Foley M. (2004). Caring for those who care: a tribute to nurses and their safety. *Online Journal of Issues in Nursing.* 9(3):2.

81. Rogers A, Wei-Ting H, Scott L, Aiken L, & Dinges D. (2004). The working hours of hospital staff nurses and patient safety. *Health Affairs.* 23(4):202.

82. Canadian Nurses Association and Canadian Federation of Nurses Unions Joint Position Statement. (2006). *Practice Environments: Maximizing Client, Nurse and System Outcomes.* Canadian Nurses Association and Canadian Federation of Nurses Unions: Ottawa, ON. Available at: http://www.cna-aiic.ca. Accessed May 4, 2007.

83. Georgia Nurses Association. (2005). Implications of fatigue on patient and nurse safety. *Georgia Nurse.* Aug-Oct.

84. American Nurses Association. (2006). Ethics and Human Rights Position Statements: Risk Versus Responsibility in Providing Nursing Care 1994. Available at: http://www.nursingworld.org/readroom/position/ethics/prterisk.htm. Accessed January 17, 2007.

85. Campbell A, & The SARS Commission. (2006). *Spring of Fear – Final Report.* The SARS Commission: Toronto, ON.

86. O'Brien-Pallas L, Shamian J, Thomson D, et al. (2004). Work related disability in Canadian nurses. *Journal of Nursing Scholarship.* 36(4):1-6.

87. (The) Nightingale Pledge (1893). Available at http://www.countryjoe.com/nightingale/pledge. Accessed April 24, 2007.

88. Fitzgerald L and Van Hooft S. (2007). A Socratic Dialogue on the Question 'What is Love in Nursing? *Nursing Ethics.* 7(6)481-491.

89. Pask E. (2005). Self-sacrifice, self-transcendence and nurses' professional self. *Nursing Philosophy.* 6:247-254.

90. Ontario Safety Association for Community and Healthcare. *Safety First (Press release).* Available at: http://www.osach.ca. Accessed May 4, 2007.

91. Greenglass ER, & Burke R. (2000). Hospital downsizing, individual resources, and occupational stressors in nurses. *Anxiety, Stress & Coping.* 13(4):371-390.

92. Burke RJ, & Greenglass ER. (2001). Hospital restructuring and nursing staff well-being: The role of perceived hospital and union support. *Anxiety, Stress & Coping.* 14(1):93-115.

93. Moore KA, & Mellor DJ. (2003). The role of management consultation, support, and coping on nurses' health during the stress of restructuring. *International Journal of Public Administration.* 26(14):1621-1636.

94. Burke RJ, & Greenglass ER. (2001). Hospital restructuring stressors, work-family concerns and psychological well-being among nursing staff. *Community Work & Family.* 4(1):49-62.

95. Burke RJ, & Greenglass ER. (2000). Hospital restructuring and nursing staff well-being: The role of coping. *International Journal of Stress Management.* 7(1):49-59.

96. Kerr MS, Spence Laschinger HK, Severin CN, Almost JM, & Shamian J. (2005). New strategies for monitoring the health of Canadian Nurses: Results of Collaborations with key stakeholders. *Canadian Journal of Nursing Leadership.* 18(1):67-81.

97. Blythe J, Baumann A, & Giovanetti P. (2001). Nurses' experiences of restructuring in three Ontario hospitals. *Journal of Nursing Scholarship.* 33(1):61-68.

98. Achat H, Kawachi I, Levine S, Berkey C, Coakley E, & Colditz G. (1998). Social networks, stress and health-related quality of life. *Quality of Life Research.* 7(8):735-750.

99. Dyck D. (2002). Organizational stressors and health: how occupational health nurses can help break the cycle. *American Association of Occupational Health Nurses Journal.* 50(5):213-219.

100. Young SW, Hayes E, & Morin K. (1995). Developing workplace advocacy behaviors. *Journal of Nursing Staff Development.* 11(5):265-269.

101. Wilson CB. (2001). Safer handling practice for nurses: a review of the literature. *British Journal of Nursing.* 10(2):108-114.

102. Heaney C. & Goetzel R. (1997). A Review of Health-related Outcomes of Multi-component Worksite Health Promotion Programs. *American Journal of Health Promotion.*

103. Skillen DL, Olson JK, & Gilbert JA. (2003). Promoting personal safety in community health: four educational strategies. *Nurse Educucator.* 28(2):89-94.

104. Fanello S, Jousset N, Roquelaure Y, Chotard-Frampas V, & Delbos V. (2002). Evaluation of a training program for the prevention of low back pain among hospital employees. *Nursing Health Science.* 4(1-2):51-54.

105. Beech B & Leather P. (2003). Evaluating a management of aggression unit for student nurses. *Journal of Advanced Nursing.* 44(6):603-612.

106. Kidd SAS. (1997). Managing the problem behaviours of patients with Alzheimer's disease *[PhD Thesis]:* Texas A& M U, Texas.

107. Goodridge D, Johnston P, Thomson M. (1997). Impact of a Nursing Assistant Training Program on Job Performance, Attitudes, and Relationships with Residents. *Education Gerontology,* 23:37-51.

108. Nhiwatiwa FG. (2003). The effects of single session education in reducing symptoms of distress following patient assault in nurses working in medium secure settings. *Journal of Psychiatric and Mental Health Nursing.* 10:561-568.

109. Industrial Accident Prevention Association. (2005). *Creating Healthy Workplaces.* Industrial Accident Prevention Association: Toronto, ON.

110. Quality Worklife - Quality Healthcare Collaborative. (2007). *Within our Grasp: A Healthy Workplace Action Strategy for Success and Sustainability in Canada's Healthcare System.* Canadian Council on Health Services Accreditation. Ottawa, Ontario.

111. Lamontagne F. (2002). *Case Study: Seven Oaks General Hospital.* Canadian Labour and Business Centre: Ottawa, ON.

112. Shamian J, & Villeneuve M. (2003). Building a national nursing agenda: A timely response for the sickest workers in the country. *Hospital Quarterly.* 4(1):16-18.

113. Cooper, A. (2004) Management systems-occupational health and safety: The road ahead. *Industrial Accident Prevention Association.* July.

114. Donner GJ, & Wheeler MM. (2001). Career planning and development for nurses: the time has come. *International Nursing Review.* 48(2):79-85.

116. Conger S. (2002). Fostering a career development culture. Reflections on the roles of managers, employees and supervisors. *Career Developing International.* 7(6):371-375.

115. Yoder LH. (1995). Staff nurses' career development relationships and self-reports of professionalism, job satisfaction and intent to stay. *Nurse Researcher.* 44(5):290-297.

117. Registered Nurses' Association of Ontario (2007). *Embracing Cultural Diversity in Health Care: Developing Cultural Competence.* Toronto, ON: Author.

118. American Holistic Nurses Association. (2006). Position Statements. Position on the Role of Nurses in the Practice of Complementary and Alternative Therapies. Available at: http://www.ahna.org/about/statements.html. Accessed on August 11, 2006.

119. Andrus V, Shanahan M & Assi MJ. (2006) A Research Study to enrich Professional Practice Environment for RNs. *Beginnings.* 26 (5):10-11.

120. Sedlak C.(2004). Nurse safety: Have we addressed the risks? *Online Journal of Issues in Nursing.* 9(3).

121. Quality Worklife Quality Healthcare Collaborative. (2007). *Within Our Grasp: A Healthy Workplace Action Strategy for Success and Sustainability in Canada's Healthcare System.* Canadian Council on Health Services Accreditation: Ottawa, ON.

122. Canadian Council on Health Services Accreditation. (2007). *Within Our Grasp: A Healthy Workplace Action Strategy for Success and Sustainability in Canada's Healthcare System.* Canadian Council on Health Services Accreditation. Retrieved from http://www.cchsa.ca/upload/files/pdf/Other/2007%20QWQHC%20Within%20Our%20Grasp.pdf

123. W.K. Kellogg Foundation. (2004). *Logic Model Development Guide.* Battle Creek, MI: Author.

124. Ellerman C, Kataoka-Yahiro M, & Wong C. (2006). Logic models used to enhance critical thinking. *Journal of Nursing Education.* 45(6):220-227.

125. Lemieux-Charles L, McGuire M, & Blidner I. (2002). Building interorganizational knowledge for evidence-based health system change. *Health Care Management Review.* 27(3):48-59.

126. Fysh, A., Hanna, S., & Kertoy, M., et al. *Knowledge Transfer in Health Care.* (2004). CanChild Centre for Childhood Disability Research. Retrieved December 2006, from http://www.canchild.ca/Default.aspx?tabid=124

127. Bandura A. (1977). Self-Efficacy: Toward a Unifying Approach of Behaviour Change. *Psychological Review.* 84:191-215.

128. Statistics Canada, Health Canada and the Canadian Institute for Health Information. (2006). *Findings from the 2005 National Survey of the Work and Health of Nurses.* Ottawa, ON: Author. Report 83-003-XPE.

129. Greene JC, Caracelli VJ, eds. (1997). *Advances in Mixed-method Evaluation : The Challenges and Benefits of Integrating Diverse Paradigms.* Jossey-Bass: San Francisco, CA.

130. Gordon DR, Ames GM, Yen IH, et al. (2005). Integrating qualitative research into occupational health: a case study among hospital workers. *Journal of Occupational Environmental Medicine.* 47(4): 399-409.

131. Cole DC, Wells RP, Frazer MB, et al; and the Ergonomic Intervention and the Evaluation Research Group. (2003). Methodological issues in evaluating workplace interventions to reduce work-related musculoskeletal disorders through mechanical exposure reduction. *Scandanavian Journal of Work Environmental Health.* 29(5):396-405.

132. Robson LS, Shannon HS, Goldenhar LM, & Hale AR. (2001). *Guide to Evaluating the Effectiveness of Strategies for Preventing Work Injuries: How to Show Whether a Safety Intervention Really Works.* Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute of Occupational Safety and Health: Washington, DC.

133. Bourbannais R, Brisson C, Vinet A, Vezina M, & Lower A. (2006). Development and implementation of participative intervention to improve the psychosocial work environment and mental health in an acute care hospital. *Occupational Environmental Medicine.* 63:326-334.

134. Cole DC, Robson LS, Lemieux-Charles L, et al. (2005). Quality of working life indicators in Canadian health care organizations: a tool for healthy, health care workplaces? *Occupational Medicine.* 55(1):54-59.

135. Shipton S. (2002). The process of seeking stress care: Coping as experienced by senior baccalaureate nursing students in response to appraised clinical stress. *Journal of Nursing Education.* 41(6);243-256.

136. Jankowski L, Bouchard L, Perrault M, & Lepage Y. (2002). Health behaviours of nursing students: a longitudinal study. *Journal of Nursing Education.* 41(6);257-265.

137. Celik S, & Bayraktar N. (2004). A study of nursing student abuse in Turkey. *Journal of Nursing Education.* 43(7):330-336.

138. McGregor A. (2005). Enacting connectedness in nursing education: moving from pockets or rhetoric to reality. *Nursing Education Perspective.* 26(2):90-95.

139. O'Brien-Pallas L, Meyer R, Alksnis C, et al. (2002). *Nursing education data - Evaluation of strategy 7 of the Nursing Strategy for Canada. Report submitted to Health Canada.* Toronto, Ontario, Canada: Nursing Effectiveness, Utilization and Outcomes Research Unit, University of Toronto.

140. Winefield AH, Gillespie N, Stough C, et al (2002). *Occupational stress in Australian universities: A national survey.* Melbourne: NTEU.

141. Morrissette P. (2004). Promoting psychiatric student nurse wellness. *Journal of Psychiatric Mental Health Nursing.* 11:534-540.

142. Ironside, P. (2005). Working together, creating excellence: The experiences of nursing teachers, students, and clinicians. *Nursing Education Perspectives.* 26(2):78-85.

143. Gillespie M. (2005). Student–teacher connection: a place of possibility. *Journal of Advanced Nursing.* 52(2):211-219.

144. Shelton E. (2003). Faculty support and student retention. *Journal of Nursing Education.* 42(2):68-76.

145. Donaldson J, & Carter D. (2005). The value of role modeling: Perceptions of undergraduate and diploma nursing (adult) students. *Nurse Education in Practice.* 5:353-359.

146. Cho J, Laschinger H, & Wong C. (2006). Workplace empowerment, work engagement and organizational commitment of new graduate nurses. *Canadian Journal of Nursing Leadership.* 19(3):43-60.

147. Davidson DD, Weisbrod L, Gregory D, Dyck N, & Neudorf K.(2006). Case Study: On the leading edge of new curricula concepts: Systems and safety in nursing education. *Canadian Journal of Nursing Leadership.* 19(3):34-42.

148. Lavoie-Tremblay M, O'Brien-Pallas L, Viens C, Hamelin Brabant L & Gelinas, C. (2006). Towards an integrated approach for the management of ageing nurses. *Journal of Nursing Management.* 14:207-212.

149. Nicklin, W. (2006). *Healthy Work Environment: Using Accreditation to Move Us Forward.* Keynote presentation at the Registered Nurses Association of Ontario 6th Annual Healthy Workplaces in Action Conference. November 30, 2006: Markham, Ontario.

150. Dick D, Baker R, Norton R, et al. (2004). The Canadian Adverse Events Study: the incident of adverse events among hospitals patients in Canada. *Canadian Medical Association Journal,* 170(11):1678-1686.

151. Steers, R. M. (1988). *Introduction to Organizational Behavior.* (3rd ed). Glenview, IL: Scott, Foreman and Company.

152. Bourbonnais D, Brisson C, Trudel L, & Vezinia M. (2004) Workplace prevention and promotion strategies. *Healthcare Papers.* 5(2):32-44.

153. National Health and Medical Research Council. (1998). *A guide to the development, implementation, and evaluation of clinical practice guidelines.* National Health and Research Council [On-line]. Available: http://www.health.gov.au/nhmrc.publications/pdf/cp30.pdf.

154. Blaney et al. *A Discussion Paper on Workplace Health.* Canadian Council on Integrated Health Care. Retrieved December 15, 2006, from http://www.ccih.ca/docs/CCIH-ADiscussionPaperonWorkplaceHealthFinal.pdf

155. Heyman, P. & Wolfe, S. (2000). *Neumans System's Model.* University of Florida, April.

156. American Association of Occupational Health Position Statement: The Licensed Practial Nurse (LPN) in Occupational Health. Retrieved March, 2006, from http://www.aaohn.org/practice/positions/upload/position_LPN-2.PDF

157. Association of Canadian Ergonomists. *What is Ergonomics and Who are Ergonomists?* Association of Canadian Ergonomists. Retrieved December 10, 2006, from http://www.ace-ergocanada.ca/index.php?contentid=142#appendix1

Alphabetized References

Achat H, Kawachi I, Levine S, Berkey C, Coakley E, & Colditz G. (1998). Social networks, stress and health-related quality of life. *Quality of Life Research.* 7(8):735-750.

Aldana S. (2001). Financial impact of health promotion programs: A comprehensive review of the literature. *American Journal of Health Promotion.* 15(5):296-320.

American Association of Occupational Health Position Statement: The Licensed Practial Nurse (LPN) in Occupational Health. Retrieved March, 2006, from http://www.aaohn.org/practice/positions/upload/position_LPN-2.PDF

American Holistic Nurses Association. (2006). Position Statements. Position on the Role of Nurses in the Practice of Complementary and Alternative Therapies. Available at: http://www.ahna.org/about/statements.html. Accessed on August 11, 2006.

American Nurses Association. (2000). *Nurse Staffing and Patient Outcomes in the Inpatient Hospital Setting.* Washington, DC: American Nurses Publishing.

American Nurses Association. (2006). Ethics and Human Rights Position Statements: Risk Versus Responsibility in Providing Nursing Care 1994. Available at: http://www.nursingworld.org/readroom/position/ethics/prterisk.htm. Accessed January 17, 2007.

Andrus V, Shanahan M & Assi MJ. (2006) A Research Study to enrich Professional Practice Environment for RNs. *Beginnings.* 26 (5):10-11.

Association of Canadian Ergonomists. *What is Ergonomics and Who are Ergonomists?* Association of Canadian Ergonomists. Retrieved December 10, 2006, from http://www.ace-ergocanada.ca/index.php?contentid=142#appendix1

Association of Colleges of Applied Arts and Technology. (2001). *The 2001 Environmental Scan for the Association of Colleges of Applied Arts and Technology of Ontario.* Toronto, ON: Author.

Bandura A. (1977). Self-Efficacy: Toward a Unifying Approach of Behaviour Change. *Psychological Review.* 84:191-215.

Baumann A, O'Brien-Pallas L, Armstrong-Stassen M, et al. (2001). *Commitment and Care: The Benefits of a Healthy Workplace for Nurses, Their Patients and the System.* Ottawa, ON: Canadian Health Services Research Foundation and The Change Foundation.

Beech B & Leather P. (2003). Evaluating a management of aggression unit for student nurses. *Journal of Advanced Nursing.* 44(6):603-612.

Bennett P, Lowe R, Matthews V, Dourali M, & Tattersall A. (2001), Stress in nurses: coping , managerial support and work demand. *Stress & Health.* 17(1):55-63.

Blaney et al. *A Discussion Paper on Workplace Health.* Canadian Council on Integrated Health Care. Retrieved December 15, 2006, from http://www.ccih.ca/docs/CCIH-ADiscussionPaperonWorkplaceHealthFinal.pdf

Blegen MA, & Vaughn T. (1998). A multi-site study of nurse staffing and patient occurrences. *Nursing Economic$* 16(4):196-203.

Blythe J, Baumann A, & Giovanetti P. (2001). Nurses' experiences of restructuring in three Ontario hospitals. *Journal of Nursing Scholarship.* 33(1):61-68.

Bourbannais R, Brisson C, Vinet A, Vezina M, & Lower A. (2006). Development and implementation of participative intervention to improve the psychosocial work environment and mental health in an acute care hospital. *Occupational Environmental Medicine.* 63:326-334.

Bourbonnais D, Brisson C, Trudel L, & Vezinia M. (2004) Workplace prevention and promotion strategies. *Healthcare Papers.* 5(2):32-44.

Burke RJ, & Greenglass ER. (2000). Hospital restructuring and nursing staff well-being: The role of coping. *International Journal of Stress Management.* 7(1):49-59.

Burke RJ, & Greenglass ER. (2001). Hospital restructuring and nursing staff well-being: The role of perceived hospital and union support. *Anxiety, Stress & Coping.* 14(1):93-115.

Burke RJ, & Greenglass ER. (2001). Hospital restructuring stressors, work-family concerns and psychological well-being among nursing staff. *Community Work & Family.* 4(1):49-62.

Campbell A, & The SARS Commission. (2006). *Spring of Fear – Final Report.* The SARS Commission: Toronto, ON.

Canadian Council on Health Services Accreditation. (2007). Within Our Grasp: A Healthy Workplace Action Strategy for Success and Sustainability in Canada's Healthcare System. Canadian Council on Health Services Accreditation. Retrieved from http://www.cchsa.ca/upload/files/pdf/Other/2007%20QWQHC%20Within%20Our%20Grasp.pdf

Canadian Health Services Research Foundation. (2006). *What's Ailing our Nurses? A Discussion of the Major Issues Affecting Nursing Human Resources in Canada.* Canadian Health Services Research Foundation: Ottawa, ON.

Canadian Institute for Health Information. (2001). *Canada's Health Care Providers.* Ottawa, ON: Author.

Canadian Intergovernmental Conference Secretariat. *First Minister's meeting communiqué on health news release.* Ottawa, ON: September 11, 2000.

Canadian Labour and Business Centre. (2002). *Twelve Case Studies on Innovative Workplace Health Initiatives: Summary of Key Conclusions.* Canadian Labour and Business Centre: Ottawa, ON.

Canadian Nurses Association and Canadian Federation of Nurses Unions Joint Position Statement. (2006). *Practice Environments: Maximizing Client, Nurse and System Outcomes.* Canadian Nurses Association and Canadian Federation of Nurses Unions: Ottawa, ON. Available at: http://www.cna-aiic.ca. Accessed May 4, 2007.

Canadian Nurses Association. (2002). *Planning for the Future: Nursing Human Resource Projections.* Ottawa, ON: Author.

Canadian Nursing Advisory Committee. (2002). *Our health, our Future: Creating Quality Workplaces for Canadian Nurses. Final Report of the Canadian Nursing Advisory Committee.* Ottawa, ON: Advisory Committee on Health Human Resources.

Celik S, & Bayraktar N. (2004). A study of nursing student abuse in Turkey. *Journal of Nursing Education.* 43(7):330-336.

Cestnick K. (2006). *Quality and healthy workplaces: Human Resources must play a critical role. National Quality Institute.* Available at: http://www.nqi.ca/articles/article_details.aspx?ID=581. Accessed August 25, 2007.

Cho J, Laschinger H, & Wong C. (2006). Workplace empowerment, work engagement and organizational commitment of new graduate nurses. *Canadian Journal of Nursing Leadership.* 19(3):43-60.

Cho S, Ketefian S, Barkauskas V, & Smith D. (2003). The effects of nurse staffing on adverse events, morbidity, mortality and medical costs. *Nursing Research.* 52(2):71-79.

Cochrane & systematic reviews website. *Cochrane Collaboration, Cochrane Consumer Network, Cochrane and systematic reviews: Levels of evidence for health care interventions.* Available at: http://www.cochrane.org/consumers/sysrev.htm#levels. Accessed: May 7, 2005.

Cole DC, Robson LS, Lemieux-Charles L, et al. (2005). Quality of working life indicators in Canadian health care organizations: a tool for healthy, health care workplaces? *Occupational Medicine.* 55(1):54-59.

Cole DC, Wells RP, Frazer MB, et al; and the Ergonomic Intervention and the Evaluation Research Group. (2003). Methodological issues in evaluating workplace interventions to reduce work-related musculoskeletal disorders through mechanical exposure reduction. *Scandanavian Journal of Work Environmental Health.* 29(5):396-405.

Conger S. (2002). Fostering a career development culture. Reflections on the roles of managers, employees and supervisors. *Career Developing International.* 7(6):371-375.

Cooper CL, & Swanson N. (2002). *Workplace Violence in the Health Sector: State of the Art.* International Labour Organization, International Council of Nurses, World Health Organization, and Public Services International Joint Programme on Workplace Violence in the Health Sector; 2002. Geneva, Switzerland.

Cooper, A. (2004) Management systems-occupational health and safety: The road ahead. *Industrial Accident Prevention Association.* July.

Council of Ontario University Programs in Nursing. (2002). *Position Statement on Nursing Clinical Education.* Toronto, ON: Author.

Davidson DD, Weisbrod L, Gregory D, Dyck N, & Neudorf K.(2006). Case Study: On the leading edge of new curricula concepts: Systems and safety in nursing education. *Canadian Journal of Nursing Leadership.* 19(3):34-42.

Dick D, Baker R, Norton R, et al. (2004). The Canadian Adverse Events Study: the incident of adverse events among hospitals patients in Canada. *Canadian Medical Association Journal,* 170(11):1678-1686.

Donaldson J, & Carter D. (2005). The value of role modeling: Perceptions of undergraduate and diploma nursing (adult) students. *Nurse Education in Practice.* 5:353-359.

Donner GJ, & Wheeler MM. (2001). Career planning and development for nurses: the time has come. *International Nursing Review.* 48(2):79-85.

Dugan J, Lauer E, Bouquot Z, Dutro B, Smith M, & Widmeyer G. (1996). Stressful nurses: The effect on patient outcomes. *Journal of Nursing Care Quality.* 10(3):46-58.

Dunleavy J, Shamian J, & Thomson D. (2003). Workplace pressures: Handcuffed by cutbacks. *Canadian Nurse.* 99(3):23-26.

Dyck D. (2002). Organizational stressors and health: how occupational health nurses can help break the cycle. *American Association of Occupational Health Nurses Journal.* 50(5):213-219.

Edmonson A. (1999). Psychological safety and learning behaviour in work teams. *Administrative Science Quarterly.* 44:350-383.

Ellerman C, Kataoka-Yahiro M, & Wong C. (2006). Logic models used to enhance critical thinking. *Journal of Nursing Education.* 45(6):220-227.

Estabrooks C, Midodzi W, Cummings G, Ricker K, & Giovannetti P. (2005). The impact of hospital nursing characteristics on 30-day mortality. *Nursing Research.* 54(2):74-84.

Fanello S, Jousset N, Roquelaure Y, Chotard-Frampas V, & Delbos V. (2002). Evaluation of a training program for the prevention of low back pain among hospital employees. *Nursing Health Science.* 4(1-2):51-54.

First Ministers' meeting on the future of health care (2004). Retrieved from: Nov 2004 – June 2005: http://www.hc-sc.gc.ca/english/hca2003/fmm/index.html

Fitzgerald L and Van Hooft S. (2007). A Socratic Dialogue on the Question 'What is Love in Nursing? *Nursing Ethics.* 7(6)481-491.

Foley M. (2004). Caring for those who care: a tribute to nurses and their safety. *Online Journal of Issues in Nursing.* 9(3):2.

Fysh, A., Hanna, S., & Kertoy, M., et al. *Knowledge Transfer in Health Care.* (2004). CanChild Centre for Childhood Disability Research. Retrieved December 2006, from http://www.canchild.ca/Default.aspx?tabid=124

Geiger-Brown J, Trinkoff AM, Nielsen K, Lirtmunlikaporn S, Brady B, & Vasquez EI. (2004). Nurses' perception of their work environment, health and well-being: a qualitative perspective. *American Association of Occupational Health Nurses Journal.* 52(1)16-22.

Georgia Nurses Association. (2005). Implications of fatigue on patient and nurse safety. *Georgia Nurse.* Aug-Oct.

Gillespie M. (2005). Student–teacher connection: a place of possibility. *Journal of Advanced Nursing.* 52(2):211-219.

Golberg B. (1988).Connection: An exploration of spirituality in nursing care. *Journal of Advanced Nursing.* 27(4):836-842.

Goodridge D, Johnston P, Thomson M. (1997). Impact of a Nursing Assistant Training Program on Job Performance, Attitudes, and Relationships with Residents. *Education Gerontology,* 23:37-51.

Gordon DR, Ames GM, Yen IH, et al. (2005). Integrating qualitative research into occupational health: a case study among hospital workers. *Journal of Occupational Environmental Medicine.* 47(4): 399-409.

Graham PB. (2000). *The Effect of Organizational Climate on the Job Satisfaction of New Nursing Graduates. (Dissertation).* University of South Carolina: Columbia, SC.

Greene JC, Caracelli VJ, eds. (1997). *Advances in Mixed-method Evaluation : The Challenges and Benefits of Integrating Diverse Paradigms.* Jossey-Bass: San Francisco, CA.

Greenglass ER, & Burke R. (2000). Hospital downsizing, individual resources, and occupational stressors in nurses. *Anxiety, Stress & Coping.* 13(4):371-390.

Grinspun D. (2000). *Taking care of the bottom line: Shifting paradigms in hospital management.* In: Gustafson DL, ed. Care and Consequences. Halifax, NS: Fernwood Publishing.

Grinspun D. (2002). *The Social Construction of Nursing Caring. Unpublished Doctoral Dissertation Proposal.* North York, ON: York University.

Harris GE & Cameron JE. (2005). Multiple Dimensions of Organizational Identification and Commitment as Predictors of Turnover Intentions and Psychological Well-Being. *Canadian Journal of Behavioural Science/Revue canadienne des Sciences du comportement.* 37(3):159-169.

Hatch, M. (1997). *Organization Theory: Modern, Symbolic and Postmodern Perspectives.* Oxford, UK: Oxford University Press: Oxford, UK.

Hayes L, O'Brien-Pallas L, Duffield C, et al. (2006). Nurse turnover: a literature review. *International Journal of Nursing Studies.* 43:237-263.

Health Canada. (2003). *First Ministers' Accord on Health Care Renewal.* Retrieved May 5, 2005 from: http://www.healthservices.gov.bc.ca/bchealthcare /publications/health_accord.pdf.

Heaney C. & Goetzel R. (1997). A Review of Health-related Outcomes of Multi-component Worksite Health Promotion Programs. *American Journal of Health Promotion.*

Hemingway MA, & Smith CS. (1999). Organizational climate and occupational stressors as predictors of withdrawal behaviours and injuries in nurses. *Journal of Occupational Organizational Psychology.* 72(3):285-299.

Henderson A. (2003). Nurses and workplace violence: Nurses' experiences of verbal and physical abuse at work. *Canadian Journal of Nursing Leadership.* 16(4):82-98.

Heyman, P. & Wolfe, S. (2000). *Neumans System's Model.* University of Florida, April.

Hofstede G. (1998). Attitudes, values and organizational culture: *Disentangling the concepts. Organization Studies.* 19(3):477-492.

Hooper J, & Charney W. (2005). Creation of a safety culture: Reducing workplace injuries in a rural hospital setting. *American Association of Occupational Health Nurses Journal.* 53(9):394-398.

Industrial Accident Prevention Association. (2005). *Creating Healthy Workplaces.* Industrial Accident Prevention Association: Toronto, ON.

Institute of Medicine. (2003). *Keeping Patients Safe: Transforming the Work Environment of Nurses.* Washington, DC: Author.

Ironside, P. (2005). Working together, creating excellence: The experiences of nursing teachers, students, and clinicians. *Nursing Education Perspectives.* 26(2):78-85.

Jackson D, Clare JM, & Mannix J. (2002). Who would want to be a nurse? Violence in the workplace-a factor in recruitment and retention. *Journal of Nursing Management.* 10:13-20.

Jankowski L, Bouchard L, Perrault M, & Lepage Y. (2002). Health behaviours of nursing students: a longitudinal study. *Journal of Nursing Education.* 41(6);257-265.

Jordan Z, Laschinger H, Long L, Pearson A, Porritt K & Tucker D. (2004) *A Comprehensive Systematic Review of Evidence on Developing and Sustaining Nursing Leadership that Fosters a Healthy Work Environment in Health Care.* Joanna Briggs Institute. Retrieved from http://www.joannabriggs.edu.au/pubs/systematic_reviews.php?

Kerr MS, Spence Laschinger HK, Severin CN, Almost JM, & Shamian J. (2005). New strategies for monitoring the health of Canadian Nurses: Results of Collaborations with key stakeholders. *Canadian Journal of Nursing Leadership.* 18(1):67-81.

Kidd SAS. (1997). Managing the problem behaviours of patients with Alzheimer's disease *[PhD Thesis]*: Texas A& M U, Texas.

Koehoorn M, Lowe GS, Rondeaus KV, Schellenberg G. & Wagar TH. (2001). *Creating High-Quality Health Care Workplaces.* Canadian Policy Research Networks, Inc: Ottawa, ON.

Kovner C, & Gergen P. (1998). Nurse staffing levels and adverse events following surgery in US hospitals. *Journal of Nursing Scholarship.* 30(4):315-321.

Lamontagne F. (2002). *Case Study: Seven Oaks General Hospital.* Canadian Labour and Business Centre: Ottawa, ON.

Laschinger H, Wang C, McMahon L, & Kaufman D. (1999). Leader behavior impact on staff nurse empowerment, job tension and work effectiveness. *Journal of Nursing Administration.* 29(5):28-38.

Lavoie-Tremblay M, O'Brien-Pallas L, Viens C, Hamelin Brabant L & Gelinas, C. (2006). Towards an integrated approach for the management of ageing nurses. *Journal of Nursing Management.* 14:207-212.

Lemieux-Charles L, McGuire M, & Blidner I. (2002). Building interorganizational knowledge for evidence-based health system change. *Health Care Management Review.* 27(3):48-59.

Lipscomb JA, Trinkoff AM, Geiger-Brown J, & Brady B. (2002). Work schedule characteristics and reported musculoskeletal disorders of registered nurses. *Scandinavian Journal of Work, Environment Health.* 28(6):394-401.

Lowe G. (2004). *Thriving on Healthy: Reaping the Benefits in our Workplaces.* Keynote presentation at the Registered Nurses Association of Ontario 4th Annual International Conference; Healthy Workplaces in Action: Thriving in Challenge. November 17, 2004, Markham, ON.

Lundstrom T, Pugliese G, Bartley J, Cos J, & Guither C. (2002). Organizational and environmental factors that affect worker health and safety and patient outcomes. *American Journal of Infection Control.* 30(2):93-106.

McGrath N & Boore RJ. (2003). Occupational stress in nursing. *International Journal of Nursing Studies.* 40:555-565.

McGregor A. (2005). Enacting connectedness in nursing education: moving from pockets or rhetoric to reality. *Nursing Education Perspective.* 26(2):90-95.

Moore KA, & Mellor DJ. (2003). The role of management consultation, support, and coping on nurses' health during the stress of restructuring. *International Journal of Public Administration.* 26(14):1621-1636.

Moran E, & Volkwein J. (1992). The cultural approach to the formation of organizational climate. *Human Relations.* 45(1):19.

Morrissette P. (2004). Promoting psychiatric student nurse wellness. *Journal of Psychiatric Mental Health Nursing.* 11:534-540.

Moynihan R. (2004). *Evaluating health services: A reporter covers the science of research synthesis.* Millbank Memorial Fund. Retrieved November 22, 2004 from: http://www.milbank.org/reports/2004Moynihan/Moynihan.pdf

National Health and Medical Research Council. (1998). *A guide to the development, implementation, and evaluation of clinical practice guidelines.* National Health and Research Council [On-line]. Available: http://www.health.gov.au/nhmrc.publications/pdf/cp30.pdf.

Needleman J, & Buerhaus P. (2003). Nurse staffing and patient safety: Current knowledge and implications for action. (Editorial). *International Journal of Quality Health Care.* 15(4):275-277.

Needleman J, Buerhaus PL, Mattke S, Stewart M, & Zelevinsky K. (2002). Nurse staffing levels and the quality of care in hospitals. *New England Journal of Medicine.* 346(22):1715-1722.

Nhiwatiwa FG. (2003). The effects of single session education in reducing symptoms of distress following patient assault in nurses working in medium secure settings. *Journal of Psychiatric and Mental Health Nursing.* 10:561-568.

Nicklin W, Mass H, Affonso D, et al. (2004). Patient safety culture and leadership within Canada's academic health centres: Towards the development of a collaborative position paper. *Canadian Journal of Nursing Leadership.* 17(1):22-34.

Nicklin, W. (2006). Healthy Work Environment: Using Accreditation to Move Us Forward. Keynote presentation at the Registered Nurses Association of Ontario 6th Annual Healthy Workplaces in Action Conference. November 30, 2006: Markham, Ontario.

(The) Nightingale Pledge (1893). Available at http://www.countryjoe.com/nightingale/pledge. Accessed April 24, 2007.

Nursing Task Force. (1991). *Good Nursing, Good Health: An Investment for the 21st Century.* Toronto, ON: Ontario Ministry of Health and Long-Term Care.

O'Brien-Pallas L, Meyer R, Alksnis C, et al. (2002). *Nursing education data - Evaluation of strategy 7 of the Nursing Strategy for Canada. Report submitted to Health Canada.* Toronto, Ontario, Canada: Nursing Effectiveness, Utilization and Outcomes Research Unit, University of Toronto.

O'Brien-Pallas L, Shamian J, Thomson D, et al. (2004). Work related disability in Canadian nurses. *Journal of Nursing Scholarship.* 36(4):1-6.

O'Brien-Pallas L, Tomblin Murphy G, Kephart G, Laschinger H, & White S. (2004). *Survey of Employers: Health Care Organizations' Senior Nurse Managers.* (This report is part of an overall project entitled Building the Future: An Integrated Strategy for Nursing Human Resources in Canada).

O'Brien-Pallas L, Tomblin Murphy G, Laschinger H, White S, Wang S, & McCulloch C. (2005). *Canadian Survey of Nurses from Three Occupational Groups.* The Nursing Sector Study Corporation: Ottawa, ON.

Ontario Hospital Association. (1997). *Healthy Hospital Initiative.* Ontario Hospital Association: Toronto, ON.

Ontario Nurses Association. (2003). *Violence in the Workplace: A Guide for ONA Members.* Toronto, ON: Author.

Ontario Nurses Association. (2006). Nurses at high risk of abuse – and worse. *ONA Vision.* 33(1):39.

Ontario Safety Association for Community and Healthcare. *Safety First (Press release).* Available at: http://www.osach.ca. Accessed May 4, 2007.

Pask E. (2005). Self-sacrifice, self-transcendence and nurses' professional self. *Nursing Philosophy.* 6:247-254.

Pearson A, Laschinger, H, Porritt K, et al. (2004). A comprehensive systematic review of evidence on developing and sustaining nursing leadership that fosters a healthy work environment in health care. *Health Care Reports.* Adelaide, Australia: The Joanna Briggs Institute.

Perry B. (2005). Core nursing values brought to life through stories. *Nursing Standard.* 20(7):41-48.

Person S, Allison J, Kiefe C, et al. (2004). Nurse staffing and mortality for Medicare patients with acute myocardial infarction. *Medical Care.* 42(1):4-12.

Quality Worklife - Quality Healthcare Collaborative. (2007). *Within our Grasp: A Healthy Workplace Action Strategy for Success and Sustainability in Canada's Healthcare System.* Canadian Council on Health Services Accreditation. Ottawa, Ontario.

Quality Worklife Quality Healthcare Collaborative. (2007). *Within Our Grasp: A Healthy Workplace Action Strategy for Success and Sustainability in Canada's Healthcare System.* Canadian Council on Health Services Accreditation: Ottawa, ON.

Registered Nurses' Association of Ontario (2007). *Embracing Cultural Diversity in Health Care: Developing Cultural Competence.* Toronto, ON: Author.

Registered Nurses' Association of Ontario and Registered Practical Nurses Association of Ontario. (2000). *Ensuring the Care Will Be There: Report on Nursing Recruitment and Retention in Ontario.* Toronto, ON: Author.

Robson LS, Shannon HS, Goldenhar LM, & Hale AR. (2001). *Guide to Evaluating the Effectiveness of Strategies for Preventing Work Injuries: How to Show Whether a Safety Intervention Really Works.* Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute of Occupational Safety and Health: Washington, DC.

Rogers A, Wei-Ting H, Scott L, Aiken L, & Dinges D. (2004). The working hours of hospital staff nurses and patient safety. *Health Affairs.* 23(4):202.

Rogers B. (2004). Improving safety in health care environment. Institute of Medicine Report. *American Association of Occupational Health Nursing Journal.* 52(10):417-419.

Rukholm E, Lemonade,M, Bailey P, Kaminski V, McLellan B, McGirr M, Palkovits J, Pong R & St. Onge R. (2003). Hospital System Assessment & Redesign for a New Millenium. *Canadian Health Services Research Foundation.*

Sasichay-Akkadechanunt T, Scalzi C, & Jawad A. (2003). The relationship between nurse staffing and patient outcomes. *Journal of Nursing Administration.* 23(9):478-485.

Scottish Intercollegiate Guidelines Network. Levels of evidence and grades of recommendations in: A Guideline Developers' Handbook. Available at: http://www.sign.ac.uk/guidelines/fulltext/50/section6.html#2. Accessed May 7, 2005.

Sedlak C.(2004). Nurse safety: Have we addressed the risks? *Online Journal of Issues in Nursing.* 9(3).

Shamian J, & Villeneuve M. (2003). Building a national nursing agenda: A timely response for the sickest workers in the country. *Hospital Quarterly.* 4(1):16-18.

Shelton E. (2003). Faculty support and student retention. *Journal of Nursing Education.* 42(2):68-76.

Shindul-Rothschild J. (1994). Restructuring, redesign, rationing and nurses' morale: A qualitative study of the impact of competitive financing. *Journal of Emergency Nursing.* 20(6):497-504.

Shipton S. (2002). The process of seeking stress care: Coping as experienced by senior baccalaureate nursing students in response to appraised clinical stress. *Journal of Nursing Education.* 41(6);243-256.

Skillen DL, Olson JK, & Gilbert JA. (2003). Promoting personal safety in community health: four educational strategies. Nurse Educucator. 28(2):89-94.

Snow J. (2002). Enhancing work climate to improve performance and retain valued employees. *Journal of Nursing Administration.* 32(7/8):393-397.

Sovie M, & Jawad A. (2001). Hospital restructuring and its impact on outcomes. *Journal of Nursing Administration.* 31(12):588-600.

Statistics Canada, Health Canada and the Canadian Institute for Health Information. (2006). *Findings from the 2005 National Survey of the Work and Health of Nurses.* Ottawa, ON: Author. Report 83-003-XPE.

Statistics Canada, Health Canada, Canadian Institute for Health Information. (2006). Findings from the 2005 National Survey of the Work and Health of Nurses. Ottawa, ON.

Steers, R. M. (1988). *Introduction to Organizational Behavior.* (3rd ed). Glenview, IL: Scott, Foreman and Company.

Thomsen S, Arnetz B, Nolan P, Loares J & Dallender J. (1999). Individual and organizational well-being in psychiatric nursing: A cross sectional study. *Journal of Advanced Nursing.* 30(3):749-757.

Tourangeau A, Giovannetti P, Tu J, & Wood M. (2002). Nursing-related determinants of 30-day mortality for hospitalized patients. *Canadian Journal of Nursing Reseach.* 33(4):71-88.

Tregunno D. (2005). Organizational climate and culture. In: McGillis-Hall L, ed. *Quality Work Environments for Nurse and Patient Safety.* Jones and Bartlett Publishers: Toronto, ON. 67-91.

U.S Department of Labor Occupational Safety and Health Administration. (2002, Fall). Safety and Health Add Value. To Your Business. To Your Workplace. To Your Life. *Job Safety and Health Quarterly.* Retrieved from http://www.osha.gov/Publications/JSHQ/fall2002html/safety_health.htm

United States Agency for Health Care Research and Quality. (2003). *The Effect of Health Care Working Conditions on Patient Safety. Summary, Evidence Report /Technology Assessment.* Rockville, MD: United States Agency for Health Care Research and Quality. Report Number 74.

Upenieks, V. (2003). Recruitment and retention strategies: A Magnet hospital prevention model. *Nursing Economics.* 21(1):7-13,23.

W.K. Kellogg Foundation. (2004). *Logic Model Development Guide.* Battle Creek, MI: Author.

Wilson CB. (2001). Safer handling practice for nurses: a review of the literature. *British Journal of Nursing.* 10(2):108-114.

Winefield AH, Gillespie N, Stough C, et al (2002). *Occupational stress in Australian universities: A national survey.* Melbourne: NTEU.

World Health Organization (WHO). What is the WHO definition of Health? http://www.who.int/suggestions/faq/en/ Accessed October 17, 2007.

Yang K. (2003). Relationships between nurse staffing and patient outcomes. *Journal of Nursing Research.* 11(3):149-158.

Yassi A, & Hancock T. (2005). Patient safety-worker safety: Building a culture of safety to improve health care worker and patient well-being. *Health Care Quarterly.* 8:32-38.

Yoder LH. (1995). Staff nurses' career development relationships and self-reports of professionalism, job satisfaction and intent to stay. *Nurse Researcher.* 44(5):290-297.

Young SW, Hayes E, & Morin K. (1995). Developing workplace advocacy behaviors. *Journal of Nursing Staff Development.* 11(5):265-269.

Zboril-Benson LR. (2002). Why nurses are calling in sick: the impact of health-care restructuring. *Canadian Journal of Nursing Research.* 33(4):89-107.

Appendix A: Glossary of Terms

Connectedness: "Connection implies a joining together of two or more elements, with a relationship formed between them. Connection is not the same as fusion, as it is not necessarily permanent. Connections may be physical or mental, as in the association of ideas. A connection may be someone influential who could act on someone else's behalf, or in their interests. A connection could be the linking train which facilitates a smooth trouble free journey. A connection facilitates communication, as in the telephone system… Connection was also identified as relating to the past and future, and connection with self-reflected growing self-knowledge with maturity".[150]

Critical Reviews (CRs): Essays based on scholarship (i.e. on finding and reading the literature on a topic, and adding your own considered arguments and judgments about it). CRs thus involve both reviewing an area, and exercising critical thought and judgment. Retrieved August 2, 2006 from: http://www.psy.gla.ac.uk/~steve/resources/crs.html#What

Descriptive Co-relational studies: Examine and describe how variables are related to one another and are used to make predictions from present circumstances to future ones. Retrieved August 2, 2006 from: http://www.chiron.valdosta.edu/whuitt/edpsyppt/Intro/researchg.ppt
http://www.ualberta.ca/~carmen/212a1/Chapter6final.ppt

Education Recommendations: Statements of educational requirements and educational approaches/strategies for the introduction, implementation and sustainability of the best practice guideline.

Expert Opinion: The opinion of a group of experts based on knowledge and experience and arrived at through consensus.

Health: Described by the World Health Organization[33] as "the extent to which an individual or group is able to realize aspirations and satisfy needs; and to change or cope with the environment".

Healthy Work Environments: A health work environment for nurses is a practice setting that maximizes the health and well-being of nurses, quality patient/client outcomes and organizational performance."

Healthy Work Environment Best Practice Guidelines: Systematically developed statements based on best available evidence to assist in making decisions about appropriate structures and processes to achieve a healthy work environment.

Healthy Workplace: One in which health care workers are able to deliver high quality care, and in which worker health and safety and patient/client health and safety are mutually supportive.[60]

Holistic Nursing: A recognition of the need to care for the whole person, i.e. body, mind and spirit, including the nurse. Practicing holistic nursing requires nurses to integrate self-care, self-responsibility, spirituality and reflection in their lives.[118]

Integrative Review: The integrative review process includes (1) problem formulation, (2) data collection or literature search, (3) evaluation of data, (4) data analysis, and (5) interpretation and presentation of results. Retrieved August 2, 2006 from:
http://www.findarticles.com/p/articles/mi_qa4117/is_200503/ai_n13476203

Job satisfaction: The difference between how much a person wants or expects from a job, and how much the person actually receives.[151] Nurse retention is related to how much an organization does or does not value its employees. Work satisfaction co-relates positively with employee retention.

Logic Model: Often used as a guide for program planning and evaluation – describes the flow of inputs to systems, interventions, outputs, as well as short and longer term impacts and outcomes, and other factors that will impact on programs achieving outcomes.
http://www.cdpac.ca/content/faqs/alliance_definitions.asp

Meta-analysis: The use of statistical methods to summarize the results of several independent studies, therefore providing more precise estimates of the effects of an intervention or phenomena of health care than those derived from the individual studies included in a review.

Nightingale Effect: The tendency for nurses to continue their assigned work or shift even though they may be physically or psycologically compromised has been termed the "Nightingale Effect".[43]

Nurses: Refers to Registered Nurses, Licensed Practical Nurses (referred to as Registered Practical Nurses in Ontario), Registered Psychiatric Nurses, nurses in advanced practice roles such as Nurse Practitioners and Clinical Nurse Specialists.

Organizational Climate: Social, organizational, or situational influence on behaviour, reflected in overall performance, policies and practices, and goals; the aspects perceived by individual organization members.

Organizational Culture: The underlying values, assumptions and beliefs in an organization. Encompasses both the informal and formal rules that govern the organization.[53]

Organization Practice Recommendations: Statements of conditions required for a practice setting that enable the successful implementation of the best practice guideline. The conditions for success are largely the responsibility of the organization, although they have implications for policy at a broader government or societal level.

Patient/Client: Refers to the recipient(s) of nursing services, including individuals (family member, guardian, substitute caregiver), families, groups, populations or entire communities. In education, the client may be a student; in administration, the client may be staff; and in research, the client is a study participant.

Physical Environment: The built environment, i.e. any aspect of the environment that is constructed by design experts, such as architects or designers. It is associated with the structure and processes of care and is believed to affect patient/client outcomes.[16]

Psychosocial (factors): Refers to all organizational factors and interpersonal relationships in the workplace that may impact health.[152]

Qualitative Research: Methods of data collection and analysis that are non-quantitative. Qualitative research uses a number of methodologies to obtain observation data or interview participants in order to understand their perspectives, world view or experiences.

Systematic Review: Application of a rigorous scientific approach to the preparation of a review article.[153] Systematic review establish where the effects of health care are consistent, and where research results can be applied across population, setting, and differences in treatment and where effects may vary significantly. The use of explicit, systematic methods in reviews limits bias (systematic errors) and reduces chance effects, thus providing more reliable results upon which to draw conclusion and make decisions.

Safety Climate: Shared perceptions of workers regarding the level of safety of their work environment – six dimensions that have been identified as part of the hospital safety climate:[16]

1. senior management support for safety programs
2. absence of workplace barriers to safe work practices
3. cleanliness and orderliness of the worksite
4. minimal conflict and good communication among stuff members
5. frequent safety related feedback/training by supervisors
6. availability of personal protective equipment and engineering controls

Social Supports: The transactions that occur within a person's social network that involve encouragement, sympathy, appreciation. Also, interactions with others in ways that support a person emotionally.

Workplace Health: Strategies, policies, programs and practices in the workplace that improve the total health of the individual (mental, physical and psychosocial).[154]

Workplace Health and Safety: As it relates to nursing, workplaces that promote "benefits, either in terms of employee health indicators or in terms of workplace performance and "bottom line" indicators.[113] Factors contributing to workplace health and safety include: a safe physical environment and initiatives to improve the mental health of employees.

Workplace Violence: Any act in which a person is abused, threatened, intimidated or assaulted in her/his employment. (Canadian Centre for Occupational Health and Safety http://www.ccohs.ca/oshanswers/psychosocial/violence.html - Retrieved December 15th, 2006)

Appendix B: Guideline Development Process

The Registered Nurses' Association of Ontario convened an expert panel of nurses chosen for their expertise in practice, research and academic sectors representing a wide range of nursing specialties, roles and practice settings.

The panel undertook the following steps in developing the Best Practice Guideline: The scope of the guideline was identified and defined through a process of discussion and consensus in a Scope and Purpose statement.

Focused research questions were developed to guide the literature review process:

- Search terms relevant to workplace health, safely and well-being of the nurse were sent to the Joanna Briggs Institute (JBI) to conduct a broad review of the literature
- The panel developed a framework to organize the concepts and content of the guideline
- The panel reviewed the JBI interim report
- Supplemental literature was sourced by the panel
- Review of findings from systematic review of literature from JBI
- Through a process of discussion and consensus preliminary recommendations were developed based on the evidence in the literature
- Drafts of the BPG were reviewed and revised by the expert panel
- The BPG was sent out for stakeholder review
- Sub-group of the expert panel reviewed and discussed all stakeholder feedback
- Recommendations and evidence finalized
- The expert panel reviewed and signed off the final document

Appendix C: Process for Systematic Review of the Literature on Workplace, Health, Safety and Well-Being of the Nurse complete by the Joanna Briggs Institute

1. **A review of the literature was undertaken using keywords associated with the broad topic of workplace health and safety, with three subtopics identified by the panel as relevant to the topic. These subtopics were equipment, supplies and resources; healthy living and illness; and safety and injury. The purpose of the preliminary review was to provide an overview of the literature published on the topic of health, wellness and safety concepts and to assist the expert panel in creating a focused review question. This search yielded literature and the references were categorized into more than 45 groups of similarity. The initial search included the following databases:**

   - CINAHL
   - Embase
   - Medline;
   - PsychInfo

2. **Expert panel members reviewed the initial search results and subsequently developed a more refined review question. The primary objective of the second review was to conduct a systematic review that identified the best available evidence on the relationship of organizational structures, processes and programs that support the health, wellness and safety of the nurse and healthy work environments. Specifically, the review sought to answer the questions:**

   I. What are the organizational programs and supports that promote/enhance the health, wellness and safety of nurses in their workplaces?

   II. What is the impact of health, wellness and safety focused environments for nurses on quality of outcomes for clients, nurses, organizations and systems?

   III. Search Terms identified included:
   - Critical incident debriefing for nurses
   - Health and safety management systems for nurses
   - Health and safety programs, primary, secondary and tertiary prevention of occupational illness
   - Health promotion in the workplace
   - Health promotion programs for health professionals
   - HR management practices and workplace safety
   - Managing workplace stress
   - Nurse abuse in the workplace (physical, emotional, verbal)
   - Occupational stress and workplace hazards for nurses
   - Organizational culture and nurses' health

- Orientation and safety training for nurses
- Safety for community health nurses
- Workplace ergonomics for nurses
- Workplace wellness programs

3. **The search strategy sought to find published and unpublished studies and papers, written in the English language. An initial limited search of MEDLINE and CINAHL was undertaken, followed by an analysis of the text words contained in the title and abstract, and of the index terms used to describe the article. A second-stage search using all identified keywords and index terms was then undertaken, using the search terms listed above.**

   Databases searched in the second stage included:

   - ABI/Inform
   - CINAHL (1994-2005)
   - Cochrane Library
   - Current Contents (2005)
   - Database of Abstracts of Reviews of Effectiveness (DARE)
   - Econ lit
   - Embase (1994-2005)
   - ERIC
   - GOOGLE
   - OVID Medline ® In-Process and Other Non-Indexed Citations and Ovid Medline ® (1994-2005)
   - PsycINFO (1994-2005)
   - PubMed
   - Sociological Abstracts
   - The search for unpublished studies included: Dissertation Abstracts International
     For a list of search terms, see above.

4. **Studies identified during the database search were assessed for relevance to the review based on the information in the title and abstract. All papers that appeared to meet the inclusion criteria were retrieved and again assessed for relevance to the review objective.**
5. **Identified studies that met inclusion criteria were grouped into type of study (e.g. experimental, descriptive).**

6. **Papers were assessed by two independent reviewers for methodological rigor prior to inclusion in the review, using an appropriate critical appraisal instrument from the SUMARI (System for the Unified Management, Assessment and Review of Information) package, software specifically designed to manage, appraise, analyze and synthesize data.**

   Disagreement between reviewers was resolved through discussion and, if necessary, with the involvement of another reviewer.

Results of Review

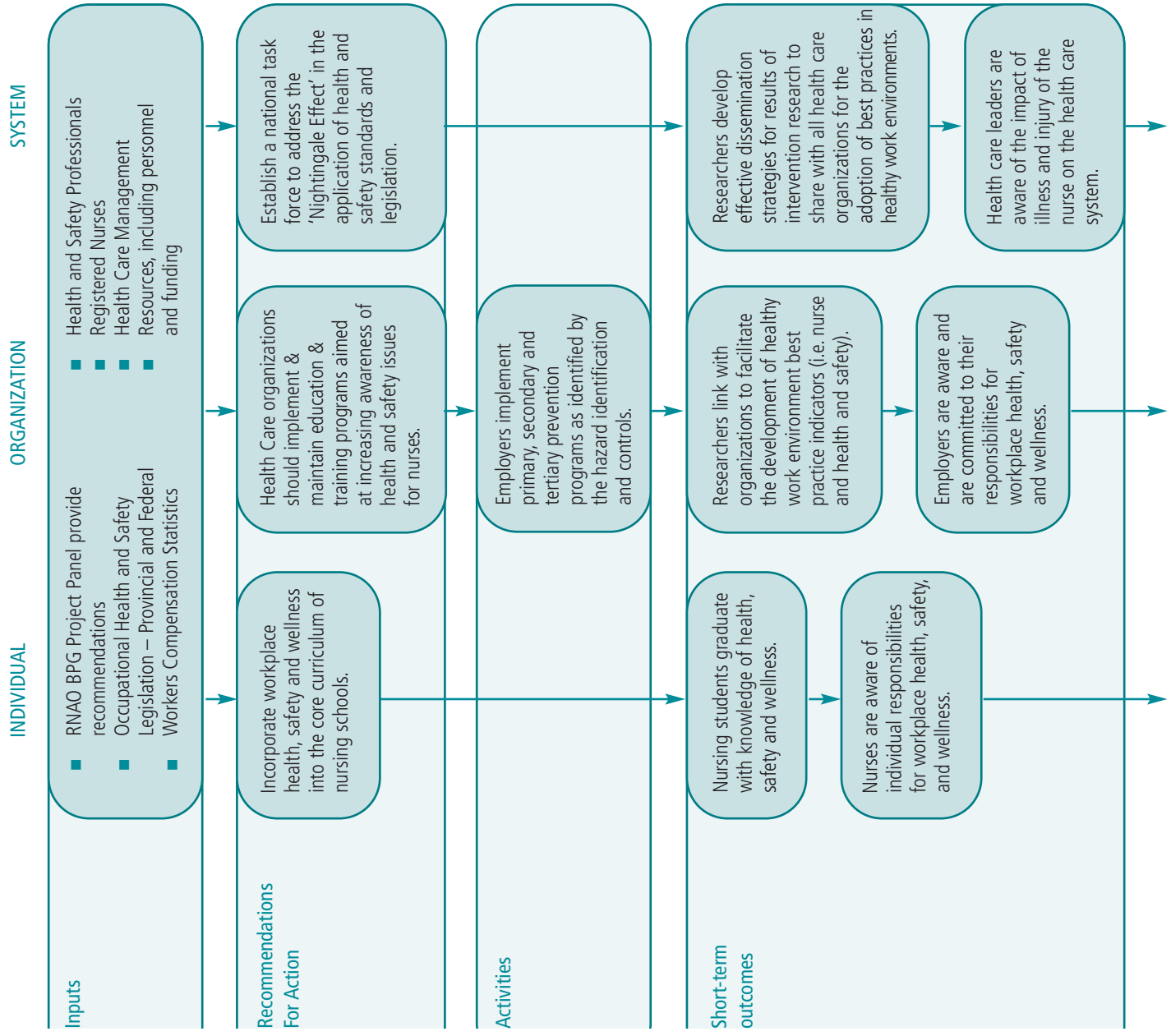
A total of 1,022 studies resulted from the search strategy. Of these, 146 were identified for retrieval and further evaluation. All retrieved papers were assessed for methodological quality and for inclusion or exclusion. A total of 108 studies were excluded due to incongruence to the review objectives, intervention and outcomes, or for poor methodological quality. The remaining 33 studies were deemed to meet the review criteria and were included for analysis.

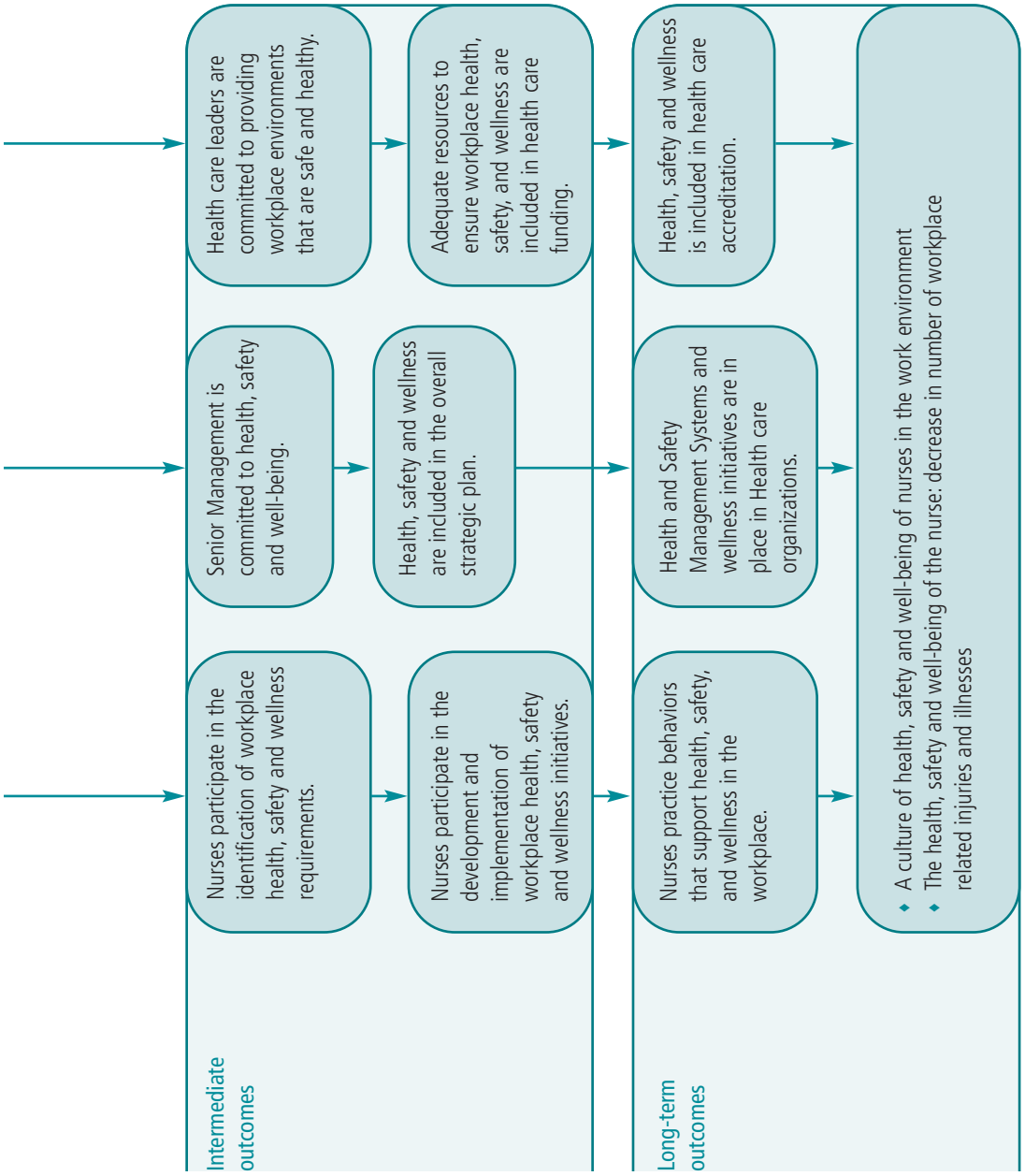
Additional Literature

The panel determined that the JBI review had excluded some major historical documents and reports pertinent to this guideline. Specific documents were reviewed by panel members and, if deemed to be a from a strong and reputable source (well-known researchers, policy papers etc.), were included as supporting evidence for these recommendations. Although these documents may not have met the JBI criteria, they were considered relevant background material for developing these guidelines.

Appendix D:

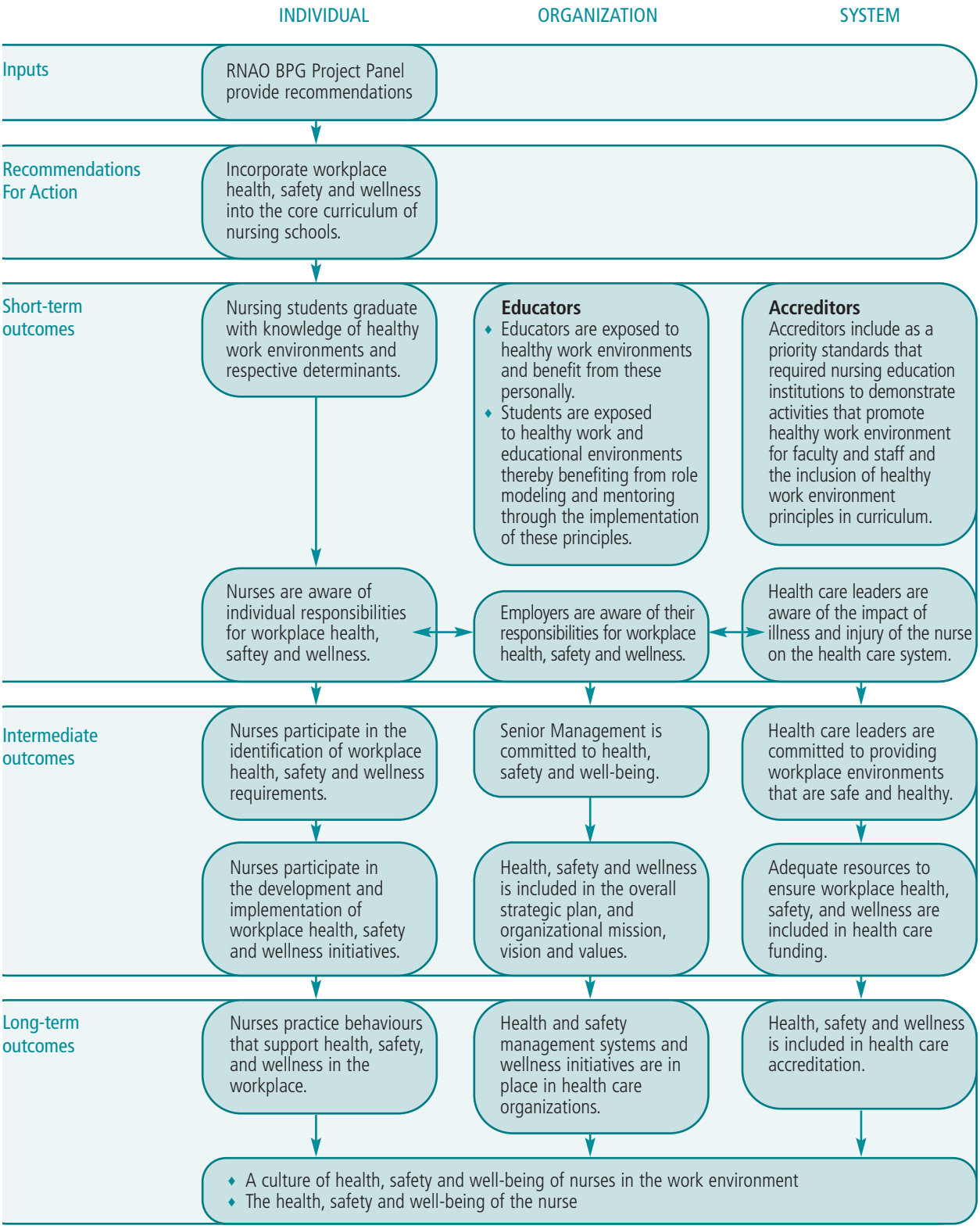
Logic Model[G] for the Workplace Health, Safety and Well-Being of the Nurse Guideline: Practice Enviroment Example




Intermediate outcomes
Nurses participate in the identification of workplace health, safety and wellness requirements.
Nurses participate in the development and implementation of workplace health, safety and wellness initiatives.
Senior Management is committed to health, safety and well-being.
Health, safety and wellness are included in the overall strategic plan.
Health care leaders are committed to providing workplace environments that are safe and healthy.
Adequate resources to ensure workplace health, safety, and wellness are included in health care funding.
Long-term outcomes
Nurses practice behaviors that support health, safety, and wellness in the workplace.
Health and Safety Management Systems and wellness initiatives are in place in Health care organizations.
Health, safety and wellness is included in health care accreditation.
A culture of health, safety and well-being of nurses in the work environment
The health, safety and well-being of the nurse: decrease in number of workplace related injuries and illnesses

Logic Model for the Workplace Health, Safety and Well-Being of the Nurse Guideline: Education Example

The Workplace Health, Safety and Well-being Model organizes and guides the discussion of the recommendations. It provides a model for understanding the leadership practices needed to achieve healthy work environments and the organizational supports and personal resources that enable effective leadership practices.



Appendix E: Supplemental Information for Occupational Health & Safety

Table of Contents

1. Introduction: Occupational Health and Safety Management Systems

The purpose of an Occupational Health and Safety Management System is to identify, assess and control workplace hazards. To be effective, the following components are essential:

- Identification and assessment of health and safety hazards at the work site
- control measures to eliminate or reduce the hazards
- clearly-stated company policy and management commitment
- worker competency and training
- an inspection program
- emergency response planning
- incident investigation
- program administration

Examples of Health and Safety Management Systems

Examples of Occupational Health and Safety Management Systems and some examples of analysis of their effectiveness include:

Canada

- Canadian Standards Association (CSA): CSA Z1000 Occupational Health and Safety Management System Standard: http://www.csa.ca/products/occupational/Default.asp?language=English
- Industrial Accident Prevention Association (IAPA) - Management Systems, Occupational Health and Safety: The Road Ahead http://www.iapa.ca/pdf/OHS%20Management%20Systems%20The%20Road%20Ahead%20July%207%202004.pdf or see free downloads at: http://www.iapa.ca/resources/resources_downloads.asp
- Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST) - Analysis of the Benefits and Costs of In-House Occupational Health and Safety: (Phase 1) Development of an Analysis Tool: http://www.irsst.qc.ca/en/_projet_3024.html
- Institute for Work and Health (IWH) - The Effectiveness of Occupational Health and Safety Management Systems: A Systematic Review: http://www.iwh.on.ca/products/ohsms.php
- Government of Alberta: Partnerships in Health and Safety: Health and Safety Management System: www.worksafely.org

United States

- American National Standards Institute (ANSI): ANSI/AIHA Z10–2005 American National Standard - Occupational Health and Safety Management Systems: http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI%2FAIHA+Z10%2D2005&source=front_page
- US Department of Health: Occupational Safety and Health Administration (OSHA) - Safety and Health Management Systems: http://www.osha.gov/SLTC/etools/safetyhealth/index.html

International:

- **ILO-OSH 2001** guidelines for safety management systems – provides a unique international model, compatible with other management system standards and guides. It is not legally binding and not intended to replace national laws, regulations and accepted standards. The ILO guidelines encourage integrating OSH management systems with other management systems and state that OSH should be an integral part of business management. www.ilo.org/public/english/protection/safework/managmnt/guide.htm
- Australian Safety and Compensation Council (ASCC) - Health and Safety Management Systems - An Analysis of System Types and Effectiveness: http://www.ascc.gov.au/ascc/HealthSafety/ManagingHealthSafety/OHSbestPractice/HealthSafetyResearchReport/

Framework of Occupational Health Programs Based on Level of Prevention

Assessment

Employee and Community Demographic Data	Health Benefits and Usage	Workers Compensation Board and Disability Claims	Regulations/Acts	Environmental Exposure Workplace Assessment

Risk Appraisal

- Employee and Departments at Risk for Injury/illness
- Health & Safe Work Enviroment
- Healthy, Productive Employees
- Protection from Liability Cost Management

Planning/Intervention

Primary Prevention

HEALTH PROMOTION

- Physical fitness/exercise
- Weight management
- Coping enhancement
- Family policy (parental leave, child care, etc.)
- Parenting skills (EAP)
- Retirement planning (EAP)

PROTECTION

- Injury prevention (safety)
  - Enviroment surveillance
  - Accident investigation
  - Safe driving & use of seat belts
  - Ergonomic analysis of work station
  - Hazard awarness education
- Disease Prevention
- Health risk appraisal
- Health education
  - Smoking cessation
  - Weight control
  - Nutrition
  - Stress management (EAP)
- Risk factor screening

Secondary Prevention

EARLY DIAGNOSTIC AND TREATMENT

- Health surveillance
  - Biological monitoring
- Disease detection (screening)
- Treatment of acute/chronic illness and injury
- Alcohol and drug treatment interventions
- Pre-placement, annual and termination examinations
- Triage systems
- Accident reporting

Tertiary Prevention

DISABILITY MANAGMENT AND REHABILITATION

- Chronic illness management
  - Medical case managment
  - Disability case managment
- Workers compensation managment
- Early return to work
  - modified duty
  - work hardening
  - on-site therapy

Evaluation

- Measurment of value
- Health/Safety outcomes
- Cost/Savings

2. Occupational Health and Safety Legislation

In Canada, both employers and workers have responsibilities for health and safety at the work site. These responsibilities are covered under either Provincial (Occupational Health and Safety Acts) or Federal (Canada Labour Code) legislation.

Employer and Employee Responsibilities

Are there any similarities in occupational health and safety (COH&S) legislation across Canada?
Many basic elements (e.g. rights and responsibilities of workers, responsibilities of employers, supervisors, etc.) are similar in all the jurisdictions across Canada. However, the details of the OH&S legislation and how the laws are enforced vary from one jurisdiction to another. In addition, provisions in the regulations may be "mandatory", "discretionary" or "as directed by the Minister". For more details on legislation for your province or territory, see pages 85-86.

What are the general responsibilities of governments?
General responsibilities of governments for occupational health and safety include:
- enforcement of occupational health and safety legislation
- workplace inspections
- investigation of serious incidents and fatalities
- dissemination of information
- promotion of training, education and research

What are the employer's responsibilities?
An employer must:
- take every reasonable precaution to ensure the workplace is safe
- train employees about any potential hazards and in how to safely use, handle, store and dispose of hazardous substances and how to handle emergencies
- ensure that personal protective equipment is used where required and that workers know how to use the equipment safely and properly
- immediately report serious injuries or fatalities to the government department responsible for OH&S – as required by the specific legislation

What are the worker's responsibilities?
Worker responsibilities include:
- to work in compliance with OH&S acts, codes and regulations
- to use personal protective equipment and clothing as directed by the employer
- to report workplace hazards and dangers
- to work in a manner as required by the employer and use the prescribed safety equipment

Federal

Canada Labour Code Part 2: Occupational Health and Safety
http://laws.justice.gc.ca/en/l-2/17632.html

Canada Occupational Health and Safety Regulations
http://laws.justice.gc.ca/en/L-2/SOR-86-304/index.html

Provincial and Territorial

Alberta

Alberta Employment, Immigration and Industry, Workplace Health and Safety
http://www.worksafely.org

British Columbia

Workers Compensation Board of British Columbia, Health and Safety Centre
http://regulation.healthandsafetycentre.org/s/Home.asp

Manitoba

Manitoba Labour and Immigration, Workplace Safety and Health Division
http://www.gov.mb.ca/labour/safety/actreg.html

New Brunswick

Workplace Health, Safety and Compensation Commission (WHSCC)
http://www.whscc.nb.ca/legcntleg_e.asp

Newfoundland and Labrador

Department of Government Services, Occupational Health and Safety Branch
http://www.gov.nl.ca/gs/ohs/legislation.stm

Northwest Territories

Government of Canada, Northwest Territories, Occupational Health and Safety
http://bsa.cbsc.org/gol/bsa/site.nsf/en/su07102.html

Nova Scotia

Nova Scotia Environment and Labour, Occupational Health and Safety Division
http://www.gov.ns.ca/enla/employmentworkplaces/

Nunavut

Department of Human Resources, Government of Nunavut
http://www.hr.gov.nt.ca:80/workplace/

Ontario
Ministry of Labour, Government of Ontario
http://www.labour.gov.on.ca/english/hs/index.html

Prince Edward Island
Workers Compensation Board
http://www.wcb.pe.ca/index.php3?number=60189&PHPSESSID=532c45c4fbc9db0040d9768548115cae

Quebec
Commission de la santé et de la sécurité du travail (CSST)
French: http://www.csst.qc.ca/portail/fr/
English: http://www.csst.qc.ca/portail/en/

Saskatchewan
Department of Labour, Government of Saskatchewan
http://www.labour.gov.sk.ca/safety/INDEX.HTM

Yukon
The Yukon Workers' Compensation Health and Safety Board
http://www.wcb.yk.ca/Introduction.109.0.html

Workers' Compensation Legislation
Most workers are covered under provincial or territorial workers' compensation legislation if they are injured or ill at work. A listing of all provincial and territorial Workers' Compensation Boards is available at the Government of Canada website at:
http://www.hrsdc.gc.ca/asp/gateway.asp?hr=en/lp/lo/fwcs/boards.shtml&hs=fxf

Information of Canadian Workers' Compensation Boards is also available on the Association of Workers' Compensation Boards of Canada at: http://www.awcbc.org/

3. Occupational Health and Safety Resources: General

A variety of Occupational Health and Safety information is available at local, provincial, national and international levels. This section provides resources at each of these levels. It is important to note that you be knowledgeable about the legislation specific to your own jurisdiction, and take this into consideration when reviewing health and safety information from other provinces or countries. Below are links to key sites that provide extensive information on a variety of occupational health and safety topics and issues.

Canada

National

- Canadian Centre for Occupational Health and Safety (CCOHS): http://www.ccohs.ca/
- Canadian Institute for Health Information (CIHI): http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=home_e
- Canada Safety Council (CSC): http://www.safety-council.org/
- CanOsh: Canada's National Occupational Health and Safety Website (CanOSH): www.canoshweb.org/en/
- Community and Hospital Infection Control Association (CHICA): http://www.chica.org/
- Health Canada (HC): http://www.hc-sc.gc.ca/index_e.html
- Public Health Agency of Canada: http://www.phac-aspc.gc.ca/new_e.html

Provincial

Each provincial government department provides a variety of publications and tools on their website.

Alberta

- Worksafe Alberta (Workplace Health and Safety, Information Sharing Network): www.worksafely.org

British Columbia

- Occupational Health and Safety Agency for Healthcare in British Columbia (OHSAH): www.ohsah.bc.ca/
- WorkSafeBC: Health Care: www.worksafebc.com
  - http://healthcare.healthandsafetycentre.org/s/Home.asp

Ontario

- Institute for Work and Health (IWH): http://www.iwh.on.ca/
- Industrial Accident Prevention Association (IAPA): www.iapa.ca/home/home.asp
- Ontario Ministry of Labour: Health and Safety: www.labour.gov.on.ca/english/hs/index.html
- Ontario Safety Association for Community & Healthcare (OSACH): www.osach.ca
- Workplace Safety and Insurance Board of Ontario: Prevention: www.wsib.on.ca/wsib/wsibsite.nsf/public/Prevention

Quebec

- Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST) – http://www.irsst.qc.ca/en/home.html

International

USA

- American Industrial Hygiene Association (AIHA): http://www.aiha.org/Content
- American Nurses Association (ANA): Occupational Health and Safety information for nurses: http://www.nursingworld.org/coeh/
- Centers for Disease Control and Prevention (CDC): www.cdc.gov/
- Department of Health and Human Services (DHHS): www.hhs.gov
- Hospitals for a Healthy Environment (H2E): www.h2e-online.org
- National Institute for Occupational Health and Safety (NIOSH): www.cdc.gov/niosh/homepage.html
  - Health Care Workers: www.cdc.gov/niosh/topics/healthcare/
- Occupational Health and Safety Administration (OSHA): www.osha.gov/
  - OSHA: Health Care: www.osha.gov/SLTC/healthcarefacilities/index.html
- Occupational Health and Safety Resources on the Internet (Health and Safety at Some US Non-Profit Organizations): www.steelynx.net/safety.html

Other

- Australia: Queensland Government: Workplace Health and Safety: www.whs.qld.gov.au/
- Australian Government: National Occupational Health and Safety Commission: www.ascc.gov.au/
- European Agency for Safety and Health at Work: http://europe.osha.eu.int/systems
- European Network for Workplace Health Promotion: www.enwhp.org
- Government of New Zealand, Department of Labour - Occupational Health and Safety: www.osh.dol.govt.nz/index.htm
- Health and Safety Executive (United Kingdom): www.hse.gov.uk
- International Labour Organization (ILO): www.ilo.org/
- World Health Organization (WHO): www.who.int/en/

4. Occupational Health and Safety Resources by Topic

As each workplace is unique, there is no way to predict all of the possible hazards that may be encountered. This summary of resources is organized according to some of the major workplace hazards.

Ability Management: Fitness for Work, Return to Work Program & Disability Management

- Developing and Implementing a Comprehensive Return to Work Program: Occupational Health and Safety Agency for Healthcare in BC. (OHSAH) www.ohsah.bc.ca/
- Fit to Work (CCOHS): http://www.ccohs.ca/oshanswers/psychosocial/fit_to_work.html
- Prevention & Early Active Return-to-Work-Safely: Occupational Health and Safety Agency for Healthcare in BC. (OHSAH): http://www.ohsah.bc.ca/EN/433/

Biological Hazards

- Canadian Centre for Occupational Health and Safety (CCOHS) www.ccohs.ca/oshanswers
- Centers for Disease Control and Prevention (CDC) (USA): www.cdc.gov/nchstp/tb/default.htm
- Occupational Health and Safety Agency for Healthcare in BC. (OHSAH) Protecting Healthcare Workers from Infectious Diseases: A Self Audit-tool - www.ohsah.bc.ca/
- Occupational Safety and Health Administration (USA): HealthCare Wide Hazards Module - Bloodborne Pathogens www.osha.gov/SLTC/etools/hospital/hazards/bbp/bbp.html
- Public Health Agency of Canada: www.phac-aspc.gc.ca

Bioterrorism

- Canadian Centre for Occupational Health and Safety (CCOHS) www.ccohs.ca/oshanswers/diseases/latex.html
- Occupational Safety and Health Administration (USA) www.osha.gov/SLTC/bioterrorism/index.html

Chemical Hazards

Centers for Disease Control (CDC)

- Glutaraldehyde: Occupational Hazards in Hospitals Centers for Disease Control and Prevention (USA) www.cdc.gov/niosh/2001-115.html
- Preventing Occupational Exposure to Antineoplastic and Other Hazardous Drugs in Health Care Settings Centers for Disease Control and Prevention www.cdc.gov/niosh/docs/2004-165/

Occupational Health and Safety Agency for Healthcare in BC. (OHSAH)

- Common Chemical Hazards ~ Chemicals You Should Be Aware Of Occupational Health and Safety Agency for Healthcare in BC. (OHSAH) www.ohsah.bc.ca/index.php?section_id=25177&
- Latex in Healthcare: A Guide to Latex Sensitivity and the Latex Database Occupational Health and Safety Agency for Healthcare in BC. (OHSAH) www.ohsah.bc.ca/505/219/\

Occupational Safety and Health Administration (OHSA) (USA)

- Anesthetic Gases: Guidelines For Workplace Exposures Occupational Safety and Health Administration (USA) www.osha.gov/dts/osta/anestheticgases/index.html
- Hospital eTool - HealthCare Wide Hazards Module
  Latex Allergy Occupational Safety and Health Administration (USA) OSHA
  www.osha.gov/SLTC/etools/hospital/hazards/latex/latex.html
- Hospital eTool - HealthCare Wide Hazards Module Mercury Occupational Safety and Health Administration (USA) OSHA www.osha.gov/SLTC/etools/hospital/hazards/mercury/mercury.html
- Occupational Safety and Health Guideline for Ethyl Chloride
  www.osha.gov/SLTC/healthguidelines/ethylchloride/recognition.html

Workplace Hazardous Materials Information System (WHMIS)

- Canadian Centre for Occupational Health & Safety (CCOHS):
  - WHMIS: www.ccohs.ca/oshanswers/legisl/intro_whmis.html
  - WHMIS for Workers Course: www.ccohs.ca/headlines/text144.html
  - WHMIS Classification Search: http://ccinfoweb.ccohs.ca/whmis/search.html
- Developing a WHMIS Program Occupational Health and Safety Agency for Healthcare in British Columbia (OHSAH): www.ohsah.bc.ca/
- Health Canada - Workplace Hazardous Materials Information System - Official National Site:
  www.hc-sc.gc.ca/hecs-sesc/whmis/reference_manual.htm

Emergency Planning and Response

- Canadian Centre for Emergency Preparedness: http://ccep.ca/
- CCOHS Emergency Planning: www.ccohs.ca/oshanswers/hsprograms/planning.html
- Emergency Measures Organizations (Canada): ccep.ca/ccepcat01.html
- Occupational Health and Safety Agency for Healthcare in British Columbia (OHSAH) - Health and Safety in Emergency Management: A Guide for the Protection of Community and Health Care Staff: www.ohsah.bc.ca/
- Public Safety and Emergency Preparedness Canada: www.psepc.gc.ca/

Hazard Identification and Control

- Alberta Government: Workplace Health and Safety eLearning program - Hazard Identification and Control: www.worksafely.org
- Canadian Centre for Occupational Health and Safety (CCOHS): www.ccohs.ca/oshanswers/hsprograms/report.html
- Human Resources and Skills Development Canada (HRSDC) - Job Safety Analysis Made Simple: www.hrsdc.gc.ca/asp/gateway.asp?hr=/en/lp/lo/ohs/publications/job-safety.shtml&hs=oxs

Incident Investigation

- Alberta Government, Workplace Health and Safety eLearning program: Incident Investigation: www.worksafely.org
- Canadian Centre for Occupational Health and Safety (CCOHS) - Accident Investigation: www.ccohs.ca/oshanswers/hsprograms/investig.html
- Occupational Health and Safety Agency for Healthcare in British Columbia (OHSAH) - Accident Investigation: www.ohsah.bc.ca/

Lasers

- Control of Smoke From Laser/Electric Surgical Procedures Centers for Disease Control and Prevention (USA): www.cdc.gov/niosh/hc11.html
- Lasers - Health Care Facilities Canadian Centre for Occupational Health and Safety www.ccohs.ca/oshanswers/phys_agents/lasers.html
- Occupational Safety and Health Agency (USA) OSHA: www.osha.gov/SLTC/laserelectrosurgeryplume/index.html

Personal Protective Equipment (PPE)

- CCOHS: PPE specific information: www.ccohs.ca/oshanswers/prevention/ppe/
- Designing an Effective PPE Program - Canadian Centre for Occupational Health and Safety (CCOHS): www.ccohs.ca/oshanswers/prevention/ppe/designin.html
- Respiratory Protection - Ontario Safety Association for Community and Healthcare (OSACH) www.osach.ca

Program Evaluation

- Evaluating the Effectiveness of Strategies for Preventing Work Injuries DHHS (National Institute for Occupational Safety and Health (USA) NIOSH) Publication No. 2991-119: www.cdc.gov/niosh and the Institute for Work and Health Research www.iwh.on.ca
- Occupational Injury Indicators: Sectoral and occupational analysis, 1996 - The Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST) www.irsst.qc.ca/en/_projet_2422.html

Working Alone

- Alberta Government, Workplace Health and Safety: Working Alone Safely: A Guide for Employers and Employees: www.worksafely.org Publications
- Canadian Centre for Occupational Health and Safety (CCOHS) Working Alone: General: www.ccohs.ca/oshanswers/hsprograms/workingalone.html
- Occupational Health and Safety Agency for Healthcare in British Columbia (OHSAH) - Working Alone / In the Community (includes guidelines for dealing with angry clients, anxious clients and depresses client in crisis) www.ohsah.bc.ca/index.php?section_id=25159&

Workplace Harassment and Workplace Violence

- Alberta Government, Workplace Health and Safety: Preventing Violence and Harassment at the Workplace: www.worksafely.org - Publications
- Canadian Centre for Occupational Health and Safety (CCOHS): Violence in the Workplace: www.ccohs.ca/oshanswers/psychosocial/violence.html
- Occupational Health and Safety Agency for Healthcare in BC. (OHSAH): Violence Prevention Policy and Procedure: www.ohsah.bc.ca/index.php?section_id=25210&
- Quebec: The Commission des normes du travail: Psychological Harassment at Work: www.cnt.gouv.qc.ca/en/recours/harcelement.asp
- WorkSafe BC: Take Care: How to Develop and Implement a Workplace Violence Prevention Program: www.worksafebc.com/publications/

Workplace Inspections

CCOHS Effective Workplace Inspections: www.ccohs.ca/oshanswers/prevention/effectiv.html

5. Occupational Health and Safety Resources: Workplace Wellness/Health Promotion

The following are resources that may assist in the development and implementation of a workplace wellness program.

Canada

- Le Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST)Canadian Health Network (CHN): www.canadian-health-network.ca/
- National Quality Institute – Healthy Workplaces: www.nqi.ca

International

- American Journal of Health Promotion: www.healthpromotionjournal.com/
- Occupational and Environmental Medicine: Health and Productivity in the Workplace: www.acoem.org/health_productivity/default.asp
- US: Wellness Councils of America (WELCOA): www.welcoa.org/

6. Occupational Health and Safety Professionals

Overview: Occupational Health Nurses

Occupational Health Nursing is a recognized specialty practice under the Canadian Nurses Association (CNA). It is defined by the American Association of Occupational Health Nurses (AAOHN) as "the specialty practice providing for and delivering cost-effective health and safety services to employees and employee population. The practice is autonomous and focuses on the promotion and restoration of health, prevention of illness and injury, and the protection from occupational health and safety hazards within the context of a safe and healthy work environment".[156]

This section provides information on some of the OHS professionals who can assist and advise for Occupational Health and Safety Management Systems implementation.

Functions of Occupational Health Nurses

Occupational health nurses provide a variety of services and functions in their practice including:

- health promotion and injury/illness prevention
- health surveillance for those worker who may be exposed to health hazards (i.e. audiometric testing for noise exposed workers; blood lead levels for lead exposed workers)
- health monitoring for workers who have health conditions that may impact on their ability to do their jobs safely, or where workplace exposures may have a detrimental effect on their health
- pre-placement health assessments to match fitness for work with bona fide occupational requirements such as job demands
- primary care and case management for ill or injured workers
- counselling
- referral to Employee Assistance Programs
- management and administration
- research
- worker education
- job hazard analysis and control of hazards
- ergonomic assessments, and
- a variety of other services

Resources for occupational health nurses in Canada include:

- Canadian Nurses Association (CNA) for information on certification for occupational health nurses: www.cna-nurses.ca/CNA
- Canadian Occupational Health Nurses Association (COHNA/ACIIST): www.cohna-aciist.ca
  - Each province (except Prince Edward Island, Yukon, Nunavut and the Northwest Territories) has a provincial occupational health nurses association with representation of the COHNA Board.
- World Health Organization: The Role of the Occupational Health Nurse in Workplace Health Management - WHO Regional Office for Europe
  www.who.int/occupational_health/regions/en/oeheurnursing.pdf

Occupational Health Physicians

Overview

Occupational health physicians are medical doctors who have specialized in the field of occupational medicine. They deal specifically with worker health to diagnose and treat occupational injuries, illnesses and diseases that may stem from workplace exposures.

Resources for occupational health physicians include:

Canada

- Occupational and Environmental Association of Canada (OEMAC) http://www.oemac.org/

United States

- ACOEM - American College of Occupational and Environmental Medicine www.acoem.org

Occupational Hygienists

Overview

Occupational Hygienist are professionals dedicated to the Anticipation, Recognition, Evaluation, Communication and Control of environmental stressors in, or arising from, the work place that may result in injury, illness, impairment, or affect the well-being of workers and members of the community. These stressors are normally divided into the categories biological, chemical, physical, ergonomic and psychosocial. Occupational hygienists have a baccaluaureate degree in engineering, chemistry, or physics or closely related biological or physical science, or a Masters degree in Occupation Hygiene. Occupational hygienists can pursue a professional designation as a Registered Occupational Hygienist (ROH) (Canadian designation) and /or Certified Industrial Hygienist (CIH) (American designation) when they meet the required criteria of education and work experience.

Functions

- To recognize all loss exposures
- To evaluate these exposures
- To develop plans for controlling the exposures
- To implement these plans
- To monitors the program's effectiveness.

Resources for occupational hygienists in Canada include:

- Canadian Registration Board of Occupational Hygienists (CRBOH): www.crboh.ca/page.cfm?onumber=1

Safety Professionals

Overview

Safety professionals may have education, training and experience in a variety of areas including: industrial hygiene and toxicology, design of engineering hazard controls, fire protection, ergonomics, system and process safety, safety and health program management, incident investigation and analysis, product safety, construction safety, education and training methods, measurement of safety performance, human behaviour, environmental safety and health, and safety, health and environmental laws, regulations and standards.

Functions of a Safety Professional

The major areas relating to the protection of people, property and the environment are:

- Anticipate, identify and evaluate hazardous conditions and practices.
- Develop hazard control designs, methods, procedures and programs.
- Implement, administer and advise others on hazard control programs.
- Measure, audit and evaluate the effectiveness of hazard control programs.

Resources for safety professionals include:

Canada

- Board of Canadian Registered Safety Professionals: www.acrsp.ca/
- Canadian Society of Safety Engineering (CSSE): www.csse.org/

United States

- American Society of Safety Engineers: www.asse.org/index.html

Ergonomists

Overview

An ergonomist is a professional who "applies theory, principles, data and methods to… optimize human well-being and overall system performance".[157] These professionals have diverse educational backgrounds, however all have an interest in and work to improving work situations by addressing the "physical, cognitive, social, organizational, environmental and other relevant factors" in the workplace.[157]

Resources for ergonomists in Canada include:

- Association of Canadian Ergonomists: www.ace.ergonomist.ca/

International OHS Professional Associations

- Australian College of Occupational Health Nurses (ACOHN) www.acohn.com.au/
- Institution of Occupational Safety and Health (IOSH): www.iosh.org
- International Health Care Worker Safety Center www.healthsystem.virginia.edu/internet/epinet/
- International Network of Safety and Health Practitioner Organizations (INSHPO) www.inshpo.org
- Safety Institute of Australia (SIA): www.sia.org.au

Notes:

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Registered Nurses' Association of Ontario
L'Association des infirmières et infirmiers autorisés de l'Ontario
NURSING BEST PRACTICE GUIDELINES PROGRAM

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