

Occupational Health and Safety Management Programme for Nurses



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Occupational Health and Safety Management Programme for Nurses

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> for the International Council of Nurses

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CONTRIBUTOR BIOGRAPHY	4
Introduction	5
OCCUPATIONAL HAZARDS AND THEIR IMPACT ON NURSES AND THEIR PATIENTS	7
Framework for an Occupational Health and Safety Management Programme	12
THE RIGHTS AND RESPONSIBILITIES FOR HEALTH AND SAFETY	23
Compensating the nurse injured at work	28
Conclusion	30
References	32
Annex A – ILO list of occupational diseases	38
Annex B - A case example – The safe care project	43
ANNEX C ICN POSITION STATEMENT ON OCCUPATIONAL HEALTH AND SAFETY FOR NURSES	4 7

CONTRIBUTOR BIOGRAPHY

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INTRODUCTION

Nurses are falling ill, incurring workplace injuries, and suffering disabilities from exposure to workplace hazards. As a result, the global community is losing critical members of the health care team, compounding the already existing nurse staffing crisis and adversely affecting the health and well-being of the world's population. This needless attrition seriously impairs the fulfilment of the United Nations' Millennium Development Goals. As well, it adversely affects the world health community's ability to meet primary healthy care needs as defined in the 1978 WHO/UNICEF Alma Ata Declaration (WHO 1978).

The International Labour Organization (ILO) acknowledged the need for safe and healthy workplaces for nurses 30 years ago (ILO Convention 157 and accompanying Recommendation 147, 1977). World Health Assemblies (WHA) since 1979 have stressed the value of nurses to the world community and addressed the need to strengthen nursing and midwifery services, including providing nurses with safe healthful work environments (WHA 36.11, 42.27, 45.5, 49.12 and 54.12). International, national and local organisations and many government entities have implemented policies and regulations to protect nurses.

Yet, despite the evidence of broad support for health and safety programmes, nurses worldwide continue to be exposed to serious and preventable work place hazards. Many communities fail to implement the ILO policy to "improve existing laws and regulations on occupational safety and health by adapting them to the special nature of nursing work and of the environment in which it is carried out" (ILO 1977). Many health care employers claim they cannot afford health and safety programmes, personal protective equipment or safer needle technology.

The International Council of Nurses (ICN) believes these claims are short-sighted and inaccurate. ICN believes

the expense lies not in protecting nurses but in losing them. The lack of workplace health and safety programmes in the health care environment can no longer be ignored in the face of mounting health care needs and a critical shortage of nurses in active practice.

ICN promotes safe working environments as an approach to strengthen nursing practice and enhance the quality of care provided. We believe governments, communities, national nursing associations (NNA), health care employers, and nurses must work together to develop a strong, consistent and comprehensive culture of health and safety in the health care sector.

ICN guidelines on strong and sustainable health and safety programmes for nurses

- 1. Discuss the impact of unhealthy and unsafe working environments on nurses and their patients throughout the world.
- Present a systematic hazard management approach to protect nurses in the workplace using a broad-based framework for an occupational health and safety management programme.
- 3. Define the rights and responsibilities of various levels of nursing in relationship to occupational health and safety, including direct care givers, independent practitioners or salaried direct care nurses, nurse managers, employers, national nursing associations, and the community.
- Explore issues of compensating nurses who are injured or become ill from exposure to workplace hazards.

While the focus is on nurses' work environment, the impact of strong health and safety programmes will naturally be felt throughout the health system, by patients as well as by health personnel and employers.

OCCUPATIONAL HAZARDS AND THEIR IMPACT

ON NURSES AND THEIR PATIENTS

OCCUPATIONAL HAZARDS AND THEIR IMPACT ON NURSES AND THEIR PATIENTS

Nursing contributions to global health

Nurses are the principal group of health care personnel providing primary health care at all levels and maintaining links between individuals, families, communities and the rest of the health care system. Working with other members of the health care team and other sectors or on their own, nurses explore new and better ways of keeping well, or improving health and preventing disease and disability. Nurses improve equity and access to health care and add quality to outcome of care.

ICN Position Statement, Nursing and Primary Care, 2000

Nurses are the backbone of world health. They work in diverse settings, such as, hospitals, nursing homes, doctors' offices, clinics, patient homes, with the homeless and in refugee camps, day care centres, nurseries, schools and industry. They work in rural areas and in cities.

Nurses deliver a wide assortment of services to patients and their communities from administering immunisations, providing the first line of care, and teaching patients how to care for themselves – to advocating for better community health and lobbying governments for sustainable health policies. In short, nurses not only provide direct patient care, they are also key in preventing injuries and illness that require hospitalization and medical intervention.

"Nurses are vital. The UN Millennium Development Goals (MDG) could not be met without them. Nurses and midwifery services are a vital resource for attaining health and development targets.

ON NURSES AND THEIR PATIENTS

If we are to succeed in improving health systems performance, urgent action is needed to overcome the problems that seriously undermine the contribution these services can make to the vision of better health to all communities."

Dr Gro Harlem Bruntland, former Director General of WHO, WHO 2002 Group Nursing and Midwifery Group Report Strategic Direction for Nursing and Midwifery: 2002-2008, p.vii.

MDG 1: Eradicate extreme poverty and hunger – Nurses understand the connection between poverty, disease and mortality. They serve the poor from refugees in camps in Somalia to homeless people on the streets in Toronto, Canada.

MDG 3: Promote gender equality and empower women – Nurses serve the girls and women of the world teaching the importance of health care, clean water and nutrition.

MDG 4: Reduce child mortality – Nurses understand that children are our future. They immunize children worldwide and teach their parents the value of sanitation and hygiene and the importance of early treatment for diarrhoea.

MDG 5: Improve maternal health – Nurses work with pregnant teens teaching them how to take care of themselves during their pregnancy and after the birth of the infant. Nurse midwives worldwide provide a clean, safe childbirth experience for thousands of women a day.

MDG 6: Combat HIV/AIDS, malaria and other diseases

– Nurses are the care givers of the world, providing care in a myriad of settings from work in TB clinics delivering DOTS therapy in the United States to serving the isolated South African AIDS patients, walking kilometres each day. They are the beating heart of health care, not only providing the physical

OCCUPATIONAL HAZARDS AND THEIR IMPACT

ON NURSES AND THEIR PATIENTS

treatment but also giving the emotional support –holding the patient's hand, ensuring the families understand the illness and care. Nurses offer the human element to health care.

The impact of unsafe and unhealthy working conditions on nurses

Although nurses are essential to the health of the world's population, they, themselves, are often put in physical jeopardy. Globally, nurses are exposed each day to a variety of health and safety hazards, including:

- Biological, e.g. diseases such as TB, HIV/AIDS, SARS;
- Ergonomic, e.g. heavy lifting;
- Psychosocial, e.g. violence and stress;
- Chemical, e.g. gluteraldehyde, ethylene oxide; and
- Physical, e.g. radiation, slips, trips and falls.

Working in health care has become hazardous. In 2003, health care workers in the United States suffered more lost time due to injuries and illnesses than construction workers and non-construction labourers (USDoL 2003). In 1997, in Sweden and Germany, the number of reports of occupational disease or work-related disorders among health care workers exceeded the national average – 4 per 1000 as compared to 3 per 1000. The most commonly reported were skin disease and strain on the musculoskeletal system (Hasselhorn, Toomingas and Lagerstrom 1999, p.2).

Exposure to biological hazards, such as HIV, Hepatitis B and C, is estimated to have a serious impact on nursing. Although injury and illness data on nurses in developing countries are not fully available, some information on needlesticks and bloodborne pathogen infections has been obtained. In countries where the prevalence of HIV is the highest in the world, nurses suffer an average of two to four needlestick injuries per year, thereby increa-

ON NURSES AND THEIR PATIENTS

sing their chances of contracting HIV, Hepatitis B or C. A study of health care workers in three Indian hospitals reported that 60% of the 100 respondents (35 of whom were nurses) confirmed that contact with blood, and without the benefit of personal protective equipment, occurred from "many times" to "always" in each week. Nine of the 35 nurses said that injuries from sharp-edged instruments or broken glassware, without personal protective equipment, were an every day occurrence (PRIA 2005).

The burden of disease from these exposures is still being investigated. The results of one study (using a probability model to estimate the global burden of disease from sharps injuries) demonstrated that, in some regions of Africa and Asia, close to half of all Hepatitis B and C infection among nurses are attributable to contaminated sharps injuries. In the same study, in developed regions where needle stick injury prevention efforts have been implemented, 8% of Hepatitis C and less than 10% of Hepatitis B are attributed to contaminated sharps injuries. This underscores the value of prevention programmes in the health care sector (Priuis-Utin, Rapiti and Hutin 2003).

In addition to biological hazards, musculoskeletal disorders (MSD) related to the physical nature of nursing – lifting and patient handling – continues to cause high rates of morbidity in nurses and significant loss of work time. A 1990 epidemiological analysis of compensation claims in England, Denmark, the United States and Israel showed that nurses were 5.1 times more likely than cashiers to have a back-related compensation claim (Harber 1990). A study of nurses and teachers in Ghana showed that nurses had 21.5 times the rate of lower back pain than teachers (Dovlo 2005). Of 844 nurses completing a questionnaire in Japan, 85.5% suffered a MSD in a 12-month period (Smith, Mihasi, Adachi, Koga and Isitake 2006).

Psycho-social issues, such as violence, also affect the nursing profession. In 2003, 73.5% of 200 nurses

OCCUPATIONAL HAZARDS AND THEIR IMPACT

ON NURSES AND THEIR PATIENTS

interviewed in one state in Australia reported having experienced a violent event in the 12 months prior to their interviews. These violent events included verbal abuse, threats, assaults, bullying and others. Thirty-seven of the nurses reported being assaulted (Mayhew and Chappell 2003). A recent survey of 200,000 physicians and nurses from 130 general hospitals in the Netherlands revealed that 90% have suffered mental and physical violence, 78% have experienced sexual intimidation and over 50% of the hospital staff have been threatened with weapons (Franx 2005).

These statistics bear real consequences. Many nurses have been injured or become ill as a result of hazardous workplace exposure and have left the profession. Many young people now shy away from the nursing profession, being fearful of contracting serious contagious diseases. According to a study completed in the United States, 75.8% of the nurses surveyed said unsafe working conditions interfere with their ability to deliver quality care. Eighty-eight percent indicated that health and safety concerns influence their decisions about the type of nursing work they do as well as whether or not they will continue to practice nursing (Houle 2001, p.6).

The impact on patient safety

Nursing is inseparably linked to patient safety poor working conditions for nurses and inadequate staffing levels increase the risk for errors.

Institute of Medicine of the National Academies Report "Keeping Patients Safe, Transforming the Work Environment of Nurses" (IOM 2003; Stone 2004).

Studies in the United States have shown that higher proportions of care provided by registered nurses result in lower rates of urinary tract infections, reduced upper gastrointestinal bleeding, lower incidence of pneumonia and fewer incidents of shock, cardiac arrest, sepsis, or deep vein thrombosis (Needleman,

AND SAFETY MANAGEMENT PROGRAMME

Buerhous, Mattke, Stewart and Zelevinsky 2002). "An additional nurse per patient day cut the odds of dying by more than half" (Curtin 2003, p.6). Several studies in the United States have confirmed the relationship between nurse staffing load, nurse turnover and patient outcomes (Aiken, et al, 2002, Aiken et.al. 2003, Steinbrook, 2002; Sulmasky and McIlvane, 2002; Unruh, 2003).

Furthermore, a high nurse turnover rate is very expensive. In one study, organisations with a high turnover rate among nurses spent 36% more per discharge than hospitals with lower staff turnover (Gelinas and Bohlen 2002). This surely counters employers' claims that health and safety protection for nurses is too expensive.

Failure to protect nurses has implications for patient care. Hazards that adversely impact nurse retention and recruitment frequently lead to errors, threaten patient safety and negatively affect the patient's treatment outcomes. Evidence now consistently demonstrates that patient safety and treatment outcomes are related to staffing and health care facilities' organisational characteristics (Pronovost 1999; Pronovost 2002 as cited in PAHO). One of these factors is adequate safety programmes (PAHO 2006).

To minimize the existence and cost of unsafe work environments to nurses, patients, employers and communities, a strong, consistent and comprehensive culture of health and safety must be established. One strategy is described below.

FRAMEWORK FOR AN OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT PROGRAMME

A systematic approach for managing occupational health and safety hazards introduced in the 1980s is,

AND SAFETY MANAGEMENT PROGRAMME

today, a well-accepted method being used in a variety of occupational settings, including health care. In 1993 the U.S. Occupational Safety and Health Administration published a Framework for Comprehensive Safety and Health Program in a Hospital Environment (USDOL, OSHA 1993) using a systems approach. The ILO later published a generic guideline for a systems approach to safety and health management (ILO 2001) while the Pan American Health Organization (PAHO) has recently published a guideline entitled Workers' Health and Safety in the Health Sector: A Manual for Managers and Administrators (2006). The European Agency on Health and Safety at Work conducted and published a study entitled The Use of Occupational Safety and Health Management Systems in the Member States of the European Union. This document defines the elements of an occupational health and safety management system, cites several case examples from a variety of industries, including home care, and demonstrates that many of the member states of the European Union promote occupational health and safety management systems. Much of the information below is adapted from these four sources.

The **structure** for identifying, assessing and controlling workplace hazards involves four elements:

- 1. Management commitment
- 2. Employee participation
- 3. Written occupational health and safety programme and
- A strong health and safety programme committee (USDOL, OSHA 1993, p.3; European Agency for Safety and Health at Work 2002; ILO 2001; PAHO 2006).

This structure serves as a framework for the six major programme **functions**:

- 1. Worksite hazard assessment
- 2. Hazard prevention and control
- 3. Employee training and education

AND SAFETY MANAGEMENT PROGRAMME

- 4. Record keeping
- 5. Programme review and evaluation, and
- 6. Continuous process improvement.

Together, the structure and functions are the substance of the health and safety operations that should be integrated into daily workplace activities.

The Structure

1. Management Commitment

Although employers are responsible for adhering to their state's regulatory/legal requirements, management commitment to occupational health and safety programmes requires much more than just regulatory/legal compliance.

Management commitment is the foundation for a strong health and safety programme, assigning organisational resources (both personnel and financial) and providing the motivation for the health and safety programme (PAHO 2006). "Management must be fully committed to the initiative and provide the necessary resources" (European Agency for Safety and Health at Work 2002, p. 1).

Managers must issue clear work policies and take the necessary actions to implement or support these policies. Pronouncing the "right words" is not enough to ensure commitment. For example, if there is a "no-lift" policy but lift devices are not available, the policy is meaningless. The result is that nurses are not working in a safer environment, and back injuries will continue.

2. Employee Participation

Management commitment to health and safety programmes is evident when all levels of staff are involved in the assessment of hazards, selection of

FRAMEWORK FOR AN OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT PROGRAMME

hazard controls and programme evaluation activities. Involvement in the process empowers and motivates employees to actively participate in achieving programme objectives and goals (US DOL, OSHA 1993, p.2) and increases their compliance with health and safety recommendations.

Employee participation is particularly important in health care, where, in addition to the nurses' safety, the patient's safety must be considered. Nurses know their patients' needs. They understand the interactions between staff and patients and so are able to help select a protection method that best suits the needs of both.

Employee participation includes making arrangements for nurses to have the time and the resources to participate actively in the processes of organising, planning, implementing, evaluating and improving the occupational health and safety management system (ILO 2001, p.7). It is also essential that nurses be encouraged to participate through suggestion programmes and other incentives.

To have a successful programme, there needs to be follow-through on employee suggestions and input. If employee contributions are touted as valuable but routinely ignored, the programme will fail. Nurses will lose the incentive to participate.

3. Written Occupational Health and Safety Programme

A written health and safety programme, specific to the facility, creates and documents the basis for future action by setting clear objectives and goals. It announces the commitment to a safe and healthful environment and communicates the health and safety policies and protocols. The written programme assigns responsibilities to staff at all levels and contains the procedures for hazard identifica-

AND SAFETY MANAGEMENT PROGRAMME

tion, risk assessment and the selection of appropriate control measures (USDOL, OSHA 1993; European Agency for Safety and Health at Work 2002; ILO 2001; PAHO 2006). The programme is often written jointly by the employer and the health and safety committee.

4. Strong Health and Safety Committee

As noted by the European Agency for Safety and Health at Work (2002, p.1), "employees need to participate in the programme from the outset, either directly or via representative bodies, such as safety committees". The occupational health and safety committee, composed of staff and managers, is a permanent group working together to identify and solve the facility's health and safety problems and communicate health and safety information to staff. Although the committee is responsible for recommending corrective actions, it is not responsible for carrying out those recommendations. The employer has the ultimate responsibility for health and safety (European Agency on Safety and Health at Work 2002; ILO 2001; PAHO 2006; USDOL 1993).

The size and function of the facility determines the size and composition of the committee. General recommendations for committee composition include managers and staff. More than half of the members should be direct care nurses representing a variety of jobs, functions and areas in the health care facility (PAHO 2006).

Functions within the Health and Safety Programme

1. Worksite Hazard Assessment

"A risk assessment needs to be conducted to identify existing and potential problem areas" (European Agency for Safety and Health at Work 2002, p.1). This worksite hazard assessment is the first step for

FRAMEWORK FOR AN OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT PROGRAMME

the health and safety programme. It is a process used to identify existing hazards, potential hazards, and the employees who may be at risk. This worksite assessment function often includes "literature reviews, identifying hazard categories, conducting worksite surveys and analyzing trends" (US DOL, OSHA 1993, p.7).

A literature review provides the knowledge needed to identify hazardous processes, tasks and occupations affected. It should include a review of the ILO's List of Occupational Diseases (Appendix A) which indexes many of the injuries and illnesses nurses experience.

ILO's List of Occupational Diseases was first introduced in 1964 as Schedule I of the Employment Injury Benefit Convention and amended in 1980. It is regularly reviewed and updated by a tripartite group of experts representatives from labour, government and employer organisations, and was most recently reviewed in 2005. The list is intended to strengthen the identification, recording and notification procedures for occupational accidents and diseases with the aim of identifying their causes, establishing prevention measures, promoting the harmonization of recording and notification systems and improving the compensation processes in the case of occupational accidents and disease (ILO 2002).

Once armed with information from the literature review, a worksite survey can be done by:

 dividing the facility physically into sections and assessing each section for hazards (e.g. the operating room, the laundry, or the patient care areas);

AND SAFETY MANAGEMENT PROGRAMME

- examining hazards associated with processes or tasks (e.g. patient transfer, chemical sterilization of equipment); or
- assessing the hazards related to a particular job or occupation within the facility (e.g. direct care nurse in an intensive care unit, or registered nurse working in a TB clinic).

Using all three methods in combination is often best, provided there is enough staff to perform the surveys well. The combination ensures a more comprehensive assessment.

The worksite hazard assessment may also include exposure monitoring, often called environmental monitoring or personal sampling. This is a process of sampling the air to determine whether the nurses are breathing harmful contaminants, such as waste anaesthetic gases. An occupational health and safety professional should analyze the results of any exposure monitoring.

2. Hazard prevention and control

After identifying the hazard present at the worksite, a method to eliminate or control it can be selected by using the "hierarchy of controls", a well-recognised system that categorizes and orders hazard controls from the most to the least effective. See Table 1 below.

To choose the best control, the seriousness of the consequences of an exposure, the importance of the task to the functioning of the unit, and the availability and feasibility of the hazard control method must be considered. Whenever possible, an occupational health and safety professional, such as an industrial hygienist, should be consulted to be sure the most appropriate and effective method is selected to control the hazard.

AND SAFETY MANAGEMENT PROGRAMME

Table 1: Industrial Hygiene Hierarchy of Controls (Am. Col. of Nurse Midwives 2001).

Level of effectiveness Type of Control	Type of Control	Example
Most effective	Hazard elimination	Using a needle-less IV system
	Substitution of a less hazardous material	Using oxidizing chemicals such as paracetic acid or hydrogen peroxide instead of gluteraldehyde
	Engineering controls	Using lift devices for moving and transferring patients
	Administrative controls	Policies and procedures that limit the number of employees entering isolation rooms by combining tasks (taking in the food tray at the same time as taking the patient's vital signs)
	Work practice controls,	Eliminating the recapping of needles; requiring hand washing
Least effective	Personal protective equipment	Gloves, respirators.

AND SAFETY MANAGEMENT PROGRAMME

An example of the deliberations for selecting the control measures for a patient with Multiple Drug Resistant TB in the hospital:

- ✓ The consequences to the nursing staff if exposed:

 Serious
- ✓ The importance of the tasks: Nursing care, treatments and taking food to the patient, giving medications: Imperative
- ✓ Availability and feasibility of the hazard control method? Negative pressure rooms are available but cost prohibitive. Personal protection – N95 respirator masks are available and feasible. Administrative and work practice controls can be arranged
- ✓ Can the hazard (MDR TB) be eliminated or substituted? No
- ✓ Can an engineering control be used? Yes, negative pressure rooms
- ✓ Is it feasible? No, cost is prohibitive
- ✓ Can administrative controls and work practice controls be used? Yes, to minimize exposure. Administrative control: Nurse does several tasks at one time to limit the number of times he/she must enter the room
- ✓ Can personal protective equipment be used? Yes. N95 respirator masks are available and feasible
- ✓ Controls to use: Administrative, Work Practice and Personal Protective Equipment. Since the consequences of the disease are so serious and since the nursing staff must be in close proximity to the patient to deliver appropriate care, hazard controls such as administrative, work practice and personal protective equipment must all be used together. Combining the use of the hazard controls provides better protection than any one of the controls used alone. If negative pressure rooms were available and feasible, their use, in addition to those mentioned above, would enhance the protection for staff.

FRAMEWORK FOR AN OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT PROGRAMME

It is best to establish evaluation methods and performance indicators – a method for determining the control's effectiveness – at the time that control measures are selected. For an accurate evaluation, a "before" and "after" comparison should be included – before the control is established and after the control has been in place for a significant period of time. For example, the number of needlesticks is recorded before instituting a needle-less system and after the system has been operational for several months or a year. Another example: the air in the operating room is monitored and the results recorded before and after installation of an engineering control that recaptures waste anaesthetic gases.

3. Employee Training and Education

Training is an essential element of any health and safety programme. Training and education informs nurses at all levels, including management, of their roles, rights and responsibilities related to health and safety in the workplace (US DOL 1993, p.13). For programme effectiveness nurses must know the hazards to which they are exposed; the signs and symptoms of exposure; how to use hazard controls, such as personal protective equipment; how to recognize signs of a problem; and where to go for help. Nurses also need to be trained on how to report a new unidentified workplace hazard and how to report a workplace injury or illness.

4. Record keeping

Well-maintained records provide the information for programme evaluation activities, such as, comparing "before and after" outcomes and looking at the records to evaluate performance indicators. At a minimum, records should include identification of the hazards, control measures used, the number and types of workplace injuries and illnesses, and the number and type of training sessions conducted.

AND SAFETY MANAGEMENT PROGRAMME

5. Programme review and evaluation
Programme review and evaluation is a cyclical,
dynamic process conducted regularly and systematically. It measures the results, determines programme successes and failures and identifies areas
that need improvement. It includes analyzing the
existing data for all programme elements and
developing new ways to address gaps in performance. Programme review and evaluation involve
an audit of processes, a comparison of the audit
results to previously established performance indicators, and a trend analysis. The formal programme review should be conducted annually, at a
minimum, and should lead to continual improvements in the programme.

6. Continuous Process Improvement Continual improvement involves two elements: 1) a formal annual programme review and evaluation and 2) "on-the spot" changes when an unsafe situation is discovered. Improvement in the processes should be integrated into the formal annual review. These types of reviews help identify areas that need improvement, determine the corrective actions, document them and set new goals and performance indicators.

"On-the spot" process improvement is often initiated any time a manager or direct care nurse or independent health practitioner notes a hazardous situation, after a workplace accident, or after a "near miss" (an incident that does not, but comes close, to causing injury or damage to property).

To institute a strong and effective health and safety culture, direct care nurses and nurse managers must be empowered to make "on-the-spot" improvements or notify the appropriate person to do so. For example, slips, trips and falls cause a high number of injuries in a health care facility; therefore, all staff are to clean

THE RIGHTS AND RESPONSIBILITIES

FOR HEALTH AND SAFETY

up spills of water, pick up items left on the floor and report hazardous conditions. All staff includes nurses, nurse managers, and non-nursing staff, including the chief executive officer of the facility. The goal is to identify and address hazards before accidents occur.

To encourage "on-the-spot" reporting and the resulting reduction in accidents, an open line of communication and a "no-blame" culture needs to be established. Nurses must feel free to report hazards without fear of reprisal for making a mistake or for finding a problem. It is essential that the system is integrated into every facet of the business, including linking it to the existing management system (EU Agency of Health and Safety at Work 2002).

A case example of the Framework for an Occupational Health and Safety Management Programme in Action is included in Appendix B.

THE RIGHTS AND RESPONSIBILITIES FOR HEALTH AND SAFETY

While each individual is accountable for workplace health and safety, overall there needs to be commitment from communities, governments, national nursing associations, health care facility employers, and health personnel, including nurses at all levels. This commitment should include just compensation for nurses who are injured or who become ill from workplace exposures.

The Community

A supportive community culture is one that values nurses and recognises the importance of health and safety programmes, keeps nurses from harm and helps ensure that nurses will be healthy and able to care for the community. Community support encourages governments to establish health and safety protections for

FOR HEALTH AND SAFETY

nurses and enables employers, nurse managers and nurses at all levels to fulfil their roles and accept their responsibilities for effective health and safety programmes. The recognition of the value of a healthful and safe work environment for nurses on a national level facilitates its implementation at the local level.

National nurses associations (NNAs) must educate their governments and citizens to recognise the importance of nurses and their welfare to the overall health of the people of their nation. NNAs would do well to educate the public (i.e. the governed and the government) about the role nurses play in reducing the cost of health care.

The Health Facility Employer

As noted in the previous section, "Framework for an Occupational Safety and Health Management Programme", the health care employer has a duty and a prominent role in protecting nurses from harm by establishing effective health and safety programmes. Employer responsibility for health and safety programmes is a concept well-accepted by national and international organisations. ILO's 2001 Guidelines on Occupational Health and Safety and Health Management Systems clearly state that the employer is "accountable for and has a duty to organize occupational safety and health." ILO specifies the responsibilities as:

- Setting policy with measurable goals;
- Providing resources;
- Delegating responsibilities within the organization:
- Ensuring line-management responsibility for safety and health;
- Promoting cooperation within the organisation;
- Communicating;
- Providing supervision; and
- Ensuring that arrangements are made for programme implementation and employee involvement.

THE RIGHTS AND RESPONSIBILITIES

FOR HEALTH AND SAFETY

Nurses

Nurses must take an active role in protecting the integrity of their work environment. Without the involvement of everyone in the health and safety programme, optimal results will never be achieved.

Rights of Nurses

All nurses have the right to work in a safe and healthy environment (physical, psychological and social) with sufficient staffing, supplies, safety equipment and immunisations for carrying out their tasks safely. They have the right to timely information about potentially hazardous exposures and the appropriate control measures, including personal protective equipment provided by the employer.

Nurses should expect health and safety training with the freedom to ask questions about the training issues and safety procedures. In addition, nurses have the right to open lines of communication including the freedom from reprisal for reporting unsafe conditions or practices.

Responsibilities of Nurses

With the rights come responsibilities. Everyone has the responsibility to contribute to the health and safety of the work environment. Nurses are no exception. They have the responsibility to comply with the facility's health and safety policies by using all health and safety equipment properly. They must participate in health and safety training.

Furthermore, nurses also have a reporting responsibility. They must report unsafe conditions – "near-misses" and unsafe or hazardous conditions. Nurses must also act to alleviate them, "on-the-spot", if possible. Accidents cannot be prevented unless unsafe conditions are recognised and rectified. In addition to hazardous conditions, nurses must report all workplace accidents, injuries and illnesses.

FOR HEALTH AND SAFETY

Nurses must take reasonable care of their own health and safety at work. They must refrain from taking unnecessary risks in a situation that is already hazardous. They must ensure that their actions or omissions do not jeopardize the health and safety of others. They must meet all the standards of care, including those for health and safety.

Although all nurses have the rights and responsibilities described above, the nurse manager's roles are particularly relevant to healthy and safe work environments.

The Nurse Manager

The nurse manager has two distinct and somewhat competing roles – one as an arm of the employer and the other as an advocate for nursing staff. As a manager the nurse provides direction to staff nurses for the provision of health care and coordinates health services of all types, including round-the-clock patient services. The nurse manager's participation in all policy-making and planning is essential. As an advocate for nursing staff, the nurse manager must ensure that the staff have the equipment, time and training to do their jobs.

As an arm of the employer, the nurse manager's health and safety responsibilities include policy-making and cost-effective human resources management. He/she also serves as the communications link between upper management and the staff about health and safety issues. Nurse managers oversee health and safety programme implementation within nursing services, note any hazardous situations and report and remedy them. Managers are expected to listen to staff and act on their reports of unsafe conditions. As well, they must remain current on the latest health and safety technologies for use in the health care environment.

As an advocate for nursing staff, the nurse manager should ensure that nursing staff are working in a safe and healthful environment. Nurse managers verify that

THE RIGHTS AND RESPONSIBILITIES

FOR HEALTH AND SAFETY

workplace hazards are identified and appropriate controls are in place, including health and safety protections, such as personal protective equipment. They must be sure that the staff have the resources and the information they need to establish effective health and safety programmes and protect themselves from harm. The nurse manager must schedule the work so staff have time to participate in the health and safety training provided by the employer.

The nurse manager has the right to expect that the employer will listen to the needs of the nursing staff, respect the nurse manager's professional judgement and supply the resources needed to assure an effective health and safety programme. This includes a sufficient number of nurses to enable safe and efficient nursing care.

The nurse manager has the right to expect that nursing staff will be a partner in the health and safety programme—observing the requirements of quality/safe standards of care, complying with health and safety policies, using the health and safety equipment provided and following the reporting and training requirements.

The Direct Care Nurse

All direct care nurses have rights and responsibilities related to the health and safety of their work environment mentioned above. Independent nurses are in a unique situation. They may be self-employed or work in a variety of health care facilities from week to week, and thus not considered to be staff. It may be more difficult for them to obtain information. However, they have the right and responsibility to ask for information about work hazards and access measures of protection. They also have the right to freedom from reprisal for questioning the safety of work procedures and reporting unsafe working conditions. Independent nurses have the responsibility of complying with health and safety programme requirements, using protective

equipment and reporting unsafe or unhealthy working conditions and workplace injuries or illnesses.

Everyone working in the facility must strive to establish and maintain a safe and healthy work environment. They must refrain from taking unnecessary risks in a situation which is already hazardous; take reasonable care of their own health and safety at work; and ensure that others are not placed at risk because of their own actions or omissions.

National Nurses Associations

ICN strongly supports the ILO Conventions and the World Health Assembly's Resolutions related to occupational health and safety and believes that the role of the national nurses' associations is to:

- Advocate for health and safety programmes for nurses, including national legislation and regulation;
- Advocate for fair compensation of work related injuries and illnesses;
- Educate the nurses, their employers and the community about health and safety programmes.

The ICN position statement on Occupational Health and Safety for Nurses published in 2006 (Appendix C) urges NNAs to work with their respective governments in support of health and safety programmes for nurse. ICN believes that NNAs should initiate research, raise the awareness of nurses to their rights and sensitize employers, communities and governments to the occupational hazards that nurses face daily.

| COMPENSATING THE NURSE | INJURED AT WORK

NNAs also have a strong role to play with compensation of nurses who, despite the best efforts, may still sustain an injury or suffer an illness as a result of exposure to a hazardous occupational exposure. The just and equitable compensation for nurses who have been injured as a result of their work in the health care facility cannot be overlooked. NNAs must join with government representatives, labour organisations and employers to establish as appropriate national list of occupational diseases and, ensure that illnesses to which nurses may fall victim are included on these lists. NNAs should continually work with competent authorities to improve ILO's List of Occupational Diseases and its relevancy to nursing personnel.

Occupational disease lists are often the measure by which compensation is established. For example, ILO's List of Occupational Diseases serves as a model and assists nations worldwide to develop a method for compensating employees who have been injured or fallen ill because of work-related exposure. (See Appendix A).

In 2002, ILO's General Conference recommended that each of its member organisations develop a national occupational disease list for purposes of prevention recording and notification (ILO 2002). Communities should follow that recommendation and ensure that their governments implement a list of occupational diseases like the one noted in ILO Recommendation 197, a 2002 initiative that establishes a basis for appropriate compensation for work related injuries and illnesses.

Nurses must report their workplace injuries or illnesses. To do so, they need to know how to file an injury/illness claim, the processes involved and what to expect. Every nation has different compensation regulations or laws and different levels of compensation. Nurses need to know the rules in their facility and their local and/or national jurisdictions.

NNAs can assist by providing nurses with information about the compensation system in their nation – how, when and to whom to file an injury or illness claim, including the type of documentation needed and forms to complete. In addition, NNAs should provide their

members with information on what to expect after filing a claim such as the waiting period, if any, before receipt of funds. In some cases, NNAs provide legal assistance to support members in filing claims and protecting their interests.

Once a nurse recognises the symptoms of a work-related illness, his/her first steps are usually notifying the nurse manager, completing the appropriate forms and supplying the required documentation in accordance with the regulations or laws governing compensation. The nurse manager must assure that the report is filed correctly and the employer notified. The employer must report injuries and work-related illnesses to the appropriate authorities.

If an occupational injury or illness cannot be prevented, the wages lost as a result must be fairly compensated. The diseases nurses incur as a result of their work must be represented on the country's List of Occupational Diseases and/or the ILO's List of Occupational Diseases.

CONCLUSION

Nurses are essential to improving and maintaining the health of the world's population. National health targets and the UN Millennium Development Goals cannot be met without an ample supply of qualified nurses working in local communities. They deliver health care to the people of the world, thus supporting sustainable development.

Given the evidence of the high rate of workplace illness and injury among nurses, occupational health and safety programmes clearly need to be strengthened in health care settings. The concepts put forward by the ILO, the 2002 WHO Strategic Directions for Nursing and Midwifery 2002-2008 and the World

Health Assembly need to be widely implemented. Health care facilities worldwide need to establish a culture of safety. They need to be dedicated to developing strong occupational health and safety management programmes to minimize the number and severity of work-related accidents and illnesses among nurses.

Countries must establish a strong national culture that recognises the importance of protecting the health and safety of its workers. When communities create a culture and environment that values safe and healthy workplaces, they maintain a stronger workforce and mitigate the loss of valuable workers to unnecessary injury and illness. Finally, establishing a strong occupational health and safety framework with clearly defined roles for employers, nurses, nurse managers and national nursing associations advances nursing practice and ensures better heath care for all.

When the established prevention methods do not work and nurses are injured or fall ill because of their work, they must be justly compensated. NNAs must join with government representatives, labour organisations and employers to establish an appropriate list of occupational diseases and ensure that illnesses to which nurses fall victim are on the list.

Health and safety programmes, along with compensation protections for ill and injured nurses, are a shared responsibility, thus requiring a shared commitment to healthy and safe workplaces. By working together the loss of key resources to work-related injury and illness can be minimized. Working together will ensure that the world's health care facilities are safe for patients and nurses alike.

REFERENCES

- Aiken LH, Clarke SP, Cheung RB, Sloane DM, and Silber JH (2003). Educational levels of hospital nurses and surgical patient mortality. JAMA: The Journal of the American Medical Association, VOL. 290, no.13. pp 1617-1623
- Aiken LH, Clarke SP, Douglas MS, Swchalski J, Silbe JH (2002). 'Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction'. JAMA: The Journal of the American Medical Association, VOL 288, no. 16, pp. 1987-1993.
- American College of Nurse-Midwives and Health Care Without Harm (2001). *Green Birthdays*, Washington, DC
- Curtin L (2003). 'An integrated analysis of nurse staffing and related variables: effects on patient outcomes, *Online Journal of Issues in Nursing* [on-line] August 2006. Available at: www.nursingworld.org/ojin/topic22/tpc22_5.htm
- Dolvo D (2005). 'Wastage in the health workforce: some perspectives from African counties', *Human Resource Health*, Vol.3, no.6 [on-line] August, 2006. Available at http://www.pubmedcentral.gov/articlerender.fcgi?tool=pmcentrez&artid=1198245
- European Agency on Safety and Health at Work (2002). News release: Study identifies key ingredients for successful OSH management systems. [on-line] August 2006. Available at: www.osha.eu.int/press_room/020805.xml
- European Agency on Safety and Health at Work (2002). The use of occupational safety and health management systems in the member states of the European Union, Issue 307, Bilboa, Spain.
- Gelinas L and Bohlen C (2002). 'The business case for retention', Journal of Clinical Systems Management, Vol. 4, no. 78 pp. 14-16, 22.
- Franx J (2003). Report: 'Programme for a safer hospital: 'Safe Care', European Agency for Safety and Health at Work: Practical Solutions. [on-line] August 2006. Available at: osha.eu.int/publications/reports/104/index_13.htm
- Harber P (1990). 'Occupational Back Pain of Nurses, The Western Journal of Medicine", February 1990, pp. 175-176.

- Hasselhorn HM, Toomingas A and Lagerstorm M (1999).

 Occupational Health for health Care Workers: A Practical Guide, Elsevier Science, Amsterdam.
- Houle J (2001). Nursingworld.org: Health and Safety Survey, American Nurses Association, Washington, D.C
- Institute of Medicine of the National Academies, Committee on the Work Environment for Nurses and Patient Safety, Board on Health Care Services, Ed. Page A (2003). Keeping Patients Safe: Transforming the work environment of nurses. National Academies Press, Washington DC.
 - International Council of Nurses (1999). Position Statement: Occupational Health and Safety for Nurses, [online]. Available at: www.icn.ch/pshealthsafety00.htm
 - International Labour Organization (1977). Recommendation 157, Nursing Personnel Recommendations, [online]. Available at: www.ilo.org/ilolex/english/recdispl.htm
 - International Labour Organization (2001). Guidelines on Occupational Safety and Health Management Systems, Safe Work-ILO InFocus Programme on Safety and Health at Work and in the Environment. Geneva, Switzerland.
 - International Labour Organization (2002). Recommendation Concerning the List of Occupational Diseases and the recording and Notification of Occupational Accidents and Diseases, Recommendation No. 194, [online]. Available at www.ilo.org/ilolex/cgi-lex/convde.pl?R194
- International Labour Organization (2005). Report of the Meeting of Experts on Updating the List of Occupational Diseases. [online]. Available at: http://www.ilo.org/public/english/standards/relm/gb/docs/gb295/pdf/meulod.pdf
- Mayhew C and Chapell D (2003). 'Workplace Violence in the Health Sector—A Case Study in Australia', The Journal of Occupational Health and safety –Australia and New Zealand, 2003, Vol.19 (6), pp. 5-43.
- Needleman J, Buerhaus P, Mattke S, Stewart M and Zellevinsky K (2002). 'Nurse-staffing levels and the quality of care in hospitals, New England Journal of Medicine, Vol 346, no. 22, pp. 1715-1722.
 - Pan American Health Organization (2006). Health Care Workers Health and Safety Manual for Managers and Administrators, Washington, DC.

- PRIA (2005). AIDS and the Health Care Workers, [online]. Available at: http://www.pria.org/cgi-bin/projectsdesc. htm?r_reportid=16
- Pronovost P. et.al (1999). 'Organizational Characteristics of Intensive Care Unites Related to Outcomes of Abdominal Aortic Surgery', *JAMA*, 281(14), pp. 1310-1317.
- Pronovost P. et.al. (2002). 'Physician Staff Patterns and Clinical Outcomes in Critically III Patients: A systematic review', JAMA 288(17), pp. 2151-2162.
- Pruiss-Ustin A, Rapiti E, Hutin Y (2003). Sharps Injuries: Global Burden of Diseases from Sharps Injuries to Health-care Workers. Environmental Burden of Disease Series No.3, World Health Organisation, Geneva, Switzerland.
- Smith DR, Mihashi M, Adachi Y, Koga H and Ishitake T (2006). A detailed analysis of musculoskeletal disorder risk factors among Japanese nurses. *Journal of Safety Research*, Vol. 37, no.2, pp.195-200.
- Steinbrook R (2002). 'Nursing in the crossfire,' New England Journal of Medicine, Vol. 346, no. 22, pp. 1757-1766.
- Stone PW, Clarke, S.P., Cimiotti J, Correa-de-Araujo R (2004). "Nurses' working conditions: Implications for infectious disease', Emerging Infectious Diseases, Vol.10, no. 11, pp.1984-1989
- Sulmasy DP and McIlvane JM (2002). 'Patients' ratings of quality and satisfaction with care at the end of life', Archives of Internal Medicine, Vol. 162, no. 18, pp. 2098-2104.
- United Nations (2000). *Millennium Declaration: Millennium Development Goals,* [online]. Available at: www.un.org/millenniumgoals/
- Unruh L (2002). 'Licensed nurse staffing and adverse events in hospitals'. *Medical Care* Vol. 41. No 1, pp. 142-152.
- U.S. DOL, Occupational Safety and Health Administration (1993). Framework for a Comprehensive Occupational Safety and Health Program in a Hospital Environment. Publication No. 029-016-00149-2, Washington, DC.
- U.S. DOL, Occupational Safety and Health Administration (1998). *Shipping Industry,* OSHA publication No. 2268, Washington, D.C., p. 1-13.
- U.S. DOL, Bureau of Labor Statistics (2003). Lost-Worktime Injuries and Illnesses: Characteristics and Resulting Days Away From Work, 2001. News Release USDL 03-138, Washington, DC.

- World Health Organization/UNICEF (1978). Declaration of Alma-Ata, International Conference on Primary Care, Alma Ata U.S.S.R. [online]. Available at: http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf
- World Health Organization (1983). World Health Assembly Recommendation 36.11 The Role of Nursing and Midwifery Personnel in the Strategy for Health of All, [online]. Available at: www.who.int/hrh/nursing_midwifery/resolutions/en/index. html
- World Health Organization (1989). World Health Assembly Recommendation 42.27, Strengthening Nursing/Midwifery in Support of the Strategy for Health for all, [online]. Available at: www.searo.who.int/LinkFiles/HRH_Documents_WHA42.27.pdf
- World Health Organization (1992). World Health Assembly Recommendation 45.5, Strengthening Nursing and Midwifery in Support of Strategies for Health for All, [online] Available at: http://www.searo.who.int/LinkFiles/HRH_Documents_WHA45.5.pdf
- World Health Organization (1996). World Health Assembly Recommendation 49.12, WHO Global Strategy for Occupational Health for All, [online]. Available at: www.who.int/occupational_health/publications/wha49rep/en/
- World Health Organization (1999). Occupational Health: Ethically Correct, Economically Sound, Fact Sheet No. 84. Geneva, Switzerland.
- World Health Organization (2001). World Health Assembly Recommendation 54.12, Strengthening Nursing and Midwifery [online]. Available at: www.wpro.who.int/pdf/wha54_12.pdf
- World Health Organization Global Advisory Group on Nursing and Midwifery (2002). Strategic Directions for Strengthening Nursing and Midwifery Services, WHO, Geneva, Switzerland.
- World Health Organization (2003). Health Care Worker Safety, AIDE-Memoire, Secretariat of the Safe Injection Global Network, Rev.1 WHO/EHT/03.11.

More Information/Additional Websites

Websites that offer information on health and safety programmes for nurses can be accessed through:

The European Agency for Safety and Health at Work's Global Portal: www.osha.europa.eu/OSHA

Several programmes from around the world are listed with descriptions and links to the site. To access in formation on nurses or health care worker programmes, put the word into the search block and many documents listed on the web will appear.

In addition, the European Agency for Safety and Health at work has launched "Healthy Workplace Initiative" to provide employers and employees with easy access to quality information about safety and health: www.hwi.osha.europa.eu/

- Frontline Health Care Workers Safety Foundation, a non-governmental organisation: www.frontlinefoundation.org
- The International Health Care Worker Safety Center is dedicated to the prevention of occupational transmission to blood-borne pathogens. The site offers over 2000 references and many resources: www.healthsystem.virginia.edu/internet/epinet
- The International Labour Organization (ILO) has teamed with ICN, the World Health Organization (WHO) and Public Services International (PSI) to address workplace violence in the Health Sector: http://www.ilo.org/public/english/dialogue/sector/sectors/health.htm
- ILO's Guidelines for Occupational Safety and Health: www.ilo.org/public/english/support/publ/pdf/guidelines.pdf
- Japanese Occupational Safety and Health Management System guidelines for employers: www.jicosh.gr.jp/english/ guideline/oshms.html
- Korean Occupational Safety and Health Guidelines: www.kosha.or.kr
- New Zealand's Health Care Sector Guidelines: www.osh.govt.nz/order/catalogue/284.shtml
- The Occupational Health and Safety Agency for Healthcare in British Columbia, Canada developed a Reference

Guideline for Safe Patient Handling entitled, It doesn't have to hurt: A guide for implementing musculoskeltal injury prevention (MSIP) programs in healthcare. This 196 page guideline can be downloaded free from the Internet using Acrobat Reader: www.ohsah.bc.ca/EN/309/

The Pan American Health Organization

The PAHO document, "Workers' Health and Safety in the Health Sector: A manual for Managers and Administrators" is a comprehensive guide available on CD in either English or Spanish. This document provides many sample forms and checklists for health and safety programmes. Contact the Pan American Health Organization at WWW.PAHO.org. This document also includes a comprehensive reference list of documents in Portuguese, Spanish and English.

Training for Development of Innovative Control Technologies (TDICT) focuses on needle and sharps injury prevention: www.tdict.org

The U.S. Occupational Safety and Health Administration has online electronic interactive tools, two of which are related to health care workers.

The Hospital eTool: www.osha.gov/SLTC/etools/hospital/mainpage.html

 Nursing Home eTool: www.osha.gov/SLTC/etools/ nursinghome/index.html

 Safety and Health Management Systems eTool: www.osha.gov/SLTC/etools/safetyhealth/index.html

World Health Organization. The WHO is in the process of developing a new brochure for the Protecting Worker Health Series. It will focus on the protection of Health Care Workers.

ILO LIST OF OCCUPATIONAL DISEASES

R194 List of Occupational Diseases Recommendation, 2002

LIST OF OCCUPATIONAL DISEASES

1. Diseases caused by agents

1.1. Diseases caused by chemical agents

- 1.1.1. Diseases caused by beryllium or its toxic compounds
- 1.1.2. Diseases caused by cadmium or its toxic compounds
- 1.1.3. Diseases caused by phosphorus or its toxic compounds
- 1.1.4. Diseases caused by chromium or its toxic compounds
- 1.1.5. Diseases caused by manganese or its toxic compounds
- 1.1.6. Diseases caused by arsenic or its toxic compounds
- 1.1.7. Diseases caused by mercury or its toxic compounds
- 1.1.8. Diseases caused by lead or its toxic compounds
- 1.1.9. Diseases caused by fluorine or its toxic compounds
- 1.1.10. Diseases caused by carbon disulphide
- 1.1.11. Diseases caused by the toxic halogen derivatives of aliphatic or aromatic hydrocarbons
- 1.1.12. Diseases caused by benzene or its toxic homologues
- 1.1.13. Diseases caused by toxic nitro- and amino-derivatives of benzene or its homologues

- 1.1.14. Diseases caused by nitroglycerine or other nitric acid esters
- 1.1.15. Diseases caused by alcohols, glycols or ketones
- 1.1.16. Diseases caused by asphyxiants: car bon monoxide, hydrogen cyanide or its toxic derivatives, hydrogen sulphide
- 1.1.17. Diseases caused by acrylonitrile
- 1.1.18. Diseases caused by oxides of nitrogen
- 1.1.19. Diseases caused by vanadium or its toxic compounds
- 1.1.20. Diseases caused by antimony or its toxic compounds
- 1.1.21. Diseases caused by hexane
- 1.1.22. Diseases of teeth caused by mineral acids
- 1.1.23. Diseases caused by pharmaceutical agents
- 1.1.24. Diseases caused by thallium or its compounds
- 1.1.25. Diseases caused by osmium or its compounds
- 1.1.26. Diseases caused by selenium or its compounds
- 1.1.27. Diseases caused by copper or its compounds
- 1.1.28. Diseases caused by tin or its compounds
- 1.1.29. Diseases caused by zinc or its compounds
- 1.1.30. Diseases caused by ozone, phosgene
- 1.1.31. Diseases caused by irritants: benzoquinone and other corneal irritants
- 1.1.32. Diseases caused by any other chemical agents not mentioned in the preceding items 1.1.1 to 1.1.31, where a link between the Exposure of a worker to these chemical agents and the diseases suffered is established

1.2. Diseases caused by physical agents

- 1.2.1. Hearing impairment caused by noise
- 1.2.2. Diseases caused by vibration (disorders of muscles, tendons, bones, joints, peripheral blood vessels or peripheral nerves)
- 1.2.3. Diseases caused by work in compressed air
- 1.2.4. Diseases caused by ionizing radiations
- 1.2.5. Diseases caused by heat radiation
- Diseases caused by ultraviolet radiation
- 1.2.7. Diseases caused by extreme temperature (e.g. sunstroke, frostbite)
- 1.2.8. Diseases caused by any other physical agents not mentioned in the preceding items 1.2.1 to 1.2.7, where a direct link between the exposure of a worker to these physical agents and the diseases suffered is established.

1.3. Diseases caused by biological agents

1.3.1. Infectious or parasitic diseases contracted in an occupation where there is a particular risk of contamination.

2. Diseases by target organ systems

2.1. Occupational respiratory diseases

- 2.1.1. Pneumoconioses caused by sclerogenic mineral dust (silicosis, anthracosilicosis, asbestosis) and silicotuberculosis, provided that silicosis is an essential factor in causing the resultant incapacity or death
- 2.1.2. Bronchopulmonary diseases caused by hard-metal dust
- 2.1.3. Bronchopulmonary diseases caused by cotton, flax, hemp or sisal dust (byssinosis)

- 2.1.4. Occupational asthma caused by recognized sensitizing agents or irritants inherent to the work process
- 2.1.5. Extrinsic allergic alveolitis caused by the inhalation of organic dusts, as prescribed by national legislation
- 2.1.6. Siderosis
- 2.1.7. Chronic obstructive pulmonary diseases
- 2.1.8. Diseases of the lung caused by aluminium
- 2.1.9. Upper airways disorders caused by recognized sensitizing agents or irritants inherent to the work process
- 2.1.10. Any other respiratory disease not mentioned in the preceding items 2.1.1 to 2.1.9, caused by an agent where a direct link between the exposure of a worker to this agent and the disease suffered is established

2.2. Occupational skin diseases

- Skin diseases caused by physical, chemical or biological agents not included under other items
- 2.2.2. Occupational vitiligo

2.3. Occupational musculo-skeletal disorders

- 2.3.1. Musculo-skeletal diseases caused by specific work activities or work environment where particular risk factors are present. Examples of such activities or environment include:
 - (a) rapid or repetitive motion
 - (b) forceful exertion
 - (c) excessive mechanical force concentration
 - (d) awkward or non-neutral postures
 - (e) vibration

Local or environmental cold may increase risk.

41

3. Occupational cancer

- 3.1. Cancer caused by the following agents
- 3.1.1. Asbestos
- 3.1.2. Benzidine and its salts
- 3.1.3. Bischloromethyl ether (BCME)
- 3.1.4. Chromium and chromium compounds
- 3.1.5. Coal tars, coal tar pitches or soots
- 3.1.6. Beta-naphthylamine
- 3.1.7. Vinyl chloride
- 3.1.8. Benzene or its toxic homologues
- 3.1.9. Toxic nitro- and amino-derivatives of benzene or its homologues
- 3.1.10. lonizing radiations
- 3.1.11. Tar, pitch, bitumen, mineral oil, anthracene, or the compounds, products or residues of these substances
- 3.1.12. Coke oven emissions
- 3.1.13. Compounds of nickel
- 3.1.14. Wood dust
- 3.1.15. Cancer caused by any other agents not mentioned in the preceding items 3.1.1 to 3.1.14, where a direct link between the exposure of a worker to this agent and the cancer suffered is established.

4. Other diseases

4.1. Miners' nystagmus

THE SAFE CARE PROJECT A CASE EXAMPLE

The case example outlined in the table below demonstrates the effectiveness of the Framework for an Occupational Health and Safety Management Programme. The published report of the "Safe Care" project does not define the components they used as a Framework for Occupational Health and Safety. Nonetheless, as the "Safe Care" programme was planned and implemented, each of the structural and functional elements described in this guideline were employed. Information used for the case example was taken from the European Agency of Safety and Health at Work's webpage, Practical Solutions, 'Programme for a safer hospital: 'Safe Care' (Franx 2003).

Case Example of the Framework for an Occupational Health and Safety Programme

Westfries Gasthuis Hospital, Hoorn, Netherlands

Safe Care Project

<u>Problem</u>: A high incidence of violent incidents toward hospital staff.

<u>Purpose of Project</u>: To reduce the number of verbal and physical incidents to the staff in the hospital by introducing a zero-tolerance policy on aggression and violence by fixed arrangements with the regional police and the Public Prosecutor's Department.

<u>Project Results</u>: A survey following the implementation of the program showed that physical violence decreased 30% and verbal aggression decreased 27%.

<u>Project description</u>: "Safe Care" is a project intended to minimize the number of violent events in a variety of hospital establishments throughout the Netherlands.

Violent events are described as verbal aggression, serious threats and physical violence including sexual assault and property damage. Each establishment must start the project from scratch with no other projects with the same aim underway; thus enabling a zero measurement before the project controls are implemented. Each establishment must be willing to share the information they gain with other establishments. The establishment must make available the necessary resources to implement the project.

The project at Westfries Gasthuis Hospital involved meetings with management and a working committee to establish an action plan. The plan involved a risk inventory - evaluating the number of violent events and the locations in the hospital that experienced the most incidents. Following the risk inventory, staff are trained in programme operation and their roles. Staff are trained not only in how to use the system but also in self-defence. In addition, a group of staff are trained in trauma counselling. Each staff member is given an alarm to carry and a colour card system with the different aggressive incidents assigned a different colour card. The alarms are used to summon the security staff and yellow or red coloured cards are given to any individual who causes a serious threatening (yellow) or a physically violent (red) incident. For example, in the event of physical violence the nurse presses the alarm button immediately, the security staff respond by giving the perpetrator a red card and reporting the incident to the police. This results in the perpetrator appearing before the assistant public prosecutor. When a security emergency is underway, a screen in the reception area announces the sudden event informing visitors of the delay of a planned appointment. The project includes meetings every six weeks to discuss concerns and how events were handled. At the end of the year, the number of violent events is compared to the number prior to implementation of the plan.

Elements and Functions of a Framework for an Occupational Health and Safety Programme	Actions Included in the Development and Implementation of the "Safe Care" Project
Management Commitment	First, hospital management is consulted about the project planning, tasks, responsibilities and the conditions of participation. After obtaining management commitment to participate, a memorandum with the basis of the plan is written.
Written Occupational Health and Safety Programme	The plan of action is written based on a "before" or "zero" measurement which is the baseline of the number of violent events prior to the intervention.
Employee Involvement	The executive/management board and the works council agree on a plan of action. Management agrees to make resources available including staff time and a staff working party.
Health and Safety Committee	A working party composed of members of staff from the at-risk departments is established.
Workplace Analysis	The overall number of violent events is noted before the project is presented to management. Then, after the action plan is written the working party draws up a "risk inventory" using colour coding to map the high risk areas on the hospital's floor plan.

15	
Hazard Prevention and Control	Following completion of the inventory, the working group discusses how improvements can be made. The group develops a plan. The controls are described above under project description.
Employee Training	Staff training is carried out in a variety of areas. Staff carrying the alarms and cards are trained in how and when to use them and the role they are to play in the process. In customer service areas, staff are trained in dealing with aggression and self defence. In addition a group of staff are trained in trauma counselling. The remainder of the organisation receives training on the "Safe Care" plan.
Programme Review and Evaluation	Before the project is implemented a "zero" measure as a baseline number of violent events prior to the programme implementation must be established. The measure is taken again one year later to determine the project's effectiveness.
Recordkeeping	Maintaining a log of the events including the location and type of event enables comparison evaluation at the end of the year.
Continual Improvement	Every six weeks the "Safe Care" project is on the agenda of the consultative meetings in each atrisk department. Staff ask questions and review any violent incident and the response to be sure to find any problems and correct them as soon as possible.

OCCUPATIONAL HEALTH AND SAFETY FOR NURSES

ICN Position:

ICN is clear that a safe work environment in the health sector significantly contributes to patient safety and supports positive patient outcomes. To that end ICN promotes the development and application of international, national and local policies or instruments that will safeguard the nurses' right to a safe work environment, including continuing education, immunisation and protective clothing/equipment. ICN reconfirms its mandate to encourage research in this area and to circulate relevant information on a regular basis to appropriate stakeholders.

ICN deplores the lack of appropriate national occupational health and safety legislation covering nurses in their place of employment, the often inadequate mechanisms for workers' participation in the monitoring/elimination of professional hazards, and the insufficient resources allocated to ensure optimal occupational health and safety services and labour inspection.

ICN strongly supports the various ILO Conventions relating to occupational health and safety and believes that national nurses' associations should:

- Urge their respective governments to ensure that all health agencies fall within the provision of occupational health and safety legislation. This can be done through lobbying, individual and/or collective political action.
- Initiate and/or support research in their countries into the safety and suitability of the work environment of nurses as well as risk behaviours, attitudes, procedures and activities.

- Sensitise nursing personnel, employers and the public to occupational hazards in the health sector, including violence or abuse.
- Raise nurses' awareness of their rights (as workers) to a safe environment and of their obligations to protect their safety and promote the safety of others.
- Convince governments and employers to adopt and implement all necessary measures to safeguard the health and well-being of nurses at risk in the course of their work, including vaccination when appropriate.
- Urge governments/employers to ensure the access of nursing personnel to protective measures (e.g. clothing) and equipment at no extra cost to staff;
- Encourage nurses to undergo vaccinations relevant to their health and safety in the workplace.
- Cooperate with the competent authorities to ensure the accuracy of the List of Occupational Diseases and periodically evaluate its relevance to nursing personnel.
- Support nurses' claims for compensation in relation to occupational disease and/or injury.
- Obtain and disseminate information on the incidence of work-related accidents, injuries and illnesses of nurses.
- Cooperate with other organisations supporting the worker's right to a safe work environment.
- Recognise the important relationships between workers and their families in the development of culturally appropriate occupational health and safety policies and treatment plans.

- Support nurses' freedom from being intimidated in their role of patient advocate.
- Call for adequate monitoring systems at all levels that will ensure appropriate implementation of policies.
- Disseminate information on the introduction of new hazards in the workplace.
- Disseminate information on non-compliance by employers of occupational health and safety legislation, including reporting mechanisms for such violations.

ICN supports the expanding role of the occupational health nurse in meeting workers' primary health care needs, and demands fair remuneration and adequate career structures that support professional development. ICN calls for the recognition of occupational health and safety as a professional nursing role with the appropriate remuneration that corresponds to the level of expertise and incentives to attract/retain nurses in this area of practice.

Background:

ICN recognises the major role occupational health and safety plays in health promotion. Furthermore, ICN acknowledges the growing expertise nurses have gained in the area of occupational health and safety and the cost-effectiveness of the services provided for workers.

Patient care benefits from a safe work environment for health personnel. The work environment of the nurse is frequently unsafe, however, as a result of:

 Environmental contamination by waste products resulting from human and industrial activity.

- Risks (e.g. chemical, biological, physical, noise, radiation, repetitive work).
- Medical technology lack of maintenance, insufficient training in the use of technology.
- Inadequate access to protective clothing and safe equipment.
- The disturbance of everyday life patterns associated with shift work.
- The increasing demands made upon the emotional, social, psychological and spiritual resources of the nurse working in complex political, social, cultural, economic and clinical settings.
- Incidents of violence, including sexual harassment.
- Poor ergonomics (engineering and design of medical related equipment, materials and facilities).
- Inadequate allocation of resources, e.g. human, financial.
- Isolation

ICN notes that most governments fail to collect current accurate information on the incidence of accidents, injuries and illness of nursing personnel as the basis for sound policy formulation. The lack of relevant data is a matter of great concern.

In certain countries, there is no occupational health and safety legislation. In others, the means to monitor its implementation and the machinery to discipline the offending employers is ineffective or non-existent. Yet other countries have adopted legislation that excludes hospitals and other health agencies.

Convention 149 of the International Labour Organization (ILO) concerning Employment and Conditions of Work and Life of Nursing Personnel 1) calls on member states to "improve existing laws and regulations on occupational health and safety by adapting them to the special nature of nursing work

and of the environment in which it is carried out". Section IX of the accompanying Recommendation (157)¹ further develops the measures considered necessary to guarantee the health and safety of nurses in the workplace.

Adopted in 1987, revised and updated in 2006

Related ICN Positions:

- Abuse and violence against nurses
- Shift work

ICN Publications:

- Guidelines on Coping with Violence
- Framework Guidelines Addressing Workplace Violence in the Health Sector

The International Council of Nurses is a federation of more than 120 national nurses' associations representing the millions of nurses worldwide. Operated by nurses for nurses, ICN is the international voice of nursing and works to ensure quality care for all and sound health policies globally.

¹⁾ International Labour Organization, Convention 149 and Recommendation 157 concerning the Employment and Conditions of Work and Life of Nursing Personnel, Geneva, ILO, 1977.



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