

# WORKPLACE HAZARDS Notes of Conference

Workplace Hazards to Nurses and Other Healthcare Workers Follow-up Booklet to 2007 Conference





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<sup>\*</sup>MNA Health and Safety Position Statements, Fact Sheets and Sample Contract Language that apply to conditions addressed at the 2007 Conference are included with specific topics from the Breakout Session

### INTRODUCTION

In June 2007, the Massachusetts Nurses Association (MNA) and the University of Massachusetts Lowell, School of Health and Environment held a two day conference in Marlboro, MA entitled, *Workplace Hazards to Nurses and Other Healthcare Workers: Promising Practices for Prevention.*Over 150 MNA members and others attended. As well as presenting the latest research findings on safe working conditions in healthcare settings, the Conference was designed to assist participants to work with others to improve working conditions by eliminating or minimizing the hazards they face at work every day.

Eight breakout sessions were held addressing hazardous conditions found in the healthcare industry.

A set of questions was presented to participants in each breakout session. In addition to nurse's safety concerns, the questions related to

- patient safety issues affected by the hazards
- good practices that participants have been involved with in the hospital where they are working
- barriers to and opportunities for change
- concrete steps that can be taken to improve working conditions
- who to involve in the change process

Not all sessions addressed all questions.

Reports were developed in each session and findings were reported back to all attendees at the end of each day.

The reports of the breakout sessions are published here and are being printed in the Massachusetts Nurse Advocate, the newsletter of the MNA. Most Power Point presentations from the Conference are available on the MNA website at www.massnurses.org, click on "Health and Safety" and then choose the "Research" option.

This educational event and the follow-up reports are the result of collaborative efforts by MNA staff in the Division of Health and Safety and MNA members who volunteer their time and share concerns about health and safety in the workplace.

### **VOLUNTEER OPPORTUNITIES IN HEALTH AND SAFETY AT MNA**

MNA members and other nurses and healthcare workers who are interested in health and safety at work are encouraged to participate in the many volunteer opportunities available at MNA.

These opportunities include the MNA Congress on Health and Safety consisting of twelve MNA members who are elected to this group for a two year term. Additionally, the Task Force groups are open to members and non-members and include:

- Workplace Violence and Abuse Prevention Task Force
- Emergency Preparedness Task Force
- Safe Patient Handling Task Force

Most groups meet monthly at MNA Headquarters in Canton, MA.

Anyone interested in attending a meeting, participating in the work of a Task Force, or standing for election to the Congress on Health and Safety is invited to contact the Health and Safety Division of the MNA by calling 781-821-4625. Ask to speak with Evie Bain, Associate Director, Chris Pontus, Associate Director or Susan Clish, Department Assistant. E-mail contact is available at eviebain@mnarn.org, cpontus@mnarn.org or sclish@mnarn.org.

2007 Congress on Health and Safety Members

Elizabeth O'Connor, Chairperson, Sandra LeBlanc, Terri Arthur, Mary Bellistri, Mary Anne Dillon, Gail Lenehan, Lorraine MacDonald, Kathleen Opanasets, Kathy Sperrazza.

Task Force Members who participated in the Conference

Rosemary O'Brien, Kathleen Mc Donald, Janice Homer, Noreen Hogan, Judith Rose

# CONFERENCE BREAKOUT NOTES OF CONFERENCE AND SUPPORTIVE DOCUMENTS

# WORKPLACE HAZARDS TO NURSES AND OTHER HEALTHCARE WORKERS: PROMISING PRACTICES FOR PREVENTION

### **Preventing Latex Allergy • June 7, 2007**

Speaker: Linda Coulombe, RN, BS, CNOR, CRCST

MNA Facilitators: Gail Lenehan, EdD, RN, Terri Arthur, RN, Mary Anne Dillon, RN

### **Statement of the Problem**

With more widespread use of natural rubber latex (NRL) gloves, there has been an increase in reported NRL allergies among patients as well as among workers, notably healthcare workers. Rarely, these allergies can be fatal. In addition to reports from the dermatology, allergy and pulmonary literature of severe skin and respiratory symptoms, life threatening reactions to NRL products have been noted in pediatric patients with spina bifida who had undergone numerous surgical procedures resulting in repeated NRL exposure. In addition, the U.S. Food and Drug Administration (FDA) received reports of numerous severe allergic reactions, including several deaths associated with exposure to NRL enema cuffs in providing care to sensitized patients. \*

\*OSHA Technical Information Bulletin – Potential for Allergy to Natural Rubber Latex Gloves and other Natural Rubber Products - 1999

**JCAHO Regulation that relates to this topic:** *EC.1.10 Hospitals must manage safety risks, EC 1.20 Hospitals must maintain a safe environment* 

**OSHA Guideline that addresses this topic:** OSHA Technical Information Bulletin, Latex Allergy, General Duty Clause 5A-1- Employers must furnish a place of employment free from recognized hazard

OSHA recommended steps to provide a safe work environment - A. Management support and worker involvement, B. Hazard assessment, C. Training and education, D. Program evaluation.

Items discussed by breakout session participants:

### How are patients, visitors or others affected?

- When latex gloves are used, patients, visitors and staff are all exposed to airborne latex particles (powder) increasing the potential for becoming sensitized
- Those already affected may experience reactions
- Powder stays airborne for long periods of time exposing everyone
- Powder adheres to surfaces and gets transferred by touching

### What are some good practices that you have seen in your workplace?

- · Latex free kits and carts
- Pharmacies, including satellite pharmacies, mixing drugs in a latex-free environment
- Asking every patient if they have a latex allergy
- Describing symptoms to patients and staff in case they are not aware

### What are some of the barriers and opportunities associated with change?

### Barriers:

- Surgeons refuse to change to latex-free gloves and equipment
- Management states it costs too much to use synthetic alternatives
- Belief that latex-free (synthetic) gloves are not safe
- Don't want to be labeled a trouble maker if you advocate for change
- Belief that there are not enough people affected to require change
- Belief that there are too many products to change
- Minimizing the reactions as "only" a rash

### Opportunities:

- Participate in safety committees and raise the issue of latex-free healthcare
- Utilize www.sustainablehospitals.org website to bring suggestions for synthetic alternative gloves

### What are some concrete steps that could be taken to address this problem?

- Educate all healthcare workers including doctors, dentists and nurses of the symptoms and prevention of latex allergy
- Educate the general public as well
- Obtain information on products from latex-free vendors
- Get figures on how latex-free gloves and equipment actually save money example: using polypropylene glove in dietary settings
- Encourage nurses and others to say "NO TO LATEX" in their personal health and dental care
- Include "latex safe environment" language in contract language

# Who are the management people at your workplace who are responsible for worker health and safety and who are 5 people in your workplace who would help to address the issue?

- People in the work setting who have responsibility for health and safety for patients as well as nurses and other staff
- Risk management
- Occupational/employee health
- · Materials management
- Infection control
- Safety officer
- Nursing supervisors
- Human resources
- Patient advocates
- Union (MNA) representatives and staff who are affected by latex allergy or others who are
  concerned about becoming latex allergic can work together on this issue through labor/management committees, hospital safety and other purchasing committees

### **POSITION STATEMENT ON LATEX ALLERGY**

### STATEMENT OF THE PROBLEM

Latex\* allergy has become an increasingly serious threat to health care providers and others exposed to natural rubber latex, particularly with frequent or prolonged exposure and particularly with exposure to mucous membrane or disrupted skin, and with inhalation<sup>1</sup>. Although latex is found in many medical devices in hospitals, experts believe that latex gloves have been a significant source of allergen exposure among health care workers and a most important cause of sensitization in the health care setting (2). Sensitization occurs through contact with latex proteins. Powder on gloves is a vehicle for sensitization. Powder increases the probability of sensitization as it allows direct contact of aerosolized latex proteins with mucous membranes of the eyes and respiratory tract.

Reports of allergic reactions to latex have increased dramatically. Individuals who are frequently exposed to latex products, may become sensitized (gradually made allergic), with resulting reactions varying from irritating to life threatening.<sup>2,3</sup> These reactions are wide ranging and include such symptoms as contact dermatitis, conjunctivitis, urticaria, latex induced anaphylactic shock, asthmatic reactions, airway obstruction, and even death.<sup>4</sup> No immunotherapy or desensitization exists for latex allergy. Each systemic reaction comes with less provocation; each reaction is worse.

There is no research data to suggest that even low protein, low powder latex gloves are safe for use with latex allergic patients or staff. To the contrary, while low protein, low powder gloves may decrease the rate of sensitization, there is data <sup>5,6</sup> and a growing number of compelling anecdotal reports to suggest that health care workers and patients can have serious reactions to latex gloves, regardless of the allergenicity and powder content.

CDC, FDA, OSHA, and NIOSH, make no distinction between vinyl, latex, and synthetic gloves. They emphasize that glove material should be of "appropriate material, intact, and of appropriate quality".<sup>7</sup>

### PREVALENCE OF LATEX ALLERGY

Group	Prevalence
Patients with spina bifida and congenital genitourinary abnormalities - these patients have been sensitized when latex urinary catheters and latex gloves contacted mucosal tissue.	<b>18-73%</b> 8,9
Health care workers (housekeepers, lab workers, dentists, nurses, physicians) - These individuals have a high incidence of contact with highly allergenic latex gloves and latex protein aerosolized with glove powder exposing eyes and respiratory tracts.	<b>8-17%</b> 10, 11,12,13,14
Group of 1000 volunteer blood donors-Exposure/ history unknown.	<b>6.5%-14%</b> <sup>15, 16</sup>
Rubber industry workers	<b>11%</b> <sup>17</sup>
Atopic patients - patients who have a tendency to develop allergies.	<b>6.8%</b> 18

<sup>\*</sup> for purposes of this position statement, latex refers to natural rubber latex.

Patients who have undergone multiple procedures - These patients have had mucosal tissue contact with latex gloves

**6.5%** 19

The number of requests for Medic Alert Bracelets citing latex allergy rose from 12 in 1986 to 2116 in 1997. Total number, as of December 31, 1997, who have Medic Alert bracelets citing latex allergy is 7447.<sup>20</sup>

### **Association Position**

The Massachusetts Nurses Association believes that, consistent with the Occupational Safety and Health Act (5)(a)(1) of 1970 <sup>21</sup>, employers have a responsibility to provide a workplace free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees.

The Massachusetts Nurses Association believes that patients, nurses, other health care professionals and staff should not be exposed and sensitized to natural rubber latex through dermal contact, mucosal contact, inhalation, percutaneous contact or wound inoculation.

### The Massachusetts Nurses Association recommends that:

- \* non-latex examination gloves be used in all health care settings.
- \* equipment used in resuscitation and invasive procedures should be latex free, given the substantial percentage of patients and health care providers who have become sensitized.
- \* nurses and other health care workers **become educated** to ensure an understanding of latex allergy including, routes of exposure, sensitization and reactions to latex, procedures for reporting acute and chronic occupational illness and protocols for treatment and accommodation of sensitized workers.
- \* nurses become educated to recognize signs and symptoms of latex allergy, to safely care for latex allergic patients, and to become familiar with **treatment protocols** for patients with acute allergic reactions to latex.
- \* latex allergic nurses and other health care workers with symptoms of latex allergy **seek medical attention** from health care providers with expertise in treating latex allergy.
- \* latex allergic nurses and other healthcare workers **submit written reports** (retaining copies) of their symptoms to their supervisors and the occupational health department (when available).
- \* procedures be established to **report adverse health effects** resulting from the use of latex gloves and other latex medical devices, to the FDA medWatch Program: phone (800) FDA-1088, FAX (800) FDA 0178.
- \* cases of latex induced occupational asthma **be reported to** the Massachusetts Department of Public Health, Occupational Health Surveillance Program at 617-624-5637.

### The Massachusetts Nurses Association recommends that all health care institutions:

- \* develop latex allergy committees with representation from latex allergic staff; administration; risk management; legal; occupational health; facility safety officer; staff education; nursing; materials management; laboratories; environmental/housekeeping/dietary services; radiology; respiratory therapy; pharmacy; operating room; IV therapy; physicians from surgery, medicine, pediatrics: and infection control to:
  - identify products that contain latex, including gloves and other medical devices
  - locate non-latex alternatives

- plan, implement, and evaluate the use of non-latex alternatives.
- \* designate a **resource nurse**, with specific knowledge of latex allergy and non-latex alternatives to be an institutional resource and to facilitate the work of the latex allergy committee.
- \* develop and implement **policies** regarding occupational latex allergies that will:
  - identify and implement measures to prevent sensitization and reactions by employees and patients.
  - create a system for early identification, referral and tracking of personnel with symptoms of latex allergy.
  - implement appropriate procedures for accommodation and/or relocation of employees who become allergic to latex
  - create provisions for compensation, benefits, health insurance, short term and long term leave, rehabilitation, and vocational training, as appropriate for nurses and others who have become sensitized as a result of work related exposures to latex.
  - identify the appropriate treatment and protection of latex allergic patients (many of whom may be nurses and other health care workers).
- \* develop **support groups** for staff, as well as patients and families who are affected by latex allergy.

### The Massachusetts Nurses Association supports and encourages:

- \* research to assess the history, prevalence, pathogenesis, and progression of latex allergy, as well as intervention measures for this serious occupational illness.
- \* research to develop and determine the efficacy of alternatives to natural rubber latex gloves and other latex medical devices.
- \* efforts to increase **public awareness** of latex allergy.
- \* labeling of consumer products containing latex.

### **Rationale**

The problems associated with the use of latex gloves, and the use of other latex products and medical devices, particularly those which come in contact with mucosa or are used intravenously, are serious, potentially crippling, and even life threatening. Only with increased awareness, education, reporting, and support, will health care practitioners be enabled to protect themselves, their co-workers and their patients from sensitization and subsequent potentially life threatening reactions to latex.

The Massachusetts Nurses Association Latex Allergy Position Statement was developed in spirit and cooperation with Massachusetts Emergency Nurses Association Committee on Latex Allergy and the Emergency Nurses Association Position Statement on Latex Allergy.

### References

- 1. Kinnaird SW, McClure N, & William S. Latex allergy: An emerging problem in health care. Neonatal Network 1995:14:33-38.
- 2. Sussman G & Gold M. Guidelines for the management of latex allergies and safe latex use in health care facilities. American College of Allergy, Asthma & Immunology 1996: 1-25.

- 3. Hunt LW, Fransway, AF, Reed CF, Miller LK, Jones RT, Swanson MC, et al. An epidemic of occupational allergy to latex involving health care workers. Journal of Occupational and Environmental Medicine 1995: 37:1204-1209.
- 4. Sussman GL, Lem D, Liss G, & Beezhold D. Latex allergy in housekeeping personnel. Annals of Allergy and Asthma Immunology 1995:74:415-418.
- 5. Gehring LL, Fink JN, Kelly KJ. Evaluation of low allergenic gloves in latex sensitive patients [abstract]. Journal of Allergy and Clinical Immunology 1996: 97:186.
- 6. Sussman G, Liss GM, Deal K, Brown S, Cividino M, Siu S, et al. Incidence of latex sensitization among latex glove users. Journal of Allergy and Clinical Immunology 1998: 101:171-178.
- 7. US Department of Labor, Occupational Safety and Health Administration OSHA Instruction CPL 2-2.448, Office of health compliance assistance. Feb.20, 1990.
- 8. Meeropol E, Kelleher R, Bell S, & Leger R. 1990. Allergic reaction to rubber in patients with myelodysplasia. New England Journal of Medicine 1990: 323:2072.
- 9. Kelly K, Pearson M, & Kurup V. A cluster of anaphylatic reactions in children with spina bifida during general anesthesia: Epidemiologic features, risk factors, and latex hypersensitivity. Journal of Allergy and Clinical Immunology 1994: 94:53-61.
- 10. Arellano R, Bradley J, & Sussman G. Prevalence of latex sensitization among hospital physicians occupationally exposed to latex gloves. Anesthesiology 1992: 77:905-908.
- 11. Turjanmaa K. Incidence of immediate allergy to latex gloves in hospital personnel. Contact Dermatitis 1987: 17:270-275.
- 12. Heese KA, Peters KP, Stahl IJ, Koch HU, & Hornstein OP. Haufigkeit und Zunahme von Typ 1-Allrgien gegen Gummihandschuhe bei Zahnmedizinstudenten. Hautarzt 1995:46:15-21.
- 13. Lagler F, Vervloet D, Lhermet I, Poyen D, & Charpin D. Prevalence of latex allergy in operating room nurses. Journal of Allergy and Clinical Immunology 1992: 90:319-322.
- 14. Yassin MS, Lierl MB, Fischer TJ, O'Brien K, Cross J, & Steinmetz C. Latex allergy in hospital employees. Annals of Allergy 1994:72:245-249.
- 15. Ownby DR, Ownby HE, McCullough TA, & Shater AW. The prevalence of anti-latex IgE anti-bodies in 1000 volunteer blood donors [abstract]. Journal of Allergy and Clinical Immunology 1994: 93:282.
- 16. LeBerthon B, Glovsky MM, Miguel A, Weiss J, & Cass G. Latex antibody in asthmatics and blood donors and latex allergens in paved road dust and airborne particles in Los Angeles [abstract]. Journal of Allergy and Clinical Immunology 1996: 97:324.
- 17. Tarlo SM, Wong L, Roos J, & Booth N. Occupational asthma caused by latex in a surgical

- glove manufacturing plant. Journal of Allergy and Clinical Immunology 1990: 35:626-631.
- 18. Shield SW, & Blaiss MS. Prevalence of latex sensitivity in children evaluated for inhalant allergy. Allergy Proceedings 1992:13:129-131.
- 19. Moneret-Vautrin DA, Beaudouin E, Widmer S, Mouton C, Kanny G, Prestat F, et al. Prospective study of risk factors in natural rubber latex hypersensitivity. Journal of Allergy and Clinical Immunology 1993: 92:668-677.
- 20. Personal communication, Medic Alert Foundation, January 1998.
- 21. US Department of Labor, Occupational Safety and Health Act of 1970, Section 5 (a)(1).

### **TOP TEN REASONS TO AVOID LATEX GLOVES\***

Congress on Health and Safety

Most nurses and other health care workers are still exposed to natural rubber latex every day, primarily through the use of latex gloves.

- 10. NIOSH says "exposure to latex can be hazardous to your health".1
- 9. Repeated exposure to latex can cause allergic reactions.<sup>1</sup>
- 8. 10 to 17 % of health care workers test positive for latex allergy.<sup>2</sup>
- 7. Latex allergy can make your face itch and swell.<sup>2</sup>
- 6. Latex allergy can make your nose run.<sup>1</sup>
- 5. Latex allergy can give you asthma.<sup>1</sup>
- 4. Latex allergy can make your hands itch and crack.<sup>1</sup>
- 3. Latex allergy can cause anaphylaxis (shock).<sup>2</sup>
- 2. OSHA says synthetic glove material is appropriate protection.<sup>2</sup>
- 1. Latex Allergy can kill you.<sup>2</sup>
- \* Avoid the use of natural rubber latex gloves in your work environment and in your personal health and dental care.
- 1. National Institute of Occupational Safety and Health, NIOSH Alert, Preventing Allergic Reactions to Natural Rubber Latex in the Workplace, DHHS (NIOSH) Publication No. 97-135, June 1997
- 2. Occupational Health and Safety Administration Technical Information Bulletin Potential for Allergy to Natural Rubber Latex Glove and other Natural Rubber Products. Information date: 19990412 (April 12, 1999)

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### **MODEL CONTRACT LANGUAGE**

Congress on Health and Safety

### **Prevention of Latex Allergy and Accommodation of Nurses with Latex Allergy**

### Section I

The hospital and the MNA bargaining unit agree that

Use of non-latex gloves – non-latex (synthetic) gloves, with effective barrier protection as applicable to the task, will be utilized in all patient care areas, including the OR, and in other departments of this hospital such as the dietary, housekeeping, and maintenance. This includes non-sterile exam gloves, sterile procedure and surgical gloves and gloves packaged in sterile and non-sterile kits.

**Latex Balloons** – will be eliminated from sale or display in the hospital. A notice of this will be prominently posted for information of patients and visitors.

Latex Allergy Resource Nurse – a registered nurse will be designated as an institutional resource. This should be someone with specific knowledge of latex allergy and non-latex (synthetic) alternatives to facilitate the work of a latex allergy committee and the safety of workers and patients, assisting in accommodating patients and nurses with latex allergy and providing education related to latex allergy to all groups of workers and patients.

**Hospital Latex Allergy Committee** – a latex allergy committee will be developed to create an environment safe for nurses, as well as patients. It will include: at least one nurse and one physician with Type I Latex Allergy, and representatives from administration, risk management, legal, occupational health facility safety officer, staff education, nursing management, materials management, laboratories, environmental/housekeeping/dietary services, radiology, respiratory therapy, pharmacy, operating room, IV therapy, physicians from surgery, pediatrics, infection control.

### The committee will:

- Identify products that contain latex and locating alternatives
- Plan, implement and evaluate these alternatives
- Identify and implement measures to prevent sensitization and reactions by nurses
- Create a system for early identification, referral and tracking of nurses with latex allergy
- Implement appropriate procedures for accommodation and/or relocation of nurses who become allergic to latex
- Create provisions for compensation, benefits, health insurance, short term and long term leave, rehabilitation, and vocational training, as appropriate, for nurses who have been sensitized as a result of work related exposures to latex.

**Assist nurses with latex allergy** – *Accommodation:* Nurses who have become allergic to latex will be accommodated through the activities of the latex allergy resource nurse, Compensation: Nurses: *Medical Care:* Nurses will receive care from a specialist, of the nurses choosing, with expertise in latex allergy.

**Education of Nurses** – Provide at least annually, to all nurses, education about latex allergy to include routes of exposure, sensitization, and reactions to latex, emphasizing the signs and symptoms of systemic and anaphylactic reactions and prevention strategies.

**Massachusetts DPH Reporting OCCUPATIONAL ASTHMA** – evaluate any employee who reports respiratory irritation from any work-related exposure, by a professional health provider. All cases of occupational asthma caused or aggravated by work exposure (including exposure to latex) or working conditions are to be reported to the Massachusetts Department of Health, SENSOR Program at 617/624-5621 as required by Massachusetts law.

**FDA medWatch Reporting** – report adverse health effects resulting from the use of latex gloves and other latex medical devices, and the make and model of those gloves or devices will be reported to the FDA MedWatch Program: Phone: 800-FDA-1088; FAX 800-FDA-0178.

**Support Groups** – support groups will be developed for nurses affected by latex allergy.

Existing contract language:

**Latex Committee** – The Hospital will appoint two nurses chosen by the bargaining unit to the Latex Committee. Paid release time will be provided for committee business as per the current practice.

**Accommodation for Latex Sensitivity** – If a nurse requires an accommodation for latex sensitivity, the Employer is committed to working to provide that accommodation.

Cambridge Hospital, Article XXV, Section 25.05, 25.06, April 2003

### **Background Information for This Proposal**

- Latex allergy has become an increasingly serious threat to nurses and others exposed to natural rubber latex, particularly with frequent or prolonged exposure and particularly with exposure to mucous membrane or disrupted skin, and with inhalation. Experts believe that latex gloves, particularly powdered latex gloves, have been a significant source of allergen exposure among health care workers and a most important cause of sensitization in the health care setting.
- Sensitization occurs through contact with latex proteins. Powder on gloves is a vehicle for sensitization. Powder increases the probability of sensitization as it allows direct contact of aerosolized latex proteins with mucous membranes of the eyes and respiratory tract.
- Reports of allergic reactions to latex have increased dramatically. Individuals who are frequently exposed to latex products, may become sensitized (gradually made allergic), with resulting reactions varying from irritating, to life threatening.
- These reactions are wide ranging and include such symptoms as contact dermatitis, conjunctivitis, urticaria, latex induced anaphylactic shock, asthmatic reactions, airway obstruction, and even death. No desensitization exists for latex allergy. Each systemic reaction comes with less provocation; each reaction is worse.
- There is no research data to suggest that even low protein, low powder latex gloves are safe for use with latex allergic patients or staff. To the contrary, while low protein, low powder gloves may decrease the rate of sensitization, there is data, and a growing number of compelling anecdotal reports to suggest that health care workers and patients can have serious reactions to latex gloves, regardless of the allergenicity and powder content.

- CDC, FDA, OSHA, and NIOSH, make no distinction between latex and synthetic gloves. They emphasize that glove material should be of inappropriate material, intact, and of appropriate quality.
- Latex allergy affects from 18-73% of patients with spina bifida and congenital genitourinary abnormalities, because these patients have been sensitized when latex urinary catheters and latex gloves contacted mucosal tissue. From 8-17% of health care workers, including nurses have latex allergy because these individuals have a high incidence of contact with highly allergenic latex gloves and latex protein aerosolized with glove powder, exposing eyes and respiratory tracts. Out of a group of 1000 volunteer blood donors, 6.5% 14% were allergic to latex. Eleven percent of rubber industry workers are allergic to latex. Of atopic patients, or patients who have a tendency toward allergies, 6.8% have latex allergy. Of patient's who have undergone multiple procedures and had mucosal tissue contact with latex gloves, 6.5% have latex allergy.
- Appropriate Barrier Protection- a review of the barrier protection properties of synthetic gloves can be located at the website of U. Mass Lowell Sustainable Hospitals Project at www.sustainablehospitals.org.

Update 0206

# WORKPLACE HAZARDS TO NURSES AND OTHER HEALTHCARE WORKERS: PROMISING PRACTICES FOR PREVENTION

### **Preventing Needlestick Injuries in Acute Care Settings • June 7, 2007**

**Speaker:** Angela Laramie, MPH, Massachusetts Department of Public Health, Occupational Safety and Health Program

MNA Facilitators: Elizabeth O'Connor, RN, Kate Opanasets, RN, Christine Pontus, RN

### **Statement of the Problem**

Healthcare worker exposures to bloodborne pathogens as result of injuries caused by needles and other sharp devices are a significant public health concern. The U.S. Centers for Disease Control and Prevention (CDC) estimate that, nationwide, between 600,00 and 800,000 percutaneous injuries from contaminated sharp devices occur each year in health care; approximately half are sustained by hospital workers.

Sharps injuries are preventable and healthcare facilities are required by state and federal regulations to implement comprehensive plans to reduce these injuries.\*

\* Sharps Injuries among Hospital Workers in Massachusetts, 2004, Findings from the Massachusetts Sharps Injury Surveillance System, Executive Summary, Massachusetts Department of Public Health, Occupational Health Surveillance Program, April 2007

**JCAHO Regulation that relates to this topic:** *EC.1.10 Hospitals must manage safety risks, EC 1.20 Hospitals must maintain safe environments* 

**OSHA Standard that addresses this topic:** 1910.1030 Bloodborne Pathogens Standard, General Duty Clause 5A-1- Employers must furnish a place of employment free from recognized hazards

OSHA recommended steps to provide a safe work environment - A. Management support and worker involvement, B. Hazard assessment, C. Training and education, D. Program evaluation

Items discussed by the breakout session participants:

### How are patients, visitors or others affected?

- Anyone can be injured by improper disposal of sharps
- The injuries are both physical and psychological and have long term consequences, particularly if the injury results in transmission of infection
- The source patient and the source's family worry about being blamed
- A patient may worry that the healthcare worker is a source of injury to them

### What are some good practices that you have seen in your workplace?

- Needle boxes in each room which are emptied/replaced regularly when 2/3 full
- Availability of travel needle boxes
- Retractable needles (one giant step for mankind!)
- Product evaluation committees that include bedside nurses as members
- · Comprehensive staff education
- Utilizing product representatives to work with nursing staff and nurse educators
- Staff education follow-up to assure that all employees have been educated

- Promoting a culture of safety
- Transfer trays and neutral zones in the OR

### What are some of the barriers and opportunities associated with change?

### Barriers:

- Conventional devices still in use
- Private "stash" of conventional devices
- Doctor's demands for specific products
- Safety committee approvals circumvented
- Resistance to learning and change
- Time consuming/computerized injury reporting systems

### Opportunities:

- Establishing resource teams
- Tying in skills with new devices in annual review of competencies

### What are some concrete steps that could be taken to address this problem?

- Specific injury follow-up protocol that is communicated to all employees at risk (example Code Stik is used at one hospital)
- Utilize resources www.fda.gov/maude defective medical equipment reporting system
- Interview all employees who have been injured
- Provide psychological counseling for injured employees

# Who are the management people at your workplace who are responsible for worker health and safety and who are 5 people in your workplace who would help to address the issue?

- This question was not addressed in this session
- Addressing and preventing needlestick injuries in healthcare settings is required by law (OSHA 1910.1030 Bloodborne Pathogens)
- Participants agreed that the law is followed closely in most of the facilities represented at this conference

### **MODEL CONTRACT LANGUAGE**

Congress on Health and Safety

# Preventing exposure to bloodborne pathogens and post exposure evaluation and follow-up

Section C

HIV, HBV and HCV and other infectious diseases are considered bloodborne pathogens transmitted through blood and other body fluids and pose a risk to the health of nurses who may be exposed through injuries from needles, sharps and splashes to the eyes, nose and mouth or direct contact to non-intact skin.

### To prevent these exposures and provide aftercare to nurses who may be exposed the hospital will:

- 1. develop and implement a quality improvement plan to reduce the risk for these injuries.
- 2. agree to having at least two nurses appointed by the bargaining unit to be on the committee that develops the plan (the exposure control plan according to OSHA).
- 3. provide HBV vaccine for all nurses according to the OSHA Bloodborne pathogens standard.
- 4. provide a post exposure evaluation and follow-up plan consistent with the requirement of the Centers for Disease Control and Prevention as required by OSHA, available to all nurses 24/7.
- 5. provide job accommodations according to the ability of any nurse who following a reported exposure, seroconverts to positive for any bloodborne disease.

### **Background Information**

- 1. In addition to needles, sharps include but are not limited to lancets, broken glass, scalpels, scissors, towel clips, etc.
- 2. NIOSH reports that nurses and other health care workers sustain 600,000 one million needlestick and sharps injuries each year resulting in at least 1,000 new cases of HIV and HBV, HCV. In 2002, according to the Massachusetts Department of Public Health, there were 3,413 needlestick and sharps injuries reported in MA Hospitals.
- 3. A bill designed to identify and reduce needlestick and sharps injuries in Massachusetts, H.969 "An Act Relative to Needlestick Injury Prevention" became law in August, 2000."
- 4. OSHA recommends a four-pronged approach to help minimize the risk of occupational exposure to bloodborne diseases due to needlestick injuries that includes implementation of engineered safety devices, inclusion of frontline healthcare workers on evaluation committees, and exposure control plan to reflect how employers implement new engineering devices, and required recordkeeping of all injuries resulting in contaminated needles and sharps.

Update of Section C and Section G - 11/05

### **MODEL CONTRACT LANGUAGE**

Congress on Health and Safety

# Insurance to address the event of sero-conversion to HIV or HCV posititve following a work related exposure

Section C-1

Workers Compensation insurance does not meet many of the expenses related to living with the diseases related to bloodborne pathogens such as HIV or HBV.

1. Provide insurance in the amount of \$250,000.00 to any nurse who experiences a sero-conversion to positive for bloodborne diseases following a work related injury.

### 2. Existing contract language:

### Work-Related HIV and Hepatitis C Benefit Plan

- A. The Hospital will participate in the Work-Related HIV Benefit Plan and the Work-Related Hepatitis C. benefit plan established for employees of Harvard University and of the Harvard-affiliated medical institutions. The Hospital will continue its participation in the Plans, as they may be changed from time to time. It is understood that the Hospital does not itself operate the Plans. The benefits and eligibility requirements under the Plans shall be as fully provided in the Plan Documents. The benefits under said Plans shall be subject to such conditions and limitations as may be set forth in the Plan documents. Any dispute concerning eligibility for or payment of benefits under the Plans shall be settled in accordance with the Plan Documents and shall not be subject to arbitration hereunder.
- B. In the event a nurse is determined to be eligible for the above Work-Related HIV or Hepatitis C Benefit, such nurse shall be entitled to continue her/his participation in her or his current medical insurance plan pursuant to Section 9.1 or 9.2 of the 2000 -2002 Agreement. Such participation shall continue until such time as the nurse becomes eligible for Medicare. Such participation is subject to any changes or modifications to said medical insurance plans or to this Agreement.\*

Update 11/05

<sup>\*</sup> Brigham and Women's Hospital, Section IX. 9.7, October 1, 2004

# WORKPLACE HAZARDS TO NURSES AND OTHER HEALTHCARE WORKERS: PROMISING PRACTICES FOR PREVENTION

### **Preventing Infectious Disease Transmission • June 8, 2007**

Speaker: Thomas P. Fuller, Sc. D. CIH

MNA Facilitators: Kathleen McDonald, RN, Kathleen Opanasets, RN, Christine Pontus, RN

### **Statement of the Problem**

Health care associated infection remains a major issue of patient safety. It complicates a significant proportion of patient care deliveries, adds to the burden of resource use, and contributes to unexpected deaths. Early infection control pioneers showed that surveillance and prevention programs can be successful and have set the scene for today's infection control activities. Parameters for success include those to recognize and explain health care associated infections and implement interventions to decrease infection rates and limit antimicrobial resistance spread.\*

\*Keynote opening lecture: 2<sup>nd</sup> International Congress of Asia Pacific Society of Infections Control, Singapore, March 2004

Literature is practically non-existent on the frequency and severity of infectious disease transmission and infection control programs that address issues and concerns of nurses and other healthcare workers being made ill in the course of their employment.

**JCAHO Regulation that relates to this topic:** *EC.1.10 Hospitals must manage safety risks, EC 1.20 Hospitals must maintain safe environments* 

**OSHA Guideline that addresses this topic:** General Duty Clause 5A-1- Employers must furnish a place of employment free from recognized hazards, CDC and NIOSH have published guidelines and fact sheets for workers and employers

OSHA recommended steps to provide a safe work environment - A. Management support and worker involvement, B. Hazard assessment and control, C. Training and education, D. Program evaluation

Items considered by the breakout session participants:

### How are patients, visitors or others affected?

- Visitor anxiety when they see the contact/respiratory precaution signs
- Prolonged hospitalization
- Increased costs
- Lost income
- Lost work
- Need for home care

### What are some good practices that you have seen in your workplace?

- Isolation precaution carts that contain all that is needed for patient care
- Proactive infection control nurse
- Swabbing fingernails and culturing clean hands as an educational/compliance activity
- Skills training with red dye/infrared lights to reinforce compliance with hand washing

### What are some of the barriers and opportunities associated with change?

### Barriers:

- Inadequate staff in home care, infection control and on inpatient staff
- Inadequate numbers of equipment and materials so that all are shared by infected and non-infected patients
- Unable to access infectious disease policies not available on line
- Each infection requires different work practices negative pressure rooms, personal protective equipment, equipment not always available
- Decontamination procedures and substances differ for different infections concise and written policies not always available
- Frequent language barriers with housekeeping staff interpreters seldom available
- · Lack of supervision of housekeeping staff
- Physicians resistance to adhere to policies
- Increase costs associated with ideal infection control practices

### Opportunities:

Not addressed in this session

### What are some concrete steps that could be taken to address this problem?

- Infectious disease MD to lecture other MD's
- Infection control RN to provide educational programs for housekeeping specific language interpreters used when necessary
- Use cost benefit data to support implementing infection control activities
- Look up the regulations and communicate to management
- Use contract language to put staff nurse(s) on facility safety committee
- Use environmental monitoring of air and surfaces to identify infectious contamination
- Use appropriate PPE
- Use appropriate UV radiation devices to reduce the germ load
- Improve engineering controls for adequate air exchanges and ventilation
- Use positive and/or negative pressure rooms when applicable

# Who are the management people at your workplace who are responsible for worker health and safety and who are 5 people in your workplace who would help to address the issue?

- Infectious disease and infection control staff doctors and nurses, employee/occupational health staff, Human Resources, Risk Management, Housekeeping, Supervisors and managers, Director of Nurses, Union representative, Patient advocates, Industrial hygienist,
- OSHA as a resource, Utilize MNA Health and Safety Congress and staff as resources

To Mass Nurse Advocate 01/07/08

# WORKPLACE HAZARDS TO NURSES AND OTHER HEALTHCARE WORKERS: PROMISING PRACTICES FOR PREVENTION

### **Preventing Home Care Injuries • June 7, 2007**

Speaker: Stephanie Chalupka, EdD, APRN, BC, CNS, FAAOHN, Pia Markkenen, ScD

MNA Facilitators: Rosemary O'Brien, RN, Judy Rose, RN, Mary Bellistri, RN

### **Statement of the Problem**

The home health care (HHC) sector represents 5.8% of overall U.S. health care employment and is one of the fastest growing parts of the economy. HHC clinicians face serious occupational hazards including violence in neighborhoods and homes, lack of workstations, heavy patient lifting, improper disposal of dressings or sharps medical devices, and high productivity demands. The social context of the home-work environment challenges the implementation of preventive interventions to reduce occupational hazards in HHC. \*

Drs. Markannen, Quinn, Chalupka, \* J Occup. Environ Med. 2007;49:327-337

**JCAHO Regulation that relates to this topic:** Joint Commission Regulations do not address home care specifically, but certain regulations apply **if the home care agency is a hospital supported program.** EC. 1.10. Hospitals must manage safety risks. EC. 1.20 Hospitals must maintain safe environments

**OSHA Standards that address this topic:** OSH Act -5A-1 General Duty Clause - Employers must furnish a place of employment that is free from recognized hazards, 1910.1030 Bloodborne Pathogens Standard, Preventing Workplace Violence in Healthcare and Social Service Settings

OSHA recommended steps to provide a safe work environment - A. Management support and worker involvement, B. Hazard assessment, C. Training and education, D. Program evaluation

Items considered by the breakout session participants:

### How are patients, visitors or others affected by this issue?

Patients, family members and healthcare providers are affected by hazards in the home care including:

- Improper disposal of sharps, needles, lancets and wound care implements providing opportunities for needlestick injuries to all
- Sharps used on pets (administering insulin) are also disposed of improperly
- Tripping hazards from clutter in the home, scatter rugs, electrical and extension cords
- Exposure to insects, rodents and animal droppings
- Medical equipment used in home care can be defective
- Potential for fire and electric shocks posed by medical equipment and extension cords

### What are some good practices that you have seen in your workplace?

- Ergonomic initiatives such as training on equipment designed to facilitate patient transfers from bed to chair
- Parking spaces made available in multi-resident dwellings to reduce the distance that nurses must walk while carrying their bags of heavy equipment

- Information on the local sex offender registry to warn nurses of the potential for violence and to assure this information is communicated to all caregivers, including home health aides
- Agency provided security services when requested
- Agencies encouraging nurses to report injuries
- Agencies acting upon injury reports so that hazards can be addressed and preventive steps taken

### What are some of the barriers and opportunities associated with change?

### Barriers:

- Lack of training in personal/workplace safety
- Organizations do not allocate time or funds for staff to attend training programs that are available
- Employees chastised for not attending safety programs even though they were on duty at the time the program was presented and were not provided time to attend

### Opportunities:

• Knowledge and training in occupational safety that provide opportunities for change

### What are some concrete steps that could be taken to address this problem?

• Include field staff and home health aides on committees so that the needs found in the field are addressed and the training is relevant

# Who are the management people at your workplace who are responsible for worker health and safety and who are 5 people in your workplace who would help to address the issue?

- Supervisors, managers, and representatives from human resources, risk management and the admissions department
- Co-workers who have been affected by unsafe conditions will often advocate for improving the work environment
- Local union representatives and union staff should be included in discussions that address workplace safety

# WORKPLACE HAZARDS TO NURSES AND OTHER HEALTHCARE WORKERS: PROMISING PRACTICES FOR PREVENTION

### **Preventing Workplace Violence • June 8, 2007**

**Speaker:** Jane Lipscomb PhD, RN, University of Maryland, Department of Family and Community Health

MNA Facilitators: Rosemary O'Brien RN, Noreen Hogan RN, Janice Homer RN

### **Statement of the Problem**

The Department of Justice National Crime Victimizations Survey (NCVS) for the years 1993 through 1999 found, on average, 1.7 million episodes of victimization at work per year (Duhart, 2001) the health care sector continues to lead all other industry sectors in the incidence of nonfatal workplace assaults. In 2000, 48% of all nonfatal injuries against workers occurred in the health care sector (BLS 2001). Nurses, nurse's aides and orderlies suffer the highest proportion of these injuries. Non-fatal assaults on health care workers include assaults, bruises, lacerations, broken bones and concussions...\*

\*McPhaul, PhD(c), RN, MPH, Lipscomb, Jane PhD, RN September 30, 2004 http://www.mursingworkd.org/ojin/topic25/tpc25\_6.htm

**JCAHO Regulation that relates to this topic:** *EC.1.10 Hospitals must manage safety risks, EC 1.20 Hospitals must maintain safe environments* 

**OSHA Guideline/Standard that address this topic:** Preventing Workplace Violence in Healthcare and Social Service Settings, General Duty Clause 5A-1- Employers must furnish a place of employment free from recognized hazards

OSHA recommended steps to provide a safe work environment - A. Management support and worker involvement, B. Hazard assessment and control, C. Training and education, D. Program evaluation

### Items considered by the breakout session participants:

- 1. How are patients, visitors or others affected?
  - Restraint reduction policies can cause increased risk of injuries for other patients and staff
  - Vicarious traumatization can occur in those who witness violence
- 2. What are some good practices that you have seen in your workplace?
  - Earlier intervention training
  - Task force to analyze the problem
  - More secure environment
  - Shuttle services to protect staff in parking lots
  - Culturally sensitive/competency programs

### What are some of the barriers and opportunities associated with change?

### Barriers:

- Insufficient time to interact with patients effectively
- No laws to protect staff
- Lack of understanding of HIPAA misuse of HIPAA as a reason to prevent reporting violence to authorities, Visitors are not covered by HIPAA
- Management unwilling to address the problem
- Erroneous assumption that "It's part of the job"

### Opportunities:

Not addressed in this session

### What are some concrete steps that could be taken to address this problem?

- Organize a team to look at the problem
- Collect data, assess work area, analyze the findings, evaluate all to develop prevention strategies
- Consider patient safety as well as staff safety when collecting data and assessing work area
- Develop educational and prevention programs that are site/department specific
- Develop post response programs Critical Incident Stress Management
- Work with local police, District Attorney and patient advocacy groups
- Collaborate with legislators for new laws related to workplace violence education and prevention
- Contact OSHA
- Support MNA Workplace Violence Prevention and Felony to Assault a Healthcare Worker legislative efforts
- Utilize external expert resources Dr. David Yamada at Suffolk University Bullying, OSHA
  Compliance Assistance Workplace Violence Prevention Guidelines, MNA Workplace Violence and Abuse Prevention Task Force, MNA Health and Safety Staff, MA Victim Bill of
  Rights, MA Victim and Witness Advocacy Program

# Who are the management people at your workplace who are responsible for worker health and safety and who are 5 people in your workplace who would help to address the issue?

- Occupational Safety Professionals
- Human Resource Management
- Supervisors, Department Managers

### *Those who would help:*

- · Nurses and others who have been affected
- Union representatives

# POSITION STATEMENT ON WORKPLACE VIOLENCE AND ABUSE PREVENTION

Prepared by members of the MNA Workplace Violence and Abuse Prevention Task Force

### STATEMENT OF THE PROBLEM

Violence pervades many aspects of American society as well as the international community. Health-care facilities known as "caring places", and once considered immune, are now frequently the site of violence.

The National Institute of Occupational Safety and Health (NIOSH) at the U. S. Department of Health and Human Services, Centers for Disease Control, defines workplace violence as violent acts, including physical assaults and threats of assaults, directed toward persons at work or on duty. The U. S. Department of Justice defines a threat as a statement or expression of intention to hurt, destroy, punish, etc. as in retaliation or intimidation. It is widely recognized that following these violent events, many nurses and other healthcare workers often leave their jobs in healthcare and never return.

The healthcare setting was once perceived as a refuge from the elements outside, as a place to treat the sick and injured. Now it has joined the many workplaces that experience more than 1,000,000 assaults annually. In fact, healthcare and social service workers have the highest incidence of injuries from workplace assaults. Emergency departments and psychiatric units have always witnessed violence. Current trends in patterns indicate that violence now pervades throughout the hospital.

### PREVALENCE OF VIOLENCE IN HEALTHCARE SETTINGS

The U.S. Department of Labor, Bureau of Labor Statistics (BLS) data reveal that healthcare and social service workers are at high risk of violent assault at work. In 2000, heathcare and social service workers overall had an incidence rate of 9.3 per 10,000 for injuries resulting from assaults and violent acts. This compares to an overall private sector injury rate from assaults and violent acts of 2 per 10,000 full time workers.<sup>3</sup>

Between 1993 and 1999, violent victimization, in the workplace and against nurses reached 429,100 reported events. Workplace violence and victimization rates for nurses were 72% higher than for medical technicians and more than twice the rate of other medical field workers.<sup>4</sup>

According to the U. S. Department of Justice, Federal Bureau of Investigation, "of greater concern is the likely under-reporting of violence and a persistent perception within the healthcare industry that assaults are part of the job. Under-reporting may

reflect a lack of institutional reporting policies, employee beliefs that reporting will not benefit them, or employee fears that employers may deem assaults the result of employee negligence or poor job performance ".2"

### TRAUMATIC EFFECTS OF VIOLENCE ON PATIENTS

According to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision*, post traumatic stress disorder (309.81) is identified as a disorder that affects a person who has: "1, experienced, witnessed, or were confronted with an event or events that involve actual or threatened death or serious injury or a threat to the physical integrity of self or others and 2, the person's

response involved intense fear, helplessness, or horror".5

These events are known to precipitate a multitude of persistent and debilitating responses. "The traumatic event is re-experienced in one or more of the following ways, recurring and intrusive distressing recollections (and dreams) of the event, intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event or physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event "5"

MNA Task Force members believe that patients suffer secondary traumatization in the same manner and from the same causes as nurses and other healthcare workers who experience or witness workplace violence or abuse.

### **ASSOCIATION POSITION ON PREVENTION**

The MNA believes that employers have a responsibility to provide safe and healthful working conditions in accordance with the Occupational Safety and Health Act of 1970. This includes preventing and addressing conditions that lead to violence and abuse and by implementing effective security and administrative work practices to protect the safety and health of workers.

THE MNA recommends that all healthcare employers implement a Workplace Violence Prevention Program that is consistent with OSHA *Guidelines for Preventing Workplace Violence to Health Care and Social Service Workers* <sup>4</sup>

### OSHA identifies the following key components of a Workplace Violence Prevention Program:

- 1) Management commitment and employee involvement
- 2) Worksite hazard analysis
- 3) Hazard prevention and control
- 4) Safety and health training for workers, managers and supervisors including where and how to report injuries
- 5) Post incident debriefing activities including appropriate evaluation and treatment of all workers affected by an incident of violence
- 6) Accurate recordkeeping and frequent evaluation of the program by employees and management

### Additionally, MNA believes the Workplace Violence Prevention Program should include:

- 7) Policies that address harassment and bullying
- 8) Methods for detection, confiscation and control of firearms and weapons from anyone (other than law enforcement officers) who enter the facility.
- 9) Security guards trained according to national standards

Once workplace hazard analysis has identified incidents of violence and risks for violence, engineering, administrative and work practice controls must be developed to protect workers (and patients). Because incidents and hazards associated with actual or potential violence and abuse differ from one facility to another, each employer must develop an individualized plan.

Each facility should develop a defined plan for the agency's response to any incident of violence, including the right and protection to call the police and file criminal charges against assailants.

Nurses and others should become familiar with their employers' guidelines including policy recommendations, reporting procedures and suggested methods to help prevent and/or reduce workplace violence and abuse.

### WHAT THE UNION CAN DO TO HELP VICTIMS OF WORKPLACE VIOLENCE AND ABUSE

MNA bargaining units are encouraged to address workplace violence and abuse prevention in contract language with their employers. Sample contract language is available by contacting the MNA health and safety program.

Plan a system for addressing Workplace Violence and Abuse and helping those who have become the victims.

### Encourage the victim to:

Report the incident
Talk about the incident
Follow the steps outlined below in *Ten Actions a Nurse Should Take if Assaulted at Work*Contact the MNA Health and Safety Program for support

### Show that you care by:

Providing non-judgmental listening Deflecting self blame Helping with police reports Keep in contact by phone or visiting

Massachusetts General Law (M. G. L. c. 258 B) contains the Massachusetts Victim Bill of Rights, to assure that rights of individuals who are victims of assaults and aggression at work are protected. A copy can be obtained from the Massachusetts Office of Victim Assistance. The Massachusetts Office of Victim (and witness) assistance is available to all who file police or court reports of violence.

### **SUMMARY**

It is the firm belief of the MNA Workplace Violence and Abuse Prevention Task Force members that a Workplace Violence Prevention Program is one step in the process of protecting nurses and other healthcare workers from violence and abuse. Violence and Abuse Prevention Programs must be supportive to workers and avoid blame and retaliation. MNA further recommends that violence aftercare plans identify a debriefing process that includes all workers impacted by a violent incident whether or not they were personally involved in the incident.

### **Resources For Assistance And Information**

Massachusetts Office of Victim Assistance One Ashburton Place, Suite 1101 Boston MA 02108 617-727-5200 627-727-6552 email at mova@state.ma.us

### U.S. Department of Labor OSHA

Springfield Area OSHA Office 1441 Main St. Rm550 Springfield, MA 01103 413-785-0123 www.dol.gov/osha

## **Massachusetts Victim Compensation and Assistance Division Office of the Attorney General** 617-748-3140

# U. S. Attorney's Office Victim/Witness program 617-727-2200

### **Massachusetts Department of Industrial Accidents**

600 Washington Street Boston, MA 02111 617-727-4900

Members of the MNA Workplace Violence and Abuse Prevention Task Force have prepared informational materials for nurses and others to assist with issues of workplace violence and abuse. These materials can be obtained by contacting:

### Massachusetts Nurses Association Health and Safety Program

340 Turnpike Street
Canton, MA 02021
781-821-4625
or 800-882-2056
www.massnurses.org
ebain@mnarn.org or cpontus@mnarn.org

### **REFERENCES**

- (1) U.S. Dept. of Health and Human Services, Centers for Disease Control, National Institute of Occupational Safety and Health, (NIOSH) Violence, Occupational Hazards in Hospitals, April 2002
- (2) U. S. Department of Justice, Federal Bureau of Investigation, *Workplace Violence, Issues in Response*, 2004 p 24, p 54
- (3) U. S. Department of Labor, Occupational Safety and Health Administration, *Guidelines for Preventing Workplace Violence for Health Care and Social Service Workers*, (OSHA 3148), 2003
- (4) U. S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, *Special Report, National Crime Victimizations Survey, Violence in the Workplace*, 1993-99, December 2001 190076
- (5) American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision, 2000

# TEN ACTIONS A NURSE SHOULD TAKE IF ASSAULTED AT WORK

- 1. Get help. Get to a safe area.
- 2. Call 911 for police assistance, (it is your civil right to call police).
- 3. Get relieved of your assignment.
- 4. Get medical attention.
- 5. Report the assault to your supervisor and union.
- 6. Get counseling or assistance for Critical Incident Stress Debriefing (CISD) to address concerns related to Post Traumatic Stress Disorder (PTSD).
- 7. Exercise your civil rights, file charges with the police.
- 8. Get copies of all reports and keep a diary of events.
- 9. Take photographs of your injuries.
- 10. Return to work only when you feel safe and supported

Permission granted to reprint with acknowledgement Massachusetts Nurses Association Workplace Violence and Abuse Prevention Task Force Updated: 03/06

# **HOW TO RECOGNIZE AND RESPOND TO BULLYING AT WORK**

Bullying is a form of abuse and harassment. The bully at work could be your co-workers, managers, supervisors, doctors, patients and/or their families.

Examples of Bullying include:

- Verbal and physical threats/often behind closed doors
- Unfair use of discipline
- Blocking promotions or requests for time off
- Excessive supervision
- Undermining responsibility or being set up to fail
- · Spreading malicious rumors
- Physical Isolation from co-workers
- Verbal abuse such as:

Swearing, racial or sexual slurs, angry intimidating words, verbal humiliation and/or demeaning comments in public or private

# Don't ignore the behavior-Don't suffer alone

Tell others you trust and ask for help to develop a plan to address the bullying

Suggested responses include:

- Keep a diary with dates, incidents, behaviors and comments
- Ask people you trust for help: co-workers, union representatives, your manager, human resource personnel, the worker ombudsman if available
- Address the situation by speaking to the bully

Let it be known that the behavior is unacceptable

- For additional direction and emotional support contact an available Employee Assistance Program through your employer or through your personal health insurance company
- Learn all you can about workplace bullying one very useful resources is www.bullybusters.org

Fact Sheet prepared by the MNA Workplace Violence and Abuse Prevention Task Force in cooperation with Chris King, RN Student, Regis College

# **HOW BULLIES PICK THEIR TARGETS**

Research shows that bullies find their targets systematically. That system follows the dynamics of power and control, i.e. the need to exert power over someone they believe they can control.

Bullies often believe themselves empowered due to size, gender or societal or work related authority. Research identifies the frequent roles of big/small, male/female, doctor/ nurse, supervisor/worker as frequent bully/target dynamic.

It is important for the person who is the target of the bully whether at work, at home or on the street, to understand the dynamic that is at work in their situation as they attempt to work through and eliminate this abuse.

## **Co-worker Response**

As with any event of workplace violence it is important to listen to the victim, encourage reporting and developing a response plan and most of all, be kind and available when the victim needs to talk.

# **Employer Response**

Currently bullying, in and of itself does not reach to the level of a legal punishable offense. Your employer's sexual harassment and workplace violence prevention policies may apply in some situations.

# **Additional Resources**

- www.bullybusters.org
- The Bully at Work, Gary Namie, Ruth Namie, April 2000, available in paperback
- Power Freaks, David L. Weiner, Robert E. Lefton, September 2002, available in paperback
- Your Boss is Not Your Mother, Debra Mandel, PhD, March 2006, available in paperback

Permission granted to reprint with acknowledgement Massachusetts Nurses Association 06/06

Congress on Health and Safety

# Preventing Workplace Violence and Assisting Nurses Who Become Victims of Workplace Violence

Section D

Violence is aggressive and abusive behavior from patients, visitors, other workers, supervisors, managers, or even patient's family members. Violence is defined as, but not limited to, physical and verbal assaults, battering, sexual assaults, or verbal or non-verbal intimidation.

The hospital will initiate strong violence and abuse prevention programs including:

- 1. develop and implement policies and procedures for the prevention of violence or potential violence.
- 2. provide training programs on violence prevention and verbal de-escalation.
- 3. develop a trained Response Team, available 24 hours and 7 days a week that, similar to a code team, that can be immediately called to assist a nurse in any situation that involves violence.
- 4. report the injury or illness to the appropriate agencies i.e., Department of Industrial Accidents, police, etc.
- 5. provide the affected nurse(s) with medical and psychological services as necessary
- 6. assure that ID badges will not reveal the nurse's last name.
- 7. develop and implement policies and procedures relating to the detection, removal, storage and disposition of any weapons found on patients, family members, visitors or others
- 8. provide security surveillance of hospital grounds and parking areas. Both will be well-lighted. Upon request, the hospital will provide escorts to cars and physical protection to workers if necessary.
- 9. provide workers injured by workplace violence with all necessary medical and psychological services.
- 10. assure that all employees have the right to police protection (call 911) if an assault is being/has been committed. The employer will support the employee in this endeavor, and throughout the police/court process.
- 11. assure that all affected employees are provided with copies of any documents relating to any incident of violence that affects them whether as victims or witnesses of the incident.
- 12. assure that all incidents of violence will be reported to the facility Safety Committee for review and appropriate intervention.

# **Existing contract language:**

#### Workplace Violence

The Medical Center will initiate a policy and procedure for the prevention of violence or potential violence. It will also give training programs on how to safely approach potential assaults and prevent aggressive behavior from escalation into violent behavior. The Medical center will endeavor to form a trained Response Team, available 24 hours a day and 7 days a week that, similar to a code team, can be immediately called to assist a nurse in any situation that involves violence. The employers will report the injury or illness to the appropriate agencies, i.e. Department of Industrial Accidents, police, etc. The employee also has the right to notify the police if he/she is being physically assault-

ed. Incidents of abuse, verbal attacks or aggressive behavior which may be threatening to the nurse but not result in injury, such as pushing or shouting or acts of aggression towards other clients/staff/ visitors will be recorded on an assaultive incident report. The incident will be reported to the Safety Committee for review and appropriate intervention. Copies of any documents relating to the incident will be given to the nurse affected. The employer will provide or make available to workers injured by workplace violence medical and psychological services. \*

\* Mercy Medical Center, Article XI Section 11.03 3 Workplace Violence 2004

## **Information for This Proposal**

#### 1. Definitions:

**Assaulted nurse:** One who is reasonably put in fear of being actually or potentially physically harmed while at work from a patient, co-worker, or visitor. This includes menacing gesture.

**Battered nurse:** One who experiences actual physical contact from another (whether or not a physical injury occurred.)

**Physical Assaults:** Violent acts of unwanted physical contact towards others. This includes slapping, pushing, kicking, punching, biting, scratching, deliberately throwing an object at a staff member, drawing a potential or actual weapon on a nurse.

**Sexual Assaults:** Unwanted sexual acts toward a nurse. This includes unwanted embraces, touching, exposures, or rape.

**Verbal or non-verbal Intimidation:** Verbal includes conversation, written, email, or voice mail communication that is meant to threaten, slur, harass or frighten. Non-verbal includes acts meant to frighten or threaten a nurse such as throwing an object at a wall, pounding walls or doors, stalking, tampering with data systems, stealing, etc.

- 2. Workplace Violence is one of the most underreported crimes. Reasons include: 1. Lack of knowledge of what, where, how and when to report. 2. Fear of repercussions on self and perpetrator. 3. Tolerance at the workplace 4. Embarrassment 5. Blaming of self 6. Belief that they will not be taken seriously.
- 3. In 2001, the American Nurses Association released its *Bill of Rights for Registered Nurses*, which set forth the tenet that nurses have the right to work in an environment that is safe for themselves and their patients. However, studies have shown that between 35% and 80% of hospital staff have been physically assaulted at least once and that nurses are at great risk for violence while on duty (Arnetz & Arnetz, 2001; Bruser, 1998; Kinross, 1992; Lanza, 1996; Shepard, 1996; Whitehorn & Nowland, 1997; Williams & Robertson, 1997). Workplace violence in health care settings is not limited to physical assault. NIOSH (2003) has defined workplace violence as any physical assault, threatening behavior, or verbal abuse occurring in the workplace. The definition includes, but is not limited to, such events as beatings, shootings, rape, suicide or suicide attempts, and psychological traumas, such as threats to harm, obscene phone calls (also known as *scatalogia*), intimidation, or harassment, including being followed or sworn at. (Nursing Economics, *Workplace Violence and Corporate Policy for Health care Settings*, Clements, DeRanierei, Clark, Manno, Kunn, 2005:23(3):119-124 from Medscape)
- 4. *Legal*: Employers can be held liable for negligent hiring, supervision, and negligent retention. Massachusetts Law, GL c.151, provides for the payment of benefits for work related injuries.

These benefits include payment of medical expenses and lost wages. The extent of an employer's obligation to address workplace violence is governed by the General Duty Clause (Section 5 (a) (1) or P.L. 91-596. "If there is a violence hazard in the workplace and employers do not take feasible steps...the employer can be cited." (OSHA).

- 5. OSHA identifies insufficient staffing as a risk factor for Workplace Violence including but not limited to:
  - a. Low staffing levels especially during time of specific increased activity such as meal times, visiting times, and when staff are transporting patients.
  - b.Isolated work with clients during examinations or treatment.
  - c. Lack of training of staff in recognizing and managing escalating hostile and assaultive behavior.
- 6. *Elements of a Violence Protection Plan (OSHA)*. 1. Management commitment 2. Employee involvement 3. Written program 4. Worksite assessment 5. Prevention of hazards 6. Training and education 7. Prompt recognition, control and monitoring, 8. Record keeping 9. Evaluation. 10. a program to assist employees injured in violence.
- 7. To attract and retain RNs in the profession, it is necessary to assure an interpersonal work environment that is safe. "Violence in the workplace is a significant public health problem but one that can be addressed by recognizing the factors that put employees at risk and taking appropriate preventative actions," CDC Director David Satcher, MD.

#### Resources

- U. S. Dept. of Labor, OSHA Guidelines for Preventing Workplace Violence for Health Care and Social Service Workers, Document, # 3148 (2003) www.osha.gov
- U. S. Department of Justice, Federal Bureau of Investigation, Workplace Violence, Issues in Response, Pg, 53, A Special Case: Violence Against Health Care Workers

Medscape, www.medscape.com view article /508158 –Nursing Economics, *Workplace Violence and Corporate Policy for Health care Settings*, Clements, DeRanierei, Clark, Manno, Kunn, 2005:23(3):119-124 – from Medscape)

Update 11/05

# WORKPLACE HAZARDS TO NURSES AND OTHER HEALTHCARE WORKERS: PROMISING PRACTICES FOR PREVENTION

# Protecting Staff through Pandemic Flu Planning • Friday, June 8, 2007

**Speaker:** Robert Naparstek MD

MNA Facilitators: Sandy LeBlanc RN, Judith Rose RN, Terri Arthur RN

#### **Statement of the Problem**

A pandemic is a global disease outbreak. A flu pandemic occurs when a new influenza virus emerges for which people have little or no immunity, and for which there is no vaccine. The disease spreads easily person-to-person, causes serious illness, and can sweep across the country and around the world in very short time.

The United States has been working closely with other countries and the World Health Organization (WHO) to strengthen systems to detect outbreaks of influenza that might cause a pandemic.

The effects of a pandemic can be lessened if preparations are made ahead of time. Planning and preparation information and checklists are being prepared for various sectors of society, including information for individuals and families.\*

**JCAHO Regulation that relates to this topic:** EC.1.10 Hospitals must manage safety risks, EC 1.20 Hospitals must maintain safe environments, EC.4.10 Hospitals must develop emergency management plans

**OSHA Guideline that address this topic:** *General Duty Clause 5A-1- Employers must furnish a place of employment free from recognized hazards, CDC and NIOSH have published guidelines and fact sheets for workers and employers* 

OSHA recommended steps to provide a safe work environment - A. Management support and worker involvement, B. Hazard assessment and control, C. Training and education, D. Program evaluation

Items considered by the breakout session participants

#### How are patients, visitors or others affected?

• In a pandemic flu outbreak all are at risk of being affected

#### What are some good practices that you have seen in your workplace?

- No practices have been developed at this time
- Suggested practices:
- Engineering controls, infection controls, pandemic flu planning task force groups,
- Immunizing all who are potentially affected
- Developing disaster plans

<sup>\*</sup> www.pandemicflu.gov - General Information

#### What are some of the barriers and opportunities associated with change?

#### Barriers:

- Nursing culture nurses do not consider themselves at risk
- Lack of understanding of the potential problem
- Fear of getting the flu
- · Fear of being disciplined if flu vaccine is refused
- Availability (or not) of vaccine consider staff safety first
- Nurses do not take advantage of the flu vaccine programs
- Ignorance of the potential of the problem
- There may be "No Right" to refuse vaccines

#### Opportunities:

- Need to advocate for safe practices
- Education alleviates fears
- Planning may alleviate fears of helping patients with pandemic flu
- Realization that you could be sued for negligence
- Need written policies and plans in place
- Implement OSHA guidelines and JCAHO requirements for emergency/pandemic planning

#### What are some concrete steps that could be taken to address this problem?

- Advocate, advocate, advocate
- Educate, educate, educate
- Whistle blowing when rights are refused
- Create focus groups
- Establish a task force at your workplace
- Learn about "Tami-flu"
- Become a member Pandemic Flu Committee

# Who are the management people at your workplace who are responsible for worker health and safety and who are five people in your workplace who would help to address the issue?

- Management required to carry out CDC recommendations
- Management to comply with legal obligation to follow OSHA regulations
- Work with one:
  - local city and town Health Departments
  - Massachusetts Department of Public Health
  - Employee health, risk management, infection control, nursing education and MNA Emergency Preparedness Task Force to develop and implement Pandemic Flu planning activities

# WORKPLACE HAZARDS TO NURSES AND OTHER HEALTHCARE WORKERS: PROMISING PRACTICES FOR PREVENTION

## **Preventing Exposure to Hazardous Drugs • June 8, 2007**

**Speaker:** Kathleen Sperrazza, RN, MS, Doctoral Candidate, University of Massachusetts, Lowell **MNA Facilitators:** Mary Anne Dillon, RN, Elizabeth O'Connor, RN, Mary Bellistri, RN

#### **Statement of the Problem**

Working with or near hazardous drugs in health care settings may cause skin rashes, infertility, miscarriage, birth defects, and possibly leukemia or other cancers.

Workers may be exposed to hazardous drugs in the air or on work surfaces, clothing, medical equipment, and in patient urine or feces.

Exposure to risks can be greatly reduced by (1) making sure that engineering controls such as a ventilated cabinet are used and (2) using proper procedures and protective equipment for handling hazardous drugs.\*

\*CDC - NIOSH ALERT, Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings, September 2004, NIOSH Publication Number 2004-165

**JCAHO Regulation that relates to this topic:** *EC.1.10 Hospitals must manage safety risks, EC 1.20 Hospitals must maintain safe environments, EC. 3.10 Hospitals must manage their hazardous materials and waste risk,* 

**OSHA Standard that addresses this topic:** 1910.1200 Hazard Communication Standard, General Duty Clause 5A-1- Employers must furnish a place of employment free from recognized hazards, CDC and NIOSH have published guidelines and fact sheets for workers and employers

OSHA recommended steps to provide a safe work environment - A. Management support and worker involvement, B. Hazard assessment and control C. Training and education, D. Program evaluation

Items considered by the breakout session participants:

#### How are patients, visitors or others affected?

- In some facilities drugs are mixed by nurses out in the open in an ER providing opportunity for patients and visitors to be exposed as well as nurses
- Above concern provides a greater likelihood for spill
- Radiation implants become dislodged exposing all in the environment

#### What are some good practices that you have seen in your workplace?

- Using pre-mixed drugs, thus reducing potential for exposures
- Providing education related to how to respond to a drug spill
- Providing education on the use of personal protective equipment (PPE) to reduce exposures

#### What are some of the barriers and opportunities associated with change?

#### Barriers:

- Focus of safety is on the patient with little time spent on safety of nurses and other workers.
- Mixed patient populations patients coming to ER for routine administration of chemotherapy which puts nurses (and patients) at risk because they must administer drugs that are not common to trauma patients.
- No training provided on proper administration of chemotherapeutic agents, or on drug exposure hazards or the PPE and other controls needed to protect nurses and other workers including those involved in disposal of hazardous drugs
- Lack of administrative response to the concerns of the nurses who administer hazardous drugs
- Using "traveling nurses" as department managers who are not familiar with policies and protocols including hazardous drug administration
- Physicians insisting that the chemotherapy be given in the ER
- Long-term care nurses concerned that there were no policies on the administration of chemotherapy in their facilities and no resources to direct them to provide safe care with hazardous drugs

#### Opportunities:

- · Utilizing premixed drugs
- Addressing hazardous drug administration in safety committees
- Utilize the NIOSH document ALERT Preventing Occupational Exposure to Antineoplaxtic and Other Hazardous Drugs in Health Care Settings

#### What are some concrete steps that could be taken to address this problem?

- Get OSHA involved, prepare an OSHA complaint
- Bring the concerns to safety committees for proactive response
- Involve occupational/employee health to help address concerns
- Report exposures to occupational/employee health
- Work collaboratively with others who have the potential for exposure, including housekeepers, interns and residents

# Who are the management people at your workplace who are responsible for worker health and safety and who are 5 people in your workplace who would help to address the issue?

- Nurse managers, occupational/employee health, pharmacy, in-service educators and risk management are considered the people responsible for safe working conditions related to exposure to hazardous drugs
- Working collaboratively with others with a potential for exposure to bring attention to the issue of the need for training and appropriate personal protection when working with hazardous drugs

# WORKPLACE HAZARDS TO NURSES AND OTHER HEALTHCARE WORKERS: PROMISING PRACTICES FOR PREVENTION

## Preventing Workplace Asthma: Consider the Cleaning Products • June 7, 2008

**Speaker:** Elise Pechter, MPH, CIH, Massachusetts Department of Public Health, Occupational Safety and Health Program, Anila Bello, MS, Department of Work Environment, UMass Lowell **MNA Facilitators:** Kathleen McDonald, RN, Janice Homer, RN, Kathleen Sperrazza, RN

#### **Statement of the Problem**

Many products that are used in hospitals to keep patients, visitors and personnel safe from pathogens represent some of the very same products that have some potential to cause or exacerbate asthma in susceptible individuals. We must reconsider the safety of certain practices that have long been believed to generate an established standard of care\*.

\*Risks to Asthma, Posed by Indoor Health Care Environments, A Guide to Identifying and Reducing Problematic Exposures, Executive Summary - Health Care Without Harm, Autumn 2006, www. noharm.org

**OSHA Standard that addresses this topic:** 1910:1200 – Hazard Communication Standard, General Duty Clause 5A-1- Employers must furnish a place of employment free from recognized hazards. **JCAHO Regulation that relates to this topic:** EC. 1.10 Hospitals must manage safety risks, EC. 1.20 Hospitals must maintain safe environments.

OSHA recommended steps to provide a safe work environment - A. Management support and worker involvement, B. Hazard assessment, C. Training and education, D. Program evaluation.

Items considered by the breakout session participants:

#### How are patients, visitors or others affected?

- Patient reported eyes burning, difficulty breathing during floor waxing, patient called the police.
- Post-op patient had an asthma attack while floors were being buffed; doors to room had to be closed.

#### What are some good practices that you have seen in your workplace?

- Block off areas when cleaning
- Decreased chemical use, no spraying cleaning chemicals
- Using cleaning wiping sheets assures proper concentrations
- Working with Environmental Services Departments to change practices and products
- No daily floor buffing
- Use floor buffer with a filter

#### What are some of the barriers and opportunities associated with change?

#### Barriers:

- No time to assess new products
- The culture of nursing is "not to report problems"
- Fear of retaliation if you speak up about problems paralyzes occupational health so they can't help
- Environmental Services Department resists change
- Lack of education about the hazards of chemicals

#### Opportunities:

- Greening of hospital programs may bring attention to the problems
- Use patient advocacy groups to protest exposing patients to the hazards of exposure to environmental cleaning chemicals, particularly children and infants

#### What are some concrete steps that could be taken to address this problem?

- Use contract language to address negative air quality caused by environmental cleaning chemicals
- Encourage all those affected to report to occupational health, supervisors, managers, physicians, risk management
- Change the culture of nursing "I'm not going to take it any longer"
- Provide education MNA programs on Occupational Asthma
- Discuss the cost of illness vs. the cost of safer products
- Join with other nurses to discuss the problem and advocate for change
- · Develop standards for cleaning chemical use
- · Associate the problem with patient safety, use JCAHO regulation on a safe environment of care

# Who are the management people at your workplace who are responsible for worker health and safety and who are five people in your workplace who would help to address the issue?

- Occupational Health
- Environmental Services
- Infection Control
- Risk Management
- Supervisors, Managers

#### **Others**

- MNA members at work
- · Other nurses who are affected
- Ethics Committee

# POSITION STATEMENT ON EXPOSURE TO ENVIRONMENTAL CLEANING CHEMICALS IN HEALTHCARE SETTINGS

## **Statement of the problem**

In recent years, research projects, booklets and articles have focused on the health effects of chemical exposures to nurses and other workers in the healthcare industry. These chemicals include pesticides, antimicrobial and environmental cleaning agents such as disinfectants and floor wax strippers. While the majority of the research projects focus on information related to asthma and reactive airway disease syndrome (RADS), neurological symptoms such as headache, dizziness and nausea, skin disorders such as rashes, blisters and burns and allergic sensitization may also result from exposure to these chemicals.

According to Health Care Without Harm, since 1980 asthma caused or significantly exacerbated by work exposures, has emerged as the most commonly reported occupational lung condition. The overall prevalence of adult asthma related to the work environment is unknown but recent studies estimate that occupational asthma accounts for 5% to 37% of all asthma. In the U.S. studies have estimated that 10% to 23% of new adult onset asthma is due to occupational exposures. Asthma ranks within the top ten conditions causing limitation of activity and costs our nation 16.1 billion dollars annually in healthcare, loss of work productivity and premature deaths.<sup>1</sup>

While the symptoms and disability are realized by the affected employees, the expense for treating asthma is shared with the employer through health insurance and Workers' Compensation expenses. Employees require and seek treatment for asthma and other breathing difficulties, whether they associate it with work related exposures or not. Additionally, the employer incurs expenses for sick time and for overtime for workers who remain on the job or replacement workers to fill in for those who become ill or disabled.

It is important to recognize the connection between work exposures and asthma as quickly as possible as delays in diagnosis result in poorer prognosis for the affected employee. Information to identify those exposures and symptoms is often close at hand in a document known as a Material Safety Data Sheet (MSDS). The MSDS is required by the OSHA Hazard Communication Standard 1910.1200.

Manufacturers are required to identify the adverse health effects of the chemicals in their product on the MSDS. The MSDS for an industrial strength floor stripper commonly used in hospitals and identified by affected employee's states:

## Effects of Acute Exposure:

Eyes: Corrosive. May cause permanent damage including blindness.

**Skin:** Corrosive. May cause permanent damage.

**Inhalation:** May cause irritation and corrosive effects to the nose, throat and respiratory tract.

**Ingestion:** Corrosive. May cause burns to mouth, throat, and stomach.

**Medical conditions aggravated by overexposure:** - Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc. may be more susceptible to irritating effects.<sup>2</sup>

# **Workers, patients and visitors are at risk**

Nurses and other healthcare workers may be exposed to environmental cleaning chemicals on a daily basis as floors are stripped, finishes are applied and then buffed to maintain the "shine". These

repeated exposures have the potential for workers to develop chronic inflammation or become sensitized to the product. Patients are also exposed at a time when their health and often their respiratory systems are already compromised. There is the potential for visitors to be exposed to these irritating and sensitizing products as well.

Another consideration when addressing exposure to toxic chemicals is individual susceptibility. This health concept refers to the fact that one person may have factors such as age, weight and gender or existing health conditions that would make them more susceptible to the chemicals when exposed. Unfortunately, many employers focus on individual susceptibility and fire sensitive people or decide that the problem is the employee and not the exposure.

From the stories of many nurses who have been made ill from exposure to environmental cleaning products, there seems to be little value in scheduling cleaning operations that utilize toxic products to weekends or night shifts or when known sensitized individuals are not on duty. Moving these toxic processes to the night and weekend shifts puts all those who routinely work these shifts at greater risk of developing symptoms and/or sensitization through repeated exposures. Often employees requiring accommodations are present when the cleaning process takes place and suffer the adverse consequences of exposure that result in emergency medical treatment and lost work time.

# **Products commonly used in healthcare**

**Pesticides:** It is no longer acceptable to follow a program that states "we spray every Friday". Pesticides by their very nature are meant to kill. Some do it by attacking the nervous system, while others attack the reproductive system or respiratory system of the pests they are meant to destroy. Some pesticides may be classified as carcinogens, teratogens or mutagens. Pesticide exposure has been associated with several neurological diseases in humans. Workers who apply pesticides are at highest risk.<sup>1</sup>

Antimicrobial Cleaning Products: Disinfectants and sterilizing chemicals composed of chloramine, hexachlorophene, glutaraldehyde, ethylene oxide, quaternary ammonium compounds (quats) and formaldehyde are commonly used in healthcare settings today. According to MSDS's and other sources, exposure can occur by inhalation and to a lesser extent by absorption of the chemicals through the skin. These chemicals are associated with asthma and neurological symptoms (headache, nausea and dizziness).<sup>3</sup>

**Environmental cleaning agents:** Floor strippers, floor polishing chemicals, toilet and glass cleaners are comprised of multiple chemicals and may include chlorine bleach, ethanolamines, glycol ethers (e.g. 2 butoxyethanol and, sodium hydroxide). These chemicals are associated with respiratory and neurological symptom and a splash to the eyes and/or skin could result in tissue irritation and burns. The MSDS for one of these products used in healthcare settings warns of corrosion that could result in blindness if a splash to the eyes should occur.<sup>4</sup>

VOC's – Many of these products contain a classification of chemicals known as volatile organic compounds (VOC's). VOC's, which are derived from petroleum products, vaporize quickly at room temperature. VOC's are inhaled in varying concentrations from different products. Ventilation (frequency of air exchanges) in place at the location of use, as well as the manner in which the product was prepared, mixed or diluted (or not) and applied will influence the amount of chemical in the air and the exposure to staff and bystanders. VOC's that are inhaled into the respiratory tract are absorbed by the bloodstream and move quickly to the brain.¹

Fragrances: Fragrances in healthcare settings exist from a variety of sources. These range from personal hygiene products used by staff and patients to those fragrances added to environmen-

tal cleaning and disinfecting products. Many hand sanitizers contain fragrances and are an additional source of VOC's. The health effects from fragrances are similar to those described above for other products including contributing to or exacerbating asthma, respiratory irritation and/or neurological symptoms.<sup>1</sup>

#### **Alternatives Exist**

As a concern and interest in preventing occupational and environmental exposure to chemical toxins becomes widespread, the manufacturers and distribution companies for environmental cleaning products are offering broad ranges of products for their customers. Changing to safer products may simply involve an open discussion and trial of new products with the current chemical supply company, rather than locating a new chemical supplier and changing to a new product line. The need to change to new supply companies has often blocked this type of quality improvement process in the past.

Alternatives to Pesticides: – A process known as Integrated Pest Management (IPM) begins with steps that should be taken to remove the attractions for pests and pathways for pests before chemicals are used. Such steps include: improved sanitation practices, (empty refuse containers more frequently), structural repairs (holes in the wall) to block the pathways for entrance and the use of non chemical pesticide devices, such as vacuuming crumbs and utilizing traps. Chemical pesticides have a place in this process but only as the last resort. Pesticides should only be applied in hospitals by those who have been specifically trained to do so.<sup>5</sup>

Alternatives to Antimicrobial Cleaning Products: All antimicrobials have a measure of hazard associated with them. This is evident by reviewing the MSDS that accompany the products. By their nature disinfectants and sterilants are developed to destroy living organisms. While few safer alternatives exist, educating and training workers in the safest application and handling, utilizing proper dilution as well as appropriate personal protective equipment when working with these chemicals can reduce exposure and adverse health effects. In many cases, cleaning is needed but antimicrobial products are not and the total amount of antimicrobials used can be reduced.

Alternatives to Environmental Cleaning Agents: Safer cleaning chemicals exist and are in use today in many environmentally conscious healthcare facilities. These products have chemical properties that do not cause or aggravate asthma or other respiratory conditions; they do not cause blindness if splashed into the eyes; they do not pollute the waterways when they are discharged in wastewater. Micro fiber mops and cleaning cloths are recognized by the U. S. Environmental Protection Agency (EPA) as a meaningful alternative to conventional floor cleaning with wet mops and buckets. This process eliminates the ergonomic hazard of lifting heavy water buckets and the EPA emphasizes that it dramatically reduces the amount of water and chemical products required for routine cleaning of hospital rooms. Microfibre mopping processes have been associated with a reduction in frequency of slips, trips and falls because of the reduction in the amount of water that remains on the floor.

**Fragrance - Free Environments:** Fragrances can cause symptoms in those individuals with asthma and chemical sensitivity. Prominent signage stating a "fragrance - free facility" and the availability of supportive information promotes the concept of voluntary compliance with a fragrance-free environment. Even voluntary compliance is associated with a marked decrease in the amount of fragrance use among individuals. Most vendors of environmental cleaning products provide a line of fragrance-free products and personal hygiene products for patient

care are available without fragrance. Several hospitals and other facilities in Massachusetts have taken the step toward becoming a fragrance free environment. Their signage simply states "Men and women are asked to refrain from using personal fragrances when working or visiting in this building."

#### **Association Position**

#### MNA believes that health care facilities should:

- evaluate the environmental cleaning and antimicrobial products they currently use by reviewing the adverse health and environmental effects noted on the MSDS. They should begin to use alternative products with less potential for adverse health effects and environmental pollution. This is the most important strategy for protecting the health of nurses, other healthcare workers and patients, as well as the environment
- include a person with expertise in occupational health and safety on any committee or group that selects environmental cleaning products, antimicrobials and/or pesticides.
- provide hazard communication training that meets the following requirements of the OSHA Hazard Communication Standard 1910.1200 (h) (3) Training and Education (must) contain at least (ii) the physical and health hazards of the chemicals in the work area and (iii) the measures for workers to use to protect themselves from these hazards and follow the requirements of the Standard 1910.1200 (g)(8) MSDS to be readily available. The process to access MSDS should be posted and available at all times.<sup>7</sup>
- develop and communicate methods for reporting any symptoms that workers and patients experience when environmental cleaning products are in use. Medical evaluation and treatment should be provided as necessary. Note; Massachusetts employers are required by law (MA 105 C.M.R 300.180) to report all cases of suspected or diagnosed occupational asthma which are believed to have been caused or aggravated by factors in the individual's workplace to the MDPH, Occupational Health Surveillance Program. (See attached form Confidential Report of Occupational Disease and Injury) www.mass.gov/dph/ohsp.8
- associate the symptoms noted on the MSDS that are related to environmental cleaning chemicals with the symptoms reported by nurses and others when they experience these adverse health effects in the presence of environmental cleaning chemicals.

# **Summary Statement**

Data recently released by the Massachusetts Department of Public Health Sentinel Event Notification for Occupational Risk (SENSOR) program indicate that healthcare was the industry most frequently identified among confirmed cases of work-related asthma. (29% of all cases, 1993-2006) and nursing was a frequently reported occupation accounting for over 13% of all confirmed cases of occupational asthma. Occupations such as health aides and health technicians were also high on the list of those affected. The leading causative agents were cleaning products and poor indoor air quality.

Health effects, associated with cleaning products include dermatitis, respiratory distress, headaches, dizziness, nausea and increase incidences of occupational asthma. As more and more workers become sensitized, there are also significant increases in lost work days and associated costs in compensation claims and replacement workers. Patients also suffer from exposures to the same chemicals and disruptions in staffing.

For many cleaning products or chemicals used in healthcare there are safer more environmentally friendly and cost-competitive alternatives. It is in the best interests of the organizations, patients and the workers to continually identify and evaluate new products and alternatives to find the "best" product available that meets all of the requirements of the given cleaning regimen or task while still providing a safe and healthy environment.

Healthcare organizations should be leaders in the movement to safer working environments. Each institution should have clear policies and directives that minimize the use of hazardous agents, inform all workers about potential health effects and how to respond if they believe they are suffering symptoms of exposure, and continuously improve their programs and products.

#### **References and resources**

- (1) Risks to ASTHMA Posed by Indoor Health Care Environments A Guide to Identifying and Reducing Problematic Exposures, Health Care Without Harm Autumn 2006 www.noharm. org
- (2) Johnson Wax Professional Material Safety Data Sheet Bravo Heavy Duty Low Odor Stripper 01/29/03

Cleaning for Health, An INFORM Report, September 2000 www.informinc.org

- (3) Feinberg, Culver, Sutherland, Musnikow, Cleaning For Health, An INFORM Report, September 2000, www.informinc.com
- (4) Health Care Without Harm Fact Sheet *Cleaning Chemical Use in Hospitals* www.noharm. org
- (5) Department of Veterans Affairs, Program Guide 1850.2 Integrated Pest Management October 5, 1998
- (6) U. S. Environmental Protection Agency, *Using Microfiber Mops in Hospitals* Environmental Best Practices for Health Care Facilities, November 2002 www.epa.us
- (7) U.S. Department of Labor, OSHA General Industry Standards 29 CFR 1910 Hazard Communication Standard 1019.1200
- (8) Sentinel Event Notification System (SENSOR) for Occupational Risk Massachusetts SENSOR is funded by the National Institute for Occupational Safety and Health
- (9) Massachusetts Department of Public Health, SENSOR Occupational Lung Disease Bulletin, July 2007, www.mass.gov/dph/ohsp

# **Additional Resources**

MNA On Line Continuing Nursing Education Program – Fragrance Free, Creating a Safe Health-care Environment www.massnurses.org click "on-line CE"

Sarah Boseley, "Cleaning chemicals linked to asthma in young children" Guardian, August 26, 2004 http://www.guardian.co.uk?uknews/story/0,3604,1290880,00.html or www.healthsentinel.com/news.php?event=news\_print\_item&id=160

Sensor Occupational Lung Disease Bulletins available at www.mass.gov/dph/ohsp Massachusetts Department of Public Health, multiple occupational lung disease topics addressed

# Occupational Health Surveillance Program Massachusetts Department of Public Health CONFIDENTIAL REPORT OF OCCUPATIONAL DISEASE AND INJURY

INSTRUCTIONS: In accordance with 105 C.M.R. 300.000, healthcare providers must report any patient with a confirmed or suspected diagnosis of any of the diseases or injuries listed below which is believed to have been caused or aggravated by factors in the individual's workplace. Cases should be reported within ten days of diagnosis or identification. PLEASE PRINT.

Reporting Source Information		Reporting Date://
Reporting Physician:	Name of Institution/Clinic:	
Address:		
Telephone: ( )	Medical Specialty:	
Patient Information		
Patient's Name:	First	Middle Initial
Patient's Address:	City	State Zip Code
Home Telephone: ()	Date of Birth: / / vear	•
[ ] Black/African American [ ] Native Hawaiian or Pa	Hispanic: ka Native [ ] Unknown Ethnicity: acific Islander	[ ] Yes [ ] No  (Specify up to 3: e.g. Brazilian, Vietnamese, etc.)
Company where exposure/injury reportedly occurred:  Type of Business or Industry: (e.g. electronics manufacturing, automotive repa	Is patient still employed at c	
[ ] Other lung disease (if checked, please complete the fo	ne following information) Suspected Agent: posure) sthma aggravated by workplace exposure) e (RADS) (asthma resulting from a one-time a llowing information) mical pneumonitis (suspected agent:	acute exposure at work)) mplete the following information)
[ ] Acute chemical poisoning (if checked, please comp	ete the following information)	
[ ] Mercury level:		
Remarks:		

Return this report to MDPH, Occupational Health Surveillance Program, 250 Washington St., 6th floor, Boston, MA 02108. FAX: (617) 624-5696. For more information or to file a report by phone, call: (617) 624-5632. Voicemail is in operation after hours. THANK YOU.

Please note: Disease outbreaks/clusters should be reported by phone.

#### OCCUPATIONAL ILLNESS AND INJURY REPORTING GUIDELINES FOR PHYSICIANS

Healthcare Workers should report all diagnosed OR suspected cases of the reportable conditions.

#### OCCUPATIONAL LUNG DISEASE

#### Asthma

Report all persons with:

- A. A physician's diagnosis of asthma; AND
- B. An association between symptoms of asthma and work.

Note: Reportable cases include persons newly sensitized by exposures at work, OR with pre-existing asthma exacerbated by exposures at work, OR persons for whom a one-time exposure to a chemical (s) at work resulted in generalized airway hyperactivity.

#### <u>Asbestosis</u>

Report all persons with:

- A. A physician's provisional or working diagnosis of asbestosis; OR
- B. A chest radiograph interpreted as consistent with asbestosis; OR
- C. Pathologic findings consistent with asbestosis.

Note: Persons with asbestos-related pleural disease without parenchymal fibrosis are <u>not</u> required to be reported.

#### **Silicosis**

Report all persons with:

- A. A physicians provisional or working diagnosis of silicosis; OR
- B. A chest radiograph interpreted as consistent with silicosis; OR
- C. Pathologic findings consistent with silicosis.

#### **Chemical Pneumonitis**

Report all persons with:

- A. A physician's provisional or working diagnosis of chemical pneumonitis; AND
- B. A history of recent occupational exposure to a chemical irritant(s).

#### Beryllium Disease

Report all persons with:

- A. A physician's provisional or working diagnosis of beryllium disease including:
  - 1. acute chemical pneumonitis related to beryllium exposure; OR
  - 2. interstitial lung disease related to beryllium exposure. OR
- B. Pathologic findings consistent with beryllium disease.

#### WORK-RELATED HEAVY METAL ABSORPTION

#### Cadmium

Report all persons with:

- A. Cadmium: greater than 5  $\mu$ g/l of blood, OR urine greater than 5  $\mu$ g/g creatinine; AND
- B. A history of occupational exposure to cadmium or an unknown source of cadmium exposure.

#### Mercury

Report all persons with:

- A. Mercury: greater than 15  $\mu$ g/l of blood, OR urine greater than 35  $\mu$ g/g creatinine; AND
- B. A history of occupational exposure to mercury or an unknown source of mercury exposure.

#### Lead

Massachusetts clinical laboratories report all elevated blood lead levels in persons over age 14 directly to the Massachusetts Occupational Lead Registry. Physicians are not required but may elect to report elevated lead levels in the blood or urine to the Massachusetts Occupational Lead Registry, (617) 969-7177.

#### Other Heavy Metals

Report all persons with:

- A. A level of any other heavy metal (e.g. arsenic, manganese, chromium) which exceeds the testing laboratory's reference value; AND
- B. A history of occupational exposure to the heavy metal in question or an unknown source of heavy metal exposure.

#### WORK-RELATED CARPAL TUNNEL SYNDROME

Report all persons with:

- A. A physician's provisional or working diagnosis of carpal tunnel syndrome; AND
- B. A history of work involving one or more of the following activities prior to the development of symptoms:
  - 1. Frequent repetitive movements of the hand(s) or wrist(s) on the affected side(s);
  - 2. Regular tasks requiring the generation of high force by the hand(s) on the affected side(s);
  - 3. Regular or sustained tasks requiring awkward hand positions on the affected side(s);
  - 4. Regular use of vibrating hand-held tools;
  - 5. Frequent or prolonged pressure over the wrist or base of the palm on the affected side(s).

# SERIOUS WORK-RELATED INJURIES TO PERSONS LESS THAN 18 YEARS OF AGE

Report any minor with a serious work-related traumatic injury. A serious work-related traumatic injury is defined as an injury which results in death or hospitalization, or, in the judgment of the treating physician, results in, or will result in:

- A. Significant scarring or disfigurement; OR
- B. Permanent disability; OR
- C. Protracted loss of consciousness; OR
- D. Loss of a body part or bodily function; OR
- E. Is less significant but similar to injuries sustained by other patients at the same place of employment.

#### WORK-RELATED ACUTE CHEMICAL POISONING

#### Carbon Monoxide Poisoning

Report all persons with:

- A. A physician's diagnosis of carbon monoxide poisoning; AND
- B. A history of occupational exposure to carbon monoxide or an unknown source of exposure.

#### Pesticide Poisoning

Report all persons with:

- A. A physician's provisional or working diagnosis of acute systemic illness or localized finding due to pesticides; AND
- B. A history of occupational exposure to pesticides.

Note: Dermatitis and/or eye injury due to pesticide exposure at work should also be reported.

#### Other Acute Poisonings

Report all persons with acute systemic poisoning caused by occupational exposure to any other chemical (e.g. cyanide, hydrogen sulfide, chlorinated hydrocarbon solvents).

Note: Persons with anoxia caused by oxygen deficient work environments should be reported.

#### WORK-RELATED DISEASE OUTBREAKS

Report any work-related disease outbreak/cluster, regardless of whether or not the disease is included among the reportable conditions listed above. A work-related disease outbreak is the occurrence of any illness in excess of normal expectation among workers at the same place of employment. Such outbreaks may be caused by exposures to a physical, biological or chemical hazard(s) in the workplace.

Written materials on reportable conditions and other occupational health issues are available for physicians and their patients. Please contact the Occupational Health Surveillance Program: 250 Washington Street, 6th floor, Boston, MA 02108, (617) 624-5632.

# ADDITIONAL MNA HEALTH AND SAFETY DOCUMENTS

**Position Statements, Fact Sheets and Model Contract Language** 

# **POSITION STATEMENT ON ON-CALL AND EXTENDED WORK HOURS**

#### **Statement of the Problem**

Excessive work hours and on-call shifts, without enough rest before returning to a regularly scheduled shift, are a concern of the Massachusetts Nurses Association because they are recognized as factors in patients' safety, place nurses and other healthcare workers at an increased risk of injury and illness, and, ultimately, diminish the retention and recruitment of nurses.

The MNA Congress on Health and Safety has developed this position statement to address the following specific concerns:

- \* Compromised patient safety fatigue is a well recognized factor contributing to medical errors.
- \* Risk to nurses' professional licenses the probability of errors and other adverse practice events increases with fatigue.
- \* Risk to nurses' personal safety the probability of work-related injury and/or post-shift automobile accidents increases with fatigue.

According to the Association of periOperating Room Nurses (AORN), new trends in staffing, other social and economic factors, and on-call hours have converged to create hazardous conditions that jeopardize patient and employee safety.<sup>1</sup>

## **Background**

#### On -Call Practices and Mandatory Overtime

On-call practices and mandatory overtime have extended in recent years from the operating room to all areas of nursing practice. MNA is aware of on call requirements for nurses working in obstetrical, home care, hospice, medical/surgical, post anesthesia care, and special procedures departments of hospitals.

Certain hospital scheduling practices could be labeled "defacto" mandatory overtime. It is not uncommon for hospitals to permit doctors to schedule and start cases late in a shift. Such a case would be known to require more time than remains in the scheduled shift. This forces the nurse on that case to remain to finish the case. This can occur because a hospital does not hire nurses for a shift that would cover those late hours and that would provide relief for the nurse required to remain on a case that does not finish before the scheduled end of shift.

Many nurses in Massachusetts report working long hours, with significant on-call responsibilities. A survey <sup>2</sup> completed by nurses attending the MNA convention in the fall of 2005, and returned anonymously found that on-call requirements for the nurses who responded ranged from 0 to 48 hours in posted work schedules over time periods of 3 weeks to 6 months. These nurses also reported taking additional voluntary call hours, in the range of 8 hours to 24 hours, during a posted work schedule. The additional mandated on-call hours were reported as high as 16 hours.

In Massachusetts, anecdotal descriptions of work schedules suggest that on-call schedules do not allow a reasonable amount of rest between shifts. After working a day shift the on-call nurse can go home, be called in and work for several hours, go home again, possibly as late as 4 am, and then be expected to be back at work again in three hours, at 7am to begin their regularly scheduled day shift. Such demanding on-call assignments also apply, of course, to nurses in many other specialties as well.

A study of the working hours of 2,273 nurses in two states found that more than half of the hospital staff nurses typically worked 12 or more hours per day and nearly 40% of the nurses surveyed had jobs with on-call requirements. The study concluded that "The proportion of nurses who reported working schedules that exceed the recommendations of the Institute of Medicine should raise industry-wide concerns about fatigue and health risks to nurses, as well as the safety of patients in their care." <sup>3</sup>

Work-Related Fatigue and the Nursing Workforce

The Centers for Disease Control, National Institute for Occupational Safety and Health (NIOSH) 2004 report entitled, "Overtime and extended work shifts: Recent Findings on Illnesses, Injuries, and Health Behaviors," <sup>4</sup> notes, "Four studies that focused on effects during extended shifts reported that the 9th to 12th hours of work were associated with feelings of decreased alertness and increased fatigue, lower cognitive function, declines in vigilance on task measures, and increased injuries. The incidence of automobile crashes and medical errors increase with every hour worked over ten hours.<sup>4</sup>

One study revealed that the likelihood of a nurse making a mistake, such as giving the wrong medication, or the wrong dose, was tripled once a shift stretched past 12.5 hours. And yet, 40 percent of the 5,317 work shifts of the 393 nurses, from across the country, usually exceeded 12 hours. On average, the nurses worked 55 minutes longer than scheduled each day, and one third of the nurses worked overtime every day during the four weeks that were studied.<sup>5</sup>

Extended work schedules (beyond the traditional 8 hour day, 35-40 hour work week) have been shown to affect nurses' fatigue, health, performance, and satisfaction in nursing <sup>6</sup> their risk for musculoskeletal disorders<sup>7</sup> and their risk for substance use.<sup>8</sup>

We know that medical interns make substantially more serious medical errors when they worked frequent shifts of 24 hours or more than when they worked shorter shifts. Limitations on the hours of work for medical interns and others as well who have an impact on public safety, (e.g., truck drivers, airplane pilots, and air traffic controllers) have been specified and **regulated**. An FAA authority recently noted that air traffic controllers do not work more than 10 operational hours in a shift, have at least an 8 hour break from the time work ends to the start of any subsequent shift, and have an off duty period of at east 12 hours following a night shift (between 10pm and 8am).

The Institute of Medicine believes that long work hours worked by nurses pose one of the most serious threats to patient safety, because fatigue slows reaction time, decreases energy, diminishes attention to detail, and otherwise contributes to errors. The Institute of Medicine therefore recommends that nurses work no more than 12 hours over a 24 hour period and no more than 60 hours within a seven-day period, in order to reduce error-producing fatigue. A large body of research underscores the effect of fatigue, sleep deprivation, and circadian rhythms on alertness. After 24 hours without sleep, impaired performance is equivalent to a blood alcohol concentration of 0.10% and yet 24 hour call shifts are becoming more common.

A reported ten states have prohibited mandatory overtime for nurses, 15 other states have introduced such legislation, and three states have laws protecting nurses who refuse to work more than 12 consecutive hours.<sup>3</sup>

Whether it is mandatory overtime, long regularly scheduled work hours, or on-call work hours without adequate rest before resuming regular schedules, the concepts inherent in work physiology, fatigue, and recovery argue for more careful planning of schedules.<sup>14</sup>

#### Safe Practices Protect Patients as well as Nurses

In light of the well recognized dangers of fatigue associated with excessive work hours that have been identified,

#### The MNA believes:

- that scheduling practices must consider the effect of working long hours and working on-call before normally scheduled shifts on patients'safety, and on the safety of the nurse or other staff required to take call.
- that staffing must be adequate in areas that use on-call practices so that those who are called in are used as supplemental or additional staff
- that nurses who are required to take call must have 8 hours of rest/sleep time between call back hours and regular work hours.
- that nurses who are required to take call must not suffer the loss of pay, earned time or other benefits because they choose to take rest time between call back hours and regular work hours.
- that nurses would benefit from education about the effects of long work hours and fatigue on their professional performance and its relation to the higher risk of litigation related to medical errors and the endangering of their nursing licenses.

#### The MNA believes nurses must:

- learn about the effects of fatigue and long work hours on personal and patient safety and the impact it could have on their nursing licenses. The MNA urges nurses to assure that they are well rested and alert before any work shift.
- address on-call hours, hours of rest and sleep and fair compensation practices in their contracts.
- Obtain adequate sleep/rest between shifts and on-call work.

#### The MNA believes health care facilities must:

- Incorporate into nurse staffing at least 6-8 hours of rest for nurses before any given shift or oncall period.
- Create systems to relieve nurses who have worked during their on-call hours and are scheduled to work following that on-call shift.
- Work with staff nurses to individualize their work schedules to enhance the health and safety of both nurses and patients.
- Help staff to recognize fatigue, change the culture of tolerance for fatigue, and recognize it as an unacceptable risk to patients and staff alike.

# **Summary**

AORN has called for a "change in culture...to recognize exhaustion as an unacceptable risk to patients and peri-operative personnel safety". That change of culture is necessary in all areas of nursing practice. There is a new emphasis, begun by the Institute of Medicine, placed on patient safety, and rightly so.

Ensuring that all nurses are alert and vigilant in their critically important functions is in keeping with this emphasis. Nurses, like those employed in aviation, medicine, and the military, must arrive at work rested and ready to perform safely. Nurses, whose work is arguably the most demanding of all professions, need adequate rest after regularly scheduled shifts or after working additional hours.

On-call and mandatory hours take no less a toll and result in no less fatigue than regularly scheduled work shifts.

#### **References**

- 1. AORN, 2005 Standards, Recommended Practices, and Guidelines
- 2. MNA, "RN Work Hours Including On-Call hours," 2005 MNA Survey conducted at annual convention, unpublished data.
- 3. Trinkoff A, Geiger-Brown J, Brady B, Lipscomb J, & Muntaner C. How long and how much are nurses now working? *Amer J of Nurs* 2006; 106(4):60-72.
- 4. The Centers for Disease Control, National Institute for Occupational Safety and Health (NIOSH) report, *Overtime and extended work shifts: Recent Findings on Illnesses, Injuries, and Health Behaviors*, of April 2004
- 5. Rogers AE, Hwang W, Scott LD, Aiken LH, & Dinges DF. "The working hours of hospital staff nurses and patient safety," *Health Affairs* 2004;23(4):202-212.
- 6. Josten IJ, et al. The effects of extended workdays on fatigue, health, performance and satisfaction in nursing. *J Adv Nurs* 2003; 44(6):643-52.
- 7. Lipscomb JA, et al. Work-schedule characteristics and reported musculoskeletal disorders of registered nurses. *Scand J Work Environ Health* 2002; 28 (6):394-401.
- 8. Trinkoff AM, Storr CL. Work schedule characteristics and substance use in nurses. *Am J Ind Med* 1998; 34(3):266-71
- 9. Landrigan CP, et. Al. Effect of reducing intern's work hours on serious medical errors in intensive care units. The New England Journal of Medicine 2004 351(18):1838-1848.
- 10.FAA Personal Communication via email (FAA Customer Service FAA@mailnj.custhelp.com Reference 14 CFR part 91 General Aviation operations), March 17, 2006.
- 11. Institute of Medicine. Keeping patients safe: transforming the work environment of nurses. Washington, DC, National Academies Press; 2004
- 12. Battelle Memorial Institute, JIL Information Systems. An overview of the scientific literature concerning fatigue, sleep, and the circadian cycle. Federal Aviation Administration. http://cf.alpa.org/internet/projects/ftdt/backgr/batelle.htm (accessed Dec. 10, 2004)
- 13. Rosekind M, et al. Managing fatigue in operational settings 1: Physiological considerations and countermeasures. Hospital Topics 75 (Summer 1997) 31-35.
- 14. Rodgers SH. Work physiology fatigue and recovery. In: Salvendy G, editor. Handbook of human factors and ergonomics. 2nd ed. New York: John Wiley and Sons; 1997. p. 268-98.

#### **Resources**

AORN Position Statement for Safe On-Call Practices. http://www.aorn.org/about/positions/pdf/Final%20PS%20on%20Safe%20Call.pdf . Approved April, 2005 by the AORN House of Delegates. (Accessed May 31, 2006)

09/28/06

# **TOP TEN REASONS TO BE SCENT FREE AT WORK\***

Catherine Dicker, RN, Chairperson and Marie Mannion, RN, member Massachusetts Nurses Association Congress on Health and Safety

- 10) You save money.
- 9) Your co-workers can breath easier.
- 8) You won't attract the wrong kind of attention.
- 7) You won't trigger someone's migraine(or maybe your own).
- 6) You won't exacerbate your patient's asthma.
- 5) You will contribute to better Indoor Air Quality.
- 4) You will not be in a cloud of Acetone, Formadehyde, Benezaldehyde, Benezylacetate, Benezylalcohol, Ethanol, Limonene, Linalool and Methylene-chloride all listed as hazardous waste and contribute to work place asthma
- 3) You won't cause skin reactions in sensitized people
- 2) You won't be supporting big business profits of companies that disregard consumer health and safety
- 1) You would be safe to be around...and safe to hug!

Reprint encouraged with acknowledgement of THE ADVOCATE
The newsletter of the Massachusetts Nurses Association
Labor Relations Program

1999

<sup>\*</sup>Scents refer to personal care products used by men and women.

Congress on Health and Safety

# **Occupational and Environmental Health and Safety**

Section A

#### **Basic Requirements**

- 1. In accordance with the U. S. Department of Labor, OSHA, the hospital will furnish a place of employment that is free from recognized hazards that are causing or likely to cause physical harm to its employees and will take measures to remediate any condition which is determined not to be healthy, safe or sanitary.
- 2. In accordance with the U. S. Department of Labor, OSHA, the hospital will work to reduce work-related injuries by providing the equipment, education and staff appropriate to the task and indicated in the job description or department protocols.
- 3. The hospital shall comply with all environmental and occupational safety and health standards and guidelines promulgated by the laws of Massachusetts and the provisions of the Federal Occupational Safety and Health Act and Center for Disease Control Guidelines. This includes but is not limited to the "Guidelines for Protecting the Safety and Health of Healthcare Workers" (NIOSH)" and updated revisions.
- 4. **Health and Safety** Bargaining unit registered nurses shall not be required to work under unsafe or hazardous conditions or to perform tasks which endanger the health and/or safety of themselves or their patients as described by OSHA and/or the Department of Environmental Health and Safety. \*
- \* U. Massachusetts Memorial Medical Center Contract, Article X, Section 11.01, June 2004.

# **Background Information for This Proposal**

- 1. The general statement is suggested to introduce the concern for health and safety of nurses into contractual language. The Congress of Occupational Health and Safety recognizes that it is broad and vague in addressing many of the specific issues that are a concern to nurses. However, it is only an umbrella statement under which more specific issues can later be placed such as Safety Committees, needle and sharps injuries, musculoskeletal injuries, latex allergies and hazardous airborne exposures in future negotiations.
- 2. This general statement will carry more strength if ascribed its own contract article number entitled "Environmental and Occupational Health and Safety." This will provide a place for further language and will make reference more convenient for the worker.
- 3. This statement closely reflects that of the American Hospital Association in regards to their responsibilities to health care workers.
- 4. Inclusion of compliance to the Guidelines will give bargaining units leverage to seek compliance and responsible action for most workplace health and safety issues.
- 5. Although the need for a Health and Safety Committee is clearly recognized, a statement to its inclusion has not been added has in an effort to prevent additional controversy. If little controversy exists it would be advantageous to add such a statement. The inclusion of this need would be the next logical step in the bargaining process.
- 6. More information on workplace health and safety issues is available through the MNA's Congress on Health and Safety.

Congress on Health and Safety

# **Hospital Health and Safety Committees**

Section B

- 1. The Hospital and the MNA bargaining unit agree to establish a Health and Safety Committee composed of equal numbers of representatives designated by the hospital and the bargaining unit.
- 2. The Health and Safety Committee shall consider and develop recommendations on health and safety matters including but not limited infectious disease, chemical hazards, security and physical safety, radiation, workplace violence and abuse prevention and any related education issue associated with these concerns.
- 3. Attendance at these meeting by nurse members will be treated as hours worked for pay purposes.
- 4. Bargaining unit members shall be guaranteed scheduled time off to attend all meetings of the Health and Safety Committee.

#### **Existing contract language:**

**Safety Committee** – The Hospital shall appoint two (2) members of the bargaining units, as designated by the Association, to the Hospital's Safety Committee, and shall provide such members paid release time to attend meetings of the Committee. These members will enjoy the same rights within the Committee as all other members of the Committee.

Cambridge Hospital, Article XXV, Section 25.04, April 2003

# **Background information on this proposal**

Documents from the U. S. Department of Labor OSHA and the Department of Health and Human Services, CDC, NIOSH describe requirements for health and safety committees and their activities in hospitals or other healthcare,

These requirements include:

- A. Management Commitment and Employee Involvement
- B. Hazard Analysis
- C. Hazard Control
- D. Education and Training

Recordkeeping of these activities is recommended.

#### **Resources:**

- U. S. Department of Labor, OSHA Document 2209, *Small Business Handbook*, describes safety committee development and responsibilities as well as providing checklists for safety inspections. (available at www.dol.gov/osha).
- U. S. Department of Health and Human Services, Centers for Disease Control, National Institute of Occupational Safety and Health (NIOSH), *Guidelines for Protecting the Health and Safety of Health Care Workers*, (available at www.cdc.gov/niosh/hcwold2.html)

Congress on Health and Safety

#### **Workers Compensation**

#### Section E

- 1. In the event of a work related illness or injury the employer will provide for pay supplementary to the Workers Compensation benefits to make whole.
- 2. Nurses will be paid regular salary before Workers Compensation begins and if Workers Compensation is denied.
- 3. If a nurse becomes ill or injured from work related exposures or conditions, the employer continues medical, dental, pension credits and accrual of seniority in accordance with contract agreements.
- 4. A nurse will be reinstated to former job at the pay rate according to the contract after an absence for work related injury or illness.
- 5. Confidentiality of records and information concerning the injured/.ill nurse will be maintained at all times.
- 6. The employer will provide to the injured/ill nurse of any and all files it has relating to that nurse upon request.
- 7. The employer shall provide a modified work assignment program to assist the nurse in returning to work. This program should include but not be limited to the following:
  - a. Nurses will be accommodated on an individual basis with a focus on the nurses' physical requirements as described by their personal treating health care provider.
  - b. In evaluating the ability to accommodate nurse with work restrictions, the employer will increase the number of staff scheduled on a unit as a method of achieving safe accommodation.
  - c. In the event the nurse can no longer be accommodated or perform the previous work because of the nature of the injury or illness and the nurse is transferred to another normally lower paying job the original payroll continue per contract (step raises).
  - d. The employer guarantees the re-education of a nurse for another job in such cases even though long term training may be involved.

# **Background Information for This Proposal**

- 1. Police and firefighters receive 100% reimbursement if injured. Nurses deserve similar treatment by their employers
- 2. Nursing personnel rank fifth nationally for filing Workers Compensation cases, only laborers such as warehouse workers and mechanics surpass nurses. (Owen, B.Essentials of Modern Hospital Safety, CRC/Lewis Press, vol.3, p.333, 1995)
- 3. **An occupational or work-related injury** is defined but not limited to any injury which results from a work accident or from a single instantaneous exposure in the work environment. Disabling musculo-skeletal injuries often develop over time and symptoms should be reported as soon as appear.
- 4. **An occupational or work-related illness** is any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated

- with employment. It includes acute and chronic illnesses or diseases which may be caused by inhalation, absorption, ingestion, direct contact or repeated trauma.
- 5. Employment may not be the sole cause of the cause of injury; it only need be a substantial contributing cause. (See State Compensation Insurance Fund vs. IAC (Wallin) (1959) 1 176 Cal. App.2nd 10, CR 73.
- 6. **An alternative duty program** is defined as but not limited to "A program that is intended to meet the injured/ill employee's medical restrictions only until such time as he/she can return to full capacity or has been issued permanent restrictions by the patient's medically responsible physician."
- 7. A Workers Compensation claim is addressed on an individual basis. There are multiple steps in this very complicated process. The steps are known as conciliation, voluntary arbitration, conference hearing and appeal. The First Report of Injury must be filed with the Department of Industrial Accidents by the employer within 7 business days or the fifth calendar day of disability or inability to work. The worker must obtain a copy of the First Report of Injury (also called OSHA 101.) The state Department of Industrial Accidents (DIA) has a public information person available to answer questions and provide written information upon request.
- 8. Every injured employee should maintain a personal record that includes: dates, symptoms, incident reports, health care provider exams, workplace records and personal logs, as well as all written reports.
- 9. The Massachusetts Nurses Association has a brochure available "Workers Compensation for Nurses and other Health Care Workers" that can be made available to anyone who requests the information. Call 781-821-4625 ask for the Division of Health and Safety.

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# **Ergonomics/Musculo-skeletal Injuries**

Section F

- 1. This facility shall establish a policy of "no lifting" over 51 pounds. This is in compliance with NIOSH indicates a person should not lift over 51 pounds.
- 2. Nurses shall be involved in the selection of devices that will be purchased to assure that the devices are appropriate for the limitations of their work environment and appropriate for the patients they care for.
- 3. Lifting devices shall be made readily available.
- 4. If "Lift Teams" are developed, team members will have no other work assignment and they will lift and move patients only with mechanized lifting devices.
- 5. Computer work stations shall be designed according to ergonomic guidelines.

# **Background Information for This Proposal**

#### General information

Examining national statistics, hospitals came in as the third most hazardous work environment in the United States when compared to all other industries. Nursing homes came in first, with the known-to-be-hazardous trucking industry scoring  $2^{nd}$ . (BLS 2000).

The incidence of *reported* non-fatal occupational injuries/illnesses in the nursing home sector in 2001 was 14.8 per 100 full time employees (FTEs), **9.0 per 100 FTEs in hospitals**, showing an increase for hospitals and nursing homes over 2000 data (BLS, 2000 & 2001).

Among employees in the Massachusetts "services" industry, RNs had the second highest number of reported injuries/illnesses of all occupations with 1265 injuries among RNs reported in 2002. Only nursing aides/orderlies/attendants, with a grand total of 3155 injuries, were higher within this sector. (MDOS/DOL, Massachusetts Occupational Injuries and illnesses, 2002, Massachusetts Department of Occupational Safety/USDOL: Boston, p.4)

Here in the Commonwealth, in 2001, 10,400 cases of nonfatal occupational injuries/illnesses were reported among hospital employees alone; another 7600 cases can be found among nursing home and personal care facilities (BLS 2001). A closer analysis shows that well over half of all lost work time injuries in this sector are associated with sprains, strains and cumulative trauma to the back and other body regions.

#### Lifting Devices

- 1. The weight and dependency of patients and the awkward posture required to lift them lead to a high risk of musculoskeletal injuries and disorders. Lifting devices minimize that risk (*Hospital Employee Health*, May, 2000).
- 2. Common tasks such as repositioning and transferring patients from bed to chair place excessive physical compressive force on the spine (*Hospital Employee Health*, May, 2000).

- 3. The most effective approach to injury prevention efforts within the health care industry is to identify high-risk jobs and activities and make physical changes to the way this work is conducted. These physical changes are achieved primarily through engineering controls for health care and include innovations in bed design, mechanical lifts, transfer chairs, sliding devices and other such aids (*Hospital Employee Health*, May, 2000).
- 4. In one particular study in a rural hospital in the mid West, lifting devices were purchased, assessments and in-services conducted. After this, intervention injuries dramatically declined and five years later there were no lost work days related to patient handling (*Hospital Employee Health*, May, 2000).

#### Lift Teams

- 1. A Lift Team incorporates the philosophy of removing nurses from the everyday task of moving patients in a facility. Lifting patients SHOULD be considered a specialized skill performed by expert professional patient movers who have been thoroughly trained in the latest techniques, rather than a hazardous random task required by busy nurses. (*The Lift Team Method for Reducing Back Injuries: A 10 Hospital Study*, Wm. Charney, *AN Journal*, June 1997, Vol. 45, No.6.)
- 2. A risk assessment guideline places risk where it can actually be controlled by a team of 2 or 4 persons, rather than in an entire nursing department, (*AAOHN Journal*, June 1997.)

#### Computer Work Stations

- 1. The feet should be placed flat on the floor or on a foot rest with the lower legs appropriately vertical.
- 2. The thighs should be horizontal with the weight taken in the buttocks. They should not be compressed, especially behind the knees, as this restricts blood flow to the lower legs.
- 3. The trunk should be vertical and the body weight on the spine should be supported by a backrest at the lumbar region.
- 4. The upper arms should hang from the shoulder joint comfortable straight, with the forearms positioned at less than 90 degrees taking the load in the elbow joints, not the upper arm.
- 5. The preferred wrist position is neutral with no deviation.
- 6. The head should be inclined slightly downward.
- 7. NIOSH recommends a 15-minute break every 2 hours of continuous computer use to relieve eye and muscular fatigue and a 15-minute break every hour for particularly demanding computer use.

Source: University of Massachusetts Safety Manual, 1998 as stated from May 2000 of Hospital Employee Health.

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## **Air Quality Concerns**

Section H

According to the U. S. EPA, "Over the past several decades, our exposure to indoor air pollutants increased due to a variety of factors including construction of more tightly sealed buildings, reduced ventilation to save energy, the use of synthetic building materials and furnishings, and the use of chemically formulated personal care products, pesticides, and cleaning products." (www.epa.gov FAQ)

#### The hospital shall:

- 1. assure that standards, guidelines and directives of OSHA, EPA and/or Mass. Department of Public Health including Construction Guidelines are followed to protect the health and safety of nurses from exposure to air contaminants, and other hazardous conditions.
- 2. eliminate the use of mercury containing products, including mercury thermometers.<sup>2</sup>
- educate nurses about the symptoms that may be associated with exposure to poor indoor air quality and advise nurses experiencing these symptoms on how and where to report their symptoms.
- 4. provide a knowledgeable Occupational Health Professional knowledgeable in chemical exposure and reactions to poor indoor air quality to be available for employees 24/7.
- 5. provide contact information for nurses to report and discuss their concerns related to air quality issues
- 6. ensure a Fragrance Free environment by educating employees on the toxic properties of personal fragrances and posting notices to inform the public.<sup>3</sup>
- eliminate the use of toxic chemicals including volatile organic compounds in housekeeping products and replace these products with those considered safer for workers and the environment.<sup>4</sup>
- 8. provide medical evaluation for nurses who report any respiratory irritation or other symptoms associated with poor indoor air quality or from any other work-related exposure
- 9. report all cases of occupational asthma caused or aggravated by work exposure or working conditions are to be reported to the Massachusetts Department of Health, SENSOR Program at 617/624-5621 as required by Massachusetts law.<sup>5</sup>

#### Existing contract language:

#### Fragrance Free Environment

The Hospital will post a notice (on signage that is 14 inches square) in each of the main entrance ways to the campus facility, currently Bailey Outer Lobby, East Wing Oute Lobby, Emergency Department Outer Lobby and staff entranceway by M RI Pad – with a statement to the following effect:" The Hospital requests that you limit the fragrances that you wear when within Jordan. Some people find that scents aggravate their medical conditions. Thank you for your cooperation."\*

\* Jordan Hospital, Article VII Health and Welfare, Section 7.9

## Notes related to this proposal

- Air contaminants include but are not limited to; cleaning, sanitizing, and disinfecting chemicals, latex, waste anesthetic gases, laser plume smoke, mold, fungus, aerosolized debris from construction materials, personal fragrances, aerosolized pharmaceuticals, mercury (dioxin, DEHP) and/or pesticides. Disinfectants used to clean healthcare facilities registered with the EPA as pesticides, which indicates the toxicity of these chemicals. They include Quaternary Ammonium Compounds, Phenols, Chlorine, Alcohols, Baldheads, Oxidizers and Iodine
- 2. Mercury is a persistent bioaccumulative toxic compound and is recognized as a global pollutant. If Mercury is spilled from a broken thermometer, it will evaporate, potentially reaching dangerous levels in indoor air.
- 3. An example of a notice currently in use in hospitals state "It is requested that you refrain from using scented personal products when working or visiting within this facility. Fragrances may aggravate medical conditions. Thank you for your cooperation."
- 4. Cleaning Chemical Use in Hospitals Fact Sheet, from Healthcare Without Harm, (www.no-harm.org, click on Pesticides and Cleaners, and go to Key Resources)
- 5. Report Asthma cases to: Massachusetts Department of Health, Occupational Health Surveillance Program, 250 Washington Street, 6th floor, Boston, MA 02108, or call 617-624-5632 to request a reporting form.
- 6. Nurses are encouraged to report their symptoms to the occupational health department because cases of hypersensitivity pneumonitis have been incorrectly diagnosed as bacterial or viral pneumonia and antibiotics have been unnecessarily prescribed. In many of these cases, the causative agent may be a toxic or irritant chemical exposure that had not been recognized.

Update 11/05

# MNA CONTINUING NURSING EDUCATION ON-LINE



# CONTINUING EDUCATION ONLINE

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1

Click on **MNA ONLINE CE** on the home page in the pink box.

# **Programs Available:**

#### Workplace Violence

The goal of this program is to provide nurses and others with an understanding of the extent and severity of workplace violence in the health care setting, the effects this violence has on nurses and other victims and learn to identify hazardous conditions that can be corrected to prevent violence.

#### Fragrance Free! Creating a Safe Health Care Environment

The goal of this program is to ensure a therapeutic environment in which the patient and the nurse can interact, as well as to create a healthy workplace in which employees can practice.

#### Latex Allergy Program

The goal of this program is to provide nurses and other healthcare workers with information related to the frequency and severity of latex allergy and prevention strategies to protect themselves and their patients from allergic reactions.

#### Fatigue and Sleeplessness

The purpose of the program is to enable nurses and health care providers to recognize the dangers associated with sleeplessness and fatigue on their own health and safety and on that of their patients, and to utilize skills to combat fatigue.

# **Program Requirements**

To successfully complete a program and receive contact hours, you must read the entire program, take and pass the Post-Test and complete the Program Evaluation. To pass the Post-Test, you must achieve a score of 80% or above. Your certificate of completion will be available immediately, from the "My Account Page", upon successful completion of the program.

#### Accreditation

The Massachusetts Nurses Association is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

\*All programs are free of charge to MNA members and others.



