Occupational Health Management™

A monthly advisory for occupational health programs

AHC Media LLC

INSIDE

Statement of Financial Disclosure: Stacey Kusterbeck (Editor), Coles McKagen (Associate Publisher), Joy Dickinson (Senior Managing Editor), and Grace K. Paranzino (Nurse Planner) report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study.

SEPTEMBER 2009

VOL. 19, NO. 9 • (pages 97-108)

If pandemic hits, step up to the plate to act in employees' best interest

Occupational health must be ready to reinforce policies

"I know John's son and wife have the flu, but John doesn't look sick, and I really need him to complete that report."

As an occupational health professional, you can expect to hear many statements like this if H1N1 returns this fall as expected. "You will need to enforce that if John's family all have the flu, having John here is too big a risk to the rest of his department, and he really needs to stay home," says **Catherine Rausch**, MN, RN, senior occupational health nurse at Marathon Petroleum Co.'s St. Paul Park, MN, refinery. "Protecting the healthy might become a challenge when management needs to run a company."

Workers might become ill, fear exposure, experience side effects from Tamiflu, or need to care for children due to school closings. Regardless of the reason, many employees won't be at work.

Eden V. Wells, MD, MPH, a medical epidemiologist at the Michigan Department of Community Health in Lansing, says, "At this time, every job site should be considering two things: employee safety and continuity of business planning." Your job, says Wells, is twofold: to ensure that employees fulfill critical roles and to reduce the likelihood of ill employees spreading infection to others. Employees might feel pressure either to come to work when they are sick, or to stay at home when it's not necessary.

EXECUTIVE SUMMARY

If widespread absences occur during a flu pandemic, occupational health professionals may be in the middle of a conflict between keeping employees from spreading infection and ensuring that critical roles are fulfilled. To address this difficult scenario:

- Work with human resources to modify policies.
- Remind senior leaders of the medical logic behind decisions.
- Reinforce company policies as needed.

"Work closely with human resources in modifying policies to address these concerns," says Wells. "Employees will more likely remain at home to avoid infecting others if they believe the worksite has contingency plans. Provide cross-training for backup staffing."

Rausch says that Marathon has a plan for organized, systematic reductions in operations, should a pandemic make safe staffing impossible. "Since we operate 24 hours a day, seven days a week, it is important for us to have staff," she says. "Planning does pay off."

Emphasize medical logic

Rausch says that senior leadership looks to the corporate health services department for guidance. "My job is to remind them why certain decisions were made and the medical logic behind them," says Rausch. "Since employees can only return to work through me, I am the person interacting with HR staff and can reinforce company policy."

For example, Marathon's company policy states that if an employee is off for three days, he or she needs a note from a health care provider to return to work. However, because doctors and clinics probably will be overwhelmed, the employee will not need the note to return to work during a pandemic. "Senior management had trouble grasping the idea that we don't want these people going to the doctor for the flu, that in most cases they can be successfully treated at home," says Rausch. "Part of my job is to inform the employees how to do that and when they should go to the doctor." According to the June 2009 report The Pandemic Flu: Lessons from the Frontlines, one of the lessons learned was that even with a mild outbreak, the health care delivery system was overwhelmed. **(To obtain the report, go to healthyamericans.org/report/64/pandemic-flu-frontlines. Click on "Complete Report.")**

Caroll Niewolny, PHN, MS, manager of occupational health and safety for Ramsey County Human Resources in St. Paul, MN, says that part of your job is to ensure that essential employees will be able to perform their job duties without increased risk for exposure to H1N1. "Advise human resources and supervisors that employees with signs and symptoms of influenza

SOURCES

For more information on preparing for an H1N1 pandemic this fall, contact:

- **Caroll Niewolny**, RN, PHN, MS, Manager, Occupational Health and Safety, Ramsey County Human Resources, St. Paul, MN. E-mail: Caroll.Niewolny@co.ramsey.mn.us.
- **Catherine Rausch**, MN, RN, Senior Occupational Health Nurse, Marathon Petroleum Co., St. Paul Park, MN. E-mail: clrausch@marathonoil.com.
- **Eden V. Wells**, MD, MPH, Bureau of Epidemiology, Michigan Department of Community Health, Lansing. Phone: (517) 335-8165. Fax: (517) 335-8263. E-mail: wellsed@michigan.gov.

Occupational Health Management™ (ISSN# 1082-5339) is published monthly by AHC Media LLC, 3525 Piedmont Road, Building Six, Piedmont Center, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodicals Postage Paid at Atlanta, GA 30304 and at additional mailing offices.

POSTMASTER: Send address changes to ***Occupational Health Management***™, P.O. Box 740059, Atlanta, GA 30374.

AHC Media LLC is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This activity has been approved for 15 nursing contact hours using a 60-minute contact hour.

Provider approved by the California Board of Registered Nursing, Provider #14749, for 15 Contact Hours.

This activity is intended for occupational nurses, occupational health managers and directors. It is in effect for 36 months from the date of publication.

Opinions expressed are not necessarily those of this publication. Mention of products or services does not constitute endorsement. Clinical, legal, tax, and other comments are offered for general guidance only; professional counsel should be sought for specific situations.

Subscriber Information

Customer Service: (800) 688-2421 or fax (800) 284-3291, (customer service@ahcmedia.com). Hours: 8:30-6:00 M-Th; 8:30-4:30 F.

Subscription rates: U.S.A., one year (12 issues), $489. Add $17.95 for shipping & handling. Outside U.S., add $30 per year, total prepaid in U.S. funds. Discounts are available for group subscriptions, multiple copies, site-licenses or electronic distribution. For pricing information, call Tria Kreutzer at 404-262-5482. Missing issues will be fulfilled by customer service free of charge when contacted within one month of the missing issue date. **Back issues**, when available, are $82 each. (GST registration number R128870672.)

Editor: **Stacey Kusterbeck.**
Associate Publisher: **Coles McKagen**, (404) 262-5420, (coles.mckagen@ahcmedia.com).
Senior Managing Editor: **Joy Dickinson**, (229) 551-9195, (joy.dickinson@ahcmedia.com).
Production Editor: **Ami Sutaria**.

AHC Media LLC

Editorial Questions

For questions or comments, call **Joy Dickinson** at (229) 551-9195.

should be home, not at work," says Niewolny.

Niewolny adds that after the public health department determined that H1N1 was acting like seasonal flu, employees were still told to go home if they had signs or symptoms of influenza, but they were not to go home from work if they were exposed to a client or co-worker who reported that they were positive for H1N1. "A big challenge was lowering the fear level to actual versus perceived, while communicating that yes, this could have been very serious," says Niewolny. **(See related story on preparing for a possible epidemic, below.)** ■

Don't assume you're ready — Make certain of it

"You can't assume that because a program has the responsibility to be prepared in the event of a potentially serious influenza outbreak, that they actually are prepared," says **Caroll Niewolny**, RN, PHN, MS, manager of occupational health and safety for Ramsey County Human Resources in St. Paul, MN. "You need oversight and accountability at a corporate level."

Here are things to do right now to prepare for a flu pandemic this fall:

1. Plan for vaccine distribution for seasonal and H1N1 vaccination for employees *and* families.

"This will probably involve three separate injections," says **Catherine Rausch**, MN, RN, senior occupational health nurse at Marathon Petroleum Company's St. Paul Park, MN, refinery. "This may be offered at work, or the nurse should have knowledge of available resources in the community."

Niewolny says, "We will offer onsite flu shots early this year, anticipating that we may need double or triple the number of shots per person if there is a new recommended vaccine."

2. Prepare concise, clear educational information materials for employees.

Rausch says that due to the fact that her company had three employees and two family members with H1N1, employees with sick family members were requested to stay home. "Education was a challenge, but I had a lot of help from our corporate health services and the corporate task force who communicated daily with employees through the company web site with information," she says.

If H1N1 returns this fall, Rausch says that education will be done via the company web page, weekly podcasts by managers, "lunch and learn" presentations, printed material, and "constant face-to-face encounters to answer personal questions." **[A PowerPoint presentation created by Rausch is included with the online version of this month's *Occupational Health Management*. For assistance, contact customer service at customerservice@ahcmedia.com or (800) 688-2421.]**

Niewolny says that pandemic flu preparedness was added to the annual training given to employees who would be expected to perform job duties during an outbreak. "We are continuing to sharing information electronically on our intranet site, and post signage on how influenza is transmitting and the need to break the chain of transmission," she says.

3. Take the opportunity to encourage healthy choices.

Rausch says she is encouraging employees to improve their nutrition, practice hand hygiene, and build up their immune systems. "We have a corporate wellness plan, and healthy behaviors are reinforced," she says.

4. Monitor supplies of personal protective equipment (PPE).

Masks, hand sanitizer, gloves, and Tamiflu were distributed to Marathon Petroleum's employees and family members this spring. "These supplies are now being held for a possible resurgence of flu in the fall," says Rausch.

Be sure that anyone who will be expected to work during an outbreak has been medically cleared to wear N95 respirators; has been fit tested; and is trained on their use, care, and storage, Niewolny says.

5. Get in touch with your local public health department.

Be familiar with the public health support in your local jurisdiction, as the local health officer will be the one providing guidance throughout a pandemic, says **Eden V. Wells**, MD, MPH, a medical epidemiologist at the Michigan Department of Community Health in Lansing.

"Contact your local public health department for information on how you can expect to receive information during a suspected life-threatening epidemic," says Niewolny.

6. Formulate a plan to isolate and treat employees who develop symptoms at work.

Rausch says to "maintain a level of healthy respect for the possibility of resurgence of the dis-

ease. Employees should not be afraid, but also not complacent." ■

ID domestic violence — It can save millions

You can and should intervene

If you had to name something that costs American businesses an estimated $4.1 billion a year in direct medical and mental health care services, would you think of intimate partner violence?[1]

Almost a quarter of full-time employed adults (21%) were victims of domestic violence, according to a survey done by the Corporate Alliance to End Partner Violence, and 64% of this group indicated that their work performance was impacted significantly.

"I think the occupational health nurse (OHN) would be surprised if they knew how much it costs," says **Sarah Katula**, PhD, APN, a clinical nurse specialist at Behavioral Health Services, Advocate Good Samaritan Hospital in Downers Grove, IL. "I also think they would be surprised at how effective they could be if they championed the issue." **[A free Domestic Violence Cost Calculator is available online, which computes the annual medical and absenteeism cost of intimate partner violence in your workplace. To use the calculator, go to www.texashealth.org. Under "Community Commitment," choose "Family Violence Prevention" and then "Family Violence Prevention/Cost Calculator."]**

Almost a quarter of full-time employed adults (21%) were victims of domestic violence, according to a survey done by the Corporate Alliance to End Partner Violence (CAEPV), and 64% of this group indicated that their work performance was impacted significantly. "There are costs involved in domestic violence for the workplace that employers do not realize," says Kim Wells, the organization's executive director. "Occupational health professionals are certainly on the frontline of this. They may see presenting issues that are not domestic violence on the face, but are so on a deeper level."

Here's what to do

Katula says occupational health professionals should "provide a place of safety in their offices and extend that into the greater work environment." She recommends you provide screening and resources to employees by doing the following:

• **Offer general education to employees so they too know what to look for in other employees.**

"Often it is the coworkers that identify it because they see the day after day consequences," says Katula. "They may overhear phone conversations from the perpetrator. They may be asked to help screen calls or prevent the abuser from entering the workplace."

However, Katula says that the occupational health nurse (OHN) "could be the one to notice a bruise. She could be the one that asks screening questions in a way that if a 'yes' answer is there, the victim might disclose abuse." **(To find employer-based materials, go to www.caepv.org. Click on "Start a Workplace Program.")**

• **Assess how much leaders know**.

Katula sent managers a questionnaire on their knowledge of intimate partner violence, including any training they had received.

"We found that they had little experience, and knew very little about how to respond and what resources were available," says Katula. "We also found they were unaware of legislation to help protect abused employees." Based on these findings, training programs and an Intranet web site were created.

• **Obtain training from local domestic violence experts or agencies.**

"Training will provide you with a framework for what needs to be cultivated at your workplace," says Katula. "At Good Samaritan, we have a very close working relationship with two agencies: a police department and the YWCA. We meet monthly and formulate plans for education and awareness."

EXECUTIVE SUMMARY

The costs of domestic violence to a workplace often are overlooked, but these include health care expenses, lost productivity, and unworked days. To help employees being victimized:

• Educate employees on signs their coworker is being abused.
• Screen for signs of abuse.
• Work with local advocacy agencies.

SOURCES

For more information on domestic violence's impact on the workplace, contact:

- **Sarah Katula**, PhD, APN, Clinical Nurse Specialist, Behavioral Health Services, Advocate Good Samaritan Hospital, Downers Grove, IL. Phone: (630) 275-6212. E-mail: Sarah.Katula@advocatehealth.com.
- **Kim Wells**, Executive Director, Corporate Alliance to End Partner Violence, Bloomington, IL. Phone: (309) 664-0667. Fax: (309) 664-0747. E-mail: caepv@caepv.org.

Reference

1. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Costs of intimate partner violence against women in the United States. 2003. Atlanta. ■

Screening may provide only modest benefits

Checking for partner violence didn't yield changes

New research suggests that universal intimate partner violence (IPV) screening in health care settings does not result in significant changes in subsequent reports of IPV or quality of life, according to a study in the August 5 issue of the *Journal of the American Medical Association*.

There is a lack of consensus on the issue of screening women for IPV in health care settings. Proponents support screening because of the high prevalence of IPV and associated impairment and the availability of feasible screening techniques. But organizations such as the U.S. Preventive Services Task Force and the Canadian Task Force on Preventive Health Care have concluded that insufficient evidence exists to recommend for or against universal screening, mainly due to lack of interventions that have been proven effective for women exposed to violence and referred from health care settings. "Nevertheless, clinicians and health care organizations are being encouraged to implement IPV screening. Numerous professional societies recommend routine IPV evaluation, assessment, and/or screening as a part of standard patient care, and the standards of The Joint Commission require that hospitals have objective criteria for identifying and assessing possible victims of abuse and neglect," the authors write.

Harriet L. MacMillan, MD, MSc, FRCPC, of McMaster University, Hamilton, Ontario, Canada, and colleagues examined the effectiveness of IPV screening and communication of a positive screening result to clinicians in health care settings, compared with no screening, in reducing subsequent violence and improving quality of life. The randomized controlled trial was conducted in 11 emergency departments, 12 family practices, and three obstetrics/gynecology clinics in Ontario, Canada, among 6,743 female patients, age 18 to 64 years.

Women in the screened group (n = 3,271; 347 positive for abuse) self-completed the Woman Abuse Screening Tool (WAST). If a woman screened positive, this information was given to her clinician before the health care visit. Subsequent discussions and/or referrals were at the discretion of the treating clinician. The non-screened group (n = 3,472; 360 positive for abuse) self-completed the WAST and other measures after their visit. Women who disclosed past-year IPV were interviewed at the start of the study and every six months until 18 months regarding subsequent incidents of IPV and quality of life, as well as several health outcomes and potential harms of screening.

The authors add that even though screening might provide some small benefits on some outcomes, "It is critical to balance the number and magnitude of potential benefits of universal screening with the human, opportunity, and resource costs required.

"We conclude, although sample attrition urges cautious interpretation, that these results do not provide sufficient evidence to support universal IPV screening in health care settings in the absence of an effective intervention to prevent or reduce IPV, especially in the context of the resources required to conduct screening and to deal with the number of women identified by the screening tool," the authors write. "Further research is essential to determine whether these findings are replicated in other settings and samples." They add that evidence regarding effective interventions to assist women who disclose abuse in health care settings is urgently required. ■

Don't neglect older workers in occ health programs

Claims are more expensive

Older workers are less likely to be injured than younger workers, but when they are, the injury is likely to be more severe and more costly.[1]

"Younger workers have fewer days out of work for the same type of injury. It takes longer for the older worker's body to recuperate," says **Judith Ostendorf**, MPH, COHN-S, CCM, FAAOHN, a clinical assistant professor for the Occupational Health Nursing Program at the University of North Carolina at Chapel Hill. "Older workers make fewer workers' comp claims, but when they do make a claim, it is generally more expensive."

In addition, the number of older workers, who might be less likely to retire early due to the recession, are growing in workplaces. The number of persons 55 and over in the labor force was 25.2 million in 2008, and this is projected to increase to 32 million by 2025, according to U.S. Bureau of Labor Statistics.

Safety of older workers "is a great concern in the manufacturing and construction environments. The occupational health professional should be learning all they can on this subject," says **Diane DeGaetano**, RN, BSN, COHN-S, COHC, president of the Atlanta chapter of the Association of Occupational Health Nurses.

Christine R. Zichello, RN, COHN-S, CSHM, ARM, FAAOHN, senior risk control specialist at PMA Insurance Group's Mount Laurel, NJ, branch office. "Older workers can bring great value — experience, work ethic, and personal virtues — to an organization," says However, Zichello points to a 2005 National Council on Compensation Insurance study also showing that older workers require more medical care, have a more difficult time returning to work, and go through a longer healing process than younger employees.[1] When developing programs targeting older workers:

• Include workers ages 45 and up.

Getting an early start with aging workers can "keep them off the disability list," says **Kathleen Buckheit**, MPH, COHN-S/CM/SM, director of continuing education at the North Carolina Occupational Safety and Health Education and Research Center in Chapel Hill.

According to **Myles Druckman**, MD, vice president of medical services for International SOS, which works with companies to keep workforces safe and healthy, "some of our concepts on what is old are being shaken. People are working now through their 60s and 70s and are highly functioning and vigorous."

However, Druckman says you have to balance that changing perception with the fact that "as people age, they have more chronic illnesses and are more at risk for certain health issues." According to a 2008 report, average case costs for International SOS employees aged 56-65 years were almost four times higher than those for employees aged 26-35.

• Assess the older worker's risk of injury.

"Older workers may have a mismatch between their job and their capabilities," says Zichello. "As people age, their skills and faculties, including strength, motor skills, and sensory acuity, diminish. The OHN [occupational health nurse] should assess worker capabilities as a strategy for controlling potential exposures before an injury occurs."

• Obtain statistics available through your workers' compensation carrier to determine the age of the workers being injured, the type of injuries and commonalities between the workers and the injury type.

"Armed with this information, the OHN can develop a proactive safety program," says Zichello.

At Roswell, GA-based Kimberly-Clark Professional, "We continue to pay close attention to older workers in our manufacturing facilities," reports **Scott Gaddis**, global safety capability leader. "Ten years ago, our trends data indicated that older workers 50 to 65 years of age, suffered

EXECUTIVE SUMMARY

If an older worker is injured in the workplace, he or she will take more time to recuperate and will have a more expensive workers' compensation claim than a younger worker. To keep older workers safe:

• Use statistics on worker's ages and type of injury to develop safety programs.

• Limit the time that older workers perform ergonomically challenging work.

• On safety rounds, consider lighting, glare, and noise levels.

more injuries than any other age group." The data pointed to trips and falls, as well as cumulative traumatic injuries to the arms, hands, shoulders, and back as primary reasons for injuries.

To "stem the tide" of injuries in this age group, Gaddis says that strengthening exercises were implemented, along with job rotations to limit the amount of time that older workers are doing ergonomically challenging work. "These programs continue today," says Gaddis. "A more recent 2008 injury trend analysis is showing fewer injuries in the older-age worker category. This is a positive indication that these programs are working." **(See related story on ways to prevent injuries in older workers, below, and a checklist of what your ergonomic programs should include, p. 104.)**

Reference

1. Wolf MH. Younger workers vs. older workers going to the emergency room: Explaining differences in utilization and price. *NCCI Research Brief*, Fall 2007. ■

SOURCES

For more information on reducing injuries in older workers, contact:

• **Kathleen Buckheit**, MPH, COHN-S/CM/SM, Director of Continuing Education, Occupational Safety and Health Education and Research Center, University of North Carolina (UNC) at Chapel Hill. Phone: (919) 962-2101. Fax: (919) 966-7579. E-mail: buckheit@email.unc.edu.
• **Diane DeGaetano**, RN, BSN, COHN-S, COHC, Occupational Health Manager, Merial Limited, Duluth, GA. Phone: (678) 772-7734. E-mail: diane.degaetano@merial.com.
• **Scott Gaddis**, Global Safety Capability Leader, Kimberly-Clark Professional, Roswell, GA. E-mail: scott.gaddis@kcc.com.
• **Judith Ostendorf**, MPH, COHN-S, CCM, FAAOHN, Clinical Assistant Professor, Occupational Health Nursing Program, UNC at Chapel Hill. Phone: (919) 966-2597. Fax: (919) 966-8999. E-mail: judy_ostendorf@unc.edu.
• **Christine R. Zichello**, RN, COHN-S, CSHM, ARM, FAAOHN, Senior Risk Control Specialist, PMA Insurance Group, Mount Laurel, NJ. Phone: (610) 304-3298. Fax: (973) 492-2823. E-mail: Christine_Zichello@PMAGroup.com.

Save older workers from serious injuries

There are many modifications you can make to work environments to prevent injuries commonly sustained by older workers, according to **Christine R. Zichello**, RN, COHN-S, CSHM, ARM, FAAOHN, senior risk control specialist at PMA Insurance Group's Mount Laurel, NJ, branch office.

"Develop training programs addressing the sensory and cognitive changes in the older workers," says Zichello. "On safety rounds, consider such items as lighting, glare, and noise levels." Here are some other items to consider:

• **Avoid slips and falls.**

"Good housekeeping can avoid slips and falls, especially in older workers who might not see a screw on the floor or water that somebody didn't clean up," says **Kathleen Buckheit**, MPH, COHN-S/CM/SM, director of continuing education at the North Carolina Occupational Safety and Health Education and Research Center in Chapel Hill.

• **Address lighting.**

"Where general lighting might be adequate for younger workers, direct light or task lighting might be necessary for the older population," says Buckheit. "Color perception decreases, so if they have to determine differences in dye lots, for example, that might be an issue. Also, contrast sensitivity decreases, so you want to have a real contrast between the background and the print."

• **Have a good hearing conservation program.**

Judith Ostendorf, MPH, COHN-S, CCM, FAAOHN, a clinical assistant professor in the Occupational Health Nursing Program at the University of North Carolina at Chapel Hill, says, "This is particularly important if people are working in a plant or manufacturing environment. The older worker may not hear somebody honk the horn or say, 'Step aside, I am driving by.'"

• **Put a good ergonomics program in place.**

Diane DeGaetano, RN, BSN, COHN-S, COHC, president of the Georgia Association of Occupational Health Nurses in Atlanta, says, "To promote safety of older workers, you need a good ergonomics program." **[A checklist and audit forms used to assess environmental health and safety, developed by DeGaetano, are included with the online version of this month's *Occupational Health Management*. For assistance, contact customer service at customer**

service@ahcmedia.com or (800) 688-2421.]

In older workers, says Buckheit, "the musculoskeletal system is less flexible, the muscles aren't as strong, and the joints may have arthritic changes. Their jobs may need to be modified. Maybe they can do more trips with less heavy loads."

A good ergonomics program benefits all workers, including younger workers who might be able to prevent a musculoskeletal problem from developing, says Ostendorf.

At Merial Limited in Duluth, GA, where DeGaetano is an occupational health manager, an "Athletes at Work" ergonomics program was implemented. "We have seen a decrease in cumulative trauma disorders including tendonitis and lateral epicondilitis in these facilities," she reports.

In many cases, older workers simply need tools to make their own self-accommodations, says DeGaetano. For example, an employee can be given an adjustable chair or work surface to vary their position, or an employee who has bifocals or trifocals can adjust the computer monitor height. "When communicating by telephone, employees who are hearing-challenged may hold their hand to their ear to direct the sound, or may use one ear routinely to hear correctly," she says. ■

Don't omit these items in ergonomics programs

Diane DeGaetano, RN, BSN, COHN-S, COHC, president of the Georgia Association of Occupational Health Nurses in Atlanta, recommends these ergonomic solutions for older workers:

- Implement ergonomic design for material handling to decrease the need for lifting.
- Rotate tasks to reduce fatigue.
- Use large video displays for presentations.
- Have workers use volume-adjustable telephones.
- Make sure controls are clearly labeled.
- Install chain actuators for hand wheels and damper wheels.
- Bring control manipulation to lower levels.
- Install skid-resistant surfaces to flooring/stair treads.
- Install shallow-angle stairways in place of ladders when space permits.
- Install cushioned flooring with static position.
- Design plant safety signs to minimize memory load.
- Provide adequate illumination.
- Increase size of warning signs.
- Provide warning lights for hearing-impaired workers
- Offer modifications such as raised textures, larger buttons, and handicap levers. ■

9/11 exposure linked with new health problems

Large number of individuals, such as recovery and rescue workers and nearby residents and office workers, who experienced intense or prolonged exposure to the World Trade Center attack have reported new diagnoses of asthma or posttraumatic stress 5-6 years after the attack, according to a study in the Aug. 5 issue of *Journal of the American Medical Association*.

"The September 11, 2001, terrorist attack on the World Trade Center (WTC) killed thousands and exposed hundreds of thousands to horrific events and potentially harmful environmental conditions resulting from the collapsing towers and fires," according to background information in the article. Studies have documented adverse respiratory and mental health conditions associated with direct exposure within 1-3 years following the event, however, the longer-term impact on health has been unclear.

Robert M. Brackbill, PhD, MPH, of the Centers for Disease Control and Prevention, Atlanta, and colleagues of the New York City Department of Health and Mental Hygiene, and Columbia University, New York, examined the incidence of two of the most commonly reported health outcomes: asthma and posttraumatic stress (PTS) symptoms indicative of probable posttraumatic stress disorder (PTSD) among adults 5-6 years after the attack. The researchers used data from the World Trade Center Health Registry, the largest postdisaster exposure registry in U.S. history, which prospectively follows a group that reported a range of WTC disaster–associated exposures on Sept. 11 and during its immediate aftermath. Wave 1 of the study, conducted in 2003-2004, included enrollment of 71,437 adults in four groups: rescue/recovery workers, lower Manhattan residents, lower Manhattan office

workers, and passersby; 46,322 adults (68%) completed a follow-up wave two survey in 2006-2007. The surveys included questions regarding symptoms of asthma following Sept. 11 and event-related PTS symptoms indicative of probable PTSD, assessed using the PTSD Checklist (a self-report symptoms rating scale).

The researchers found that overall postevent incidence among those without a prior history of asthma was 10.2%, with rescue/recovery workers having higher postevent asthma diagnosis rates than the next highest group, passersby on Sept. 11 (12.2% vs. 8.6%). For all eligibility groups combined, intense dust cloud exposure was associated with postevent diagnoses of asthma (13.5% vs. 8.4% for no dust cloud exposure). Thirty-nine percent of all respondents reporting postevent diagnoses of asthma also reported intense dust cloud exposure.

"These analyses confirm that intense dust cloud exposure was associated with new asthma diagnoses for each eligibility group, including the 1,913 passersby who only had exposure to the area air and dust on Sept. 11," the authors write.

Among rescue/recovery workers, risk for asthma was highest among those who worked on the pile on Sept. 11, with risk diminishing with later start dates. Asthma risk also was independently associated with some damage to home or office, and risk was highest if there was a heavy coating of dust at home or at the office. Among residents, those who did not evacuate reported higher rates of asthma than those who did.

Of the adults without a diagnosis of PTSD before Sept. 11, 23.8% screened positive for PTS symptoms indicative of probable PTSD at either wave one (14.3%) or wave two (19.1%). At follow-up, the prevalence of PTS symptoms increased in every eligibility group, with the greatest increase occurring among rescue/recovery workers. At the wave two follow-up survey, passersby had the highest levels of symptoms (23.2%), while residents had the lowest (16.3%).

Across eligibility groups, passersby had the highest prevalence of chronic PTS symptoms, office workers had the highest prevalence of resolved symptoms, and rescue/recovery workers had the highest prevalence of late-onset symptoms. With regard to mental health diagnoses, 13.6% of all participants previously free of PTSD reported receiving a PTSD diagnosis from a mental health professional since Sept. 11; 14.0% reported receiving a depression diagnosis; and 7.4% reported receiving both. Event-related loss of spouse or job was associated with PTS symptoms.

Co-occurrence of postevent asthma and PTS symptoms was common in the follow-up survey. Among enrollees with postevent asthma, 36% had PTS symptoms; among enrollees with these symptoms at follow-up, 19% reported a new diagnosis of asthma after Sept. 11.

The researchers add that applying reported outcome rates from the follow-up survey results to the about 409,000 potentially exposed persons, roughly 25,500 adults are estimated to have experienced postevent asthma and 61,000 are estimated to have experienced symptoms indicative of probable PTSD. "Our findings confirm that, after a terrorist attack, mental health conditions can persist if not identified and adequately treated and that a substantial number of exposed persons may develop late-onset symptoms. Our study highlights the need for surveillance, outreach, treatment, and evaluation of efforts for many years following a disaster to prevent and mitigate health consequences," the authors conclude. ■

Emphysema severity tied to coal dust exposure

Coal dust exposure is directly linked to severity of emphysema in smokers and nonsmokers alike, according to new research from the National Institute for Occupational Safety and Health (NIOSH).

"In this study we have shown that coal mine dust exposure is a significant predictor of emphysema severity," said **Eileen Kuempel**, PhD, a senior scientist at NIOSH and lead author of the study. The findings, which were reported in the Aug. 1 issue of the American Thoracic Society's *American Journal of Respiratory and Critical Care Medicine* (AJRCCM), highlight a health problem related to a growing industry. In the past 25 years, coal production has nearly doubled worldwide.

Kuempel and colleagues compared lung autopsy results from 722 individuals, including 616 coal miners from West Virginia and 106 nonminers from West Virginia and Vermont. Those from West Virginia were collected from consecutive autopsies from 1957 and 1973 at the Beckley Southern Appalachian Regional Hospital as part of a black lung study. Those from Vermont were taken from consecutive autopsies performed at the University of Vermont between 1972 and 1978.

Age at death, race, miner/non-miner status, and smoking history were established where possible, and individual exposure to coal dust was estimated using work history data and job-specific dust exposure estimates.

Pathologists **Francis Green**, MD, and **Val Vallyathan**, PhD, two of the coauthors on this study, examined sections of the lungs to determine the presence and extent of emphysema. A smaller subset of the study group had their lung tissue analyzed for dust content. Emphysema was graded for type and severity.

The researchers found that cumulative exposure to respirable coal mine dust was a highly significant predictor of emphysema severity after accounting for cigarette smoking, age at death, and race. Miners tended to be older at death than non-miners due to a higher proportion of accidental or other sudden deaths among the non-miners. Miners also smoked less on average, though differences were nonsignificant. However, emphysema in miners was significantly more severe than in non-miners among smokers and never-smokers. Not surprisingly, emphysema also was more severe among smokers than never smokers in miners and non-miners. Coal mine dust exposure and cigarette smoking had similar, additive effects on emphysema severity in this study.

The lung tissue analysis corroborated these findings; the greater the concentration of coal dust in the lungs, the more severe the emphysema.

While the data were collected on miners who worked in the mines before the enforcement of the federal standard limiting legal coal dust concentrations to 2 mg/m3 imposed in 1972, the study does have immediate relevance to current occupational safety standards. Even at the current federal standard, a full working lifetime's exposure would produce a cumulative exposure similar to the levels found in the autopsied miners.

"Based on our findings, exposure to respirable coal mine dust for a full working lifetime at the current 2 mg/m3 standard would increase the emphysema severity index by 99 points on average. This provides additional evidence of the need to reduce dust exposures to 1 mg/m3 or less as NIOSH has recommended." said Kuempel. "Furthermore, miners in developing countries may be faced with exposure levels in excess of those reported here. Thus, the effects of dust that we report are relevant to current conditions in many countries, including the U.S."

A 99-point increase on the 1,000-point emphysema severity index scale is equivalent to an approximately 10% increase in diseased lung tissue. Previous studies have shown that a 99-point increase in emphysema severity could mean the difference between "normal" and "abnormal" lung function or the worsening of existing lung function.

Coal mine dust exposure is now generally accepted as a cause of chronic obstructive pulmonary disease (COPD), but this study will provide the basis for improved recognition of dust-induced COPD, its relationship to cigarette smoking, and it might enhance efforts at prevention, diagnosis, and medical management of occupational dust-related lung diseases, according to Kuempel.

Benoit Nemery, MD, PhD, in an editorial in the same issue of the *AJRCCM*, says, "Coal employs over 7 million people worldwide, 90% of whom are in developing countries. Coal production has almost doubled in the past 25 years. The environmental and climatic impacts of burning coal are, quite rightly, a source of concern. However, the direct consequences of extracting coal on the health of millions of coal miners must be an equal concern." ■

Get attention on costs of emotional disorders

Coronary artery disease, diabetes, asthma, chronic obstructive pulmonary disease, and congestive heart failure. Would it surprise you to learn that emotional disorders cost companies more than any of these conditions? That is what researchers found when they merged health care claims with data on disability and productivity for 4,000 employees of a large U.S. insurance company.[1]

The researchers merged health care claims with data on disability and productivity for the employees, 11.5% of which had depression, anxiety, or another emotional disorder.

In addition to the $774 of average annual direct medical costs for each worker with these conditions, the indirect costs were even higher: $872 per affected employee. For each employee with emotional disorders, overall loss of productive time averaged 3.3 days per year.

Kenton Johnston, MPH, MS, MA, the study's lead author and a bio-statistical research analyst at Blue Cross BlueShield of Tennessee in Chattanooga, says he wasn't surprised by this data. "The findings are in line with a large body of prior

literature regarding the cost of depression, anxiety, and emotional disorders to employers," says Johnston. However, he says that companies often overlook the indirect costs of emotional disorders.

"The old adage is that what gets measured gets managed," says Johnston. "Most companies simply do not measure these costs because they are not as salient as their annual health care premiums and related health care claims costs. However, these costs are substantial, as is the missed opportunity to manage the underlying costs."

As an occupational health professional, Johnston says you can "put these indirect costs on the radar" for your employer. Johnston recommends telling senior leaders that for every 40 cents spent on medical and pharmacy claims to treat these disorders, another 60 cents is being lost in indirect labor costs. "This has a real impact on their bottom line," he says. "Such data may be used to justify screening and treatment programs targeted to employees at risk for depression, anxiety, and emotional disorders."

Reference

1. Johnston K, Westerfield W, Momin S, et al. The direct and indirect costs of employee depression, anxiety, and emotional disorders: an employer case study. *J Occup Environ Med* 2009; 51:564-577. ■

EXECUTIVE SUMMARY

The indirect costs of emotional disorders, such as decreased productivity, are probably being overlooked in your workplace. Share this data with higher-ups:

- Emotional disorders cost more than coronary artery disease or diabetes.
- Annual indirect costs are $872 per employee, compared with $774 for direct medical costs.
- Of 4,000 employees in a study, 11.5% had an emotional disorder.

New guides in Spanish compare treatment options

New Spanish-language consumer guides have been released by the Agency for Healthcare Research and Quality (AHRQ).

They address antidepressants, rheumatoid arthritis drugs, prostate cancer, high blood pressure, osteoporosis, and renal artery stenosis. The guides join three previously published Spanish-language guides on oral medications for type 2 diabetes, osteoarthritis, and acid reflux disease.

To access the online Spanish-language consumer guides, as well as AHRQ's English-language consumer guides and companion guides for clinicians, go to effectivehealthcare.ahrq.gov. Audio versions of many guides also are available. To order free printed copies of the guides, call (800) 358-9295 or e-mail ahrqpubs@ahrq.hhs.gov. ■

CNE Objectives / Instructions

The CNE objectives for *Occupational Health Management* are to help nurses and other occupational health professionals to:

- Develop employee wellness and prevention programs to improve employee health and productivity.
- Identify employee health trends and issues.
- Comply with OSHA and other federal regulations regarding employee health and safety.

Nurses and other professionals participate in this continuing education program by reading the issue, using the provided references for further research, and studying the questions at the end of the issue.

Participants should select what they believe to be the correct answers, then refer to the list of correct answers to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material.

After completing this semester's activity, you must complete the evaluation form provided in the June issue and return it in the reply envelope provided in order to receive a letter of credit. When your evaluation is received, a letter of credit will be mailed to you. ■

COMING IN FUTURE MONTHS

- ■ What results you can expect with employee incentives
- ■ How to share your expertise on the lecture circuit
- ■ Stop OSHA violations for hidden workplace hazards
- ■ Training you must have for cardiac emergencies

To reproduce any part of this newsletter for promotional purposes, please contact:
Stephen Vance
Phone: (800) 688-2421, ext. 5511
Fax: (800) 284-3291
Email: stephen.vance@ahcmedia.com

To obtain information and pricing on group discounts, multiple copies, site-licenses, or electronic distribution please contact:
Tria Kreutzer
Phone: (800) 688-2421, ext. 5482
Fax: (800) 284-3291
Email: tria.kreutzer@ahcmedia.com
Address: AHC Media LLC
3525 Piedmont Road, Bldg. 6, Ste. 400
Atlanta, GA 30305 USA

To reproduce any part of AHC newsletters for educational purposes, please contact:
The Copyright Clearance Center for permission
Email: info@copyright.com
Website: www.copyright.com
Phone: (978) 750-8400
Fax: (978) 646-8600
Address: Copyright Clearance Center
222 Rosewood Drive
Danvers, MA 01923 USA

CE Answers: 9. A; 10. B; 11. B; 12. C.

CNE *questions*

9. Which is recommended in the event of an H1N1 pandemic this fall?
A. Ensure that employees fulfill critical roles and reduce the likelihood of ill employees spreading infection to others.
B. Policies requiring a doctor's note to return to work should never be modified, even during a pandemic.
C. If policies do need to be modified by human resources, do not become involved in this.
D. Don't offer flu shots to employees onsite.

10. Which is true regarding domestic violence in the workplace?
A. Costs are minimal to most organizations.
B. Employees should be given education on signs that a coworker is a victim.
C. Avoid working with advocacy groups on developing training for employees.
D. Evidence suggests that even if an employee is a victim of domestic violence, productivity is not impacted.

11. Which is true regarding older workers and workplace injuries, compared with younger workers?
A. Older workers are much more likely to be injured.
B. Injuries of older workers are likely to be more severe.
C. Older workers have a higher number of workers' compensation claims.
D. Workers' compensation claims made by older workers are much less expensive.

12. Which is true regarding the costs of emotional disorders to workplaces, according to a recent study?
A. Coronary artery disease costs companies significantly more than emotional disorders.
B. The direct medical costs of emotional disorders were higher than indirect costs.
C. Indirect costs of emotional disorders were higher than direct costs.
D. Since indirect costs of emotional disorders are minimal, it is difficult to justify screening and treatment programs targeting employees at risk for these conditions.

H1N1 Influenza

Swine Flu

- Common in Swine, first isolated 1930
- Usually occurs in late fall and winter, just like people
- High rate of illness, low death rate in pigs
- Pig farmers vaccinate their pigs for the flu
- In the U.S. there may be 1 case of people catching the flu from pigs every other year
- Usually mild flu-like symptoms

H1N1 Influenza
NOT Swine Flu!

- People thinking you only catch it from pigs
- People thinking if they don’t eat pork they will be OK
- So not taking the correct precautions
- Pork industry having a fit
- In Israel was always named “Mexico Flu”
- Egypt ordered the killing of all pigs, but could sell the meat????

H1N1 Influenza

- 1976, Fort Dix New Jersey
- First isolated H1N1 from humans NOT in contact with pigs
- Similar to 1918 pandemic strain
- Uh Oh!

H1N1 Influenza

- 1988 outbreak in pigs in Wisconsin
- Multiple human infections in handlers
- Evidence of transmission from patient to healthcare workers
- Uh Oh!

More Information than you want

This is just Cathy “showing off”

- Influenza viruses are RNA viruses
- Family “Orthomyxoviridae”
- “Myxo” refers to fact they infect mucus membranes
- Human flu viruses
- Type A
- Type B

This will show up later

- Subtypes based on two surface proteins
- Hemagglutinin (H)
- 16 different type H
- Neuraminidases (N)
- 9 distinct type N
- Two most important subtypes
- A (H3N2) greater mortality
- A (H1N1)
- (A (H5N1) Avian)

Still More Trivia

- Influenza viruses change their structure,
- genetic reassortment
- H1N1 reassortment of 4 strains
- human flu
- North America swine
- Eurasia swine
- North American Avian
- **Brand New, Never Seen Before!!!**

Influenza Pandemics

- A flu pandemic occurs when a new flu virus, against which the human population has no immunity appears

Influenza Pandemics

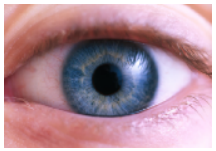
- History records show at least 10 pandemics in the last 300 years

- 1918, the Spanish Flu, as many as 50 million people perished worldwide
- They did not have the mobile society we have now!
- Disruption of “everyday” life

Influenza Pandemic

- Spread in “waves”, lasting 6 to 8 weeks
- In 1918 there were 3 “waves”
- Those who survive the flu in the first “wave” are immune in the subsequent “waves”
- Those who don’t catch it the first “wave”, may still get sick

How Do I Catch it?

- Thought to be the same as the seasonal flu
- Droplets from coughing, sneezing
- About 3 to 6 feet distance
- Touching something with the virus on it, then touching your mucus membranes
- mouth  nose  eyes 

Stubborn Little Sucker

- Virus thought to live on hard, non-porous surfaces up to 48 hours
- Thought to live on paper up to 12 hours

Tricky Little Sucker

- Victims can spread the virus starting 1 day *Before* they have symptoms

- Thought to spread the virus for up to 7 days after they have symptoms

Prevention

- Cover your cough
- Wash your hands
- Social distancing
- Avoid touching your nose, mouth, eyes
- “Mommy Things”
- get plenty of sleep
- eat nutritious foods
- drink plenty of fluids
- be physically active

Prevention

- Antiviral Drugs
- Tamiflu (pills and liquid)
- Relenza (inhaled powder)

- To prevent catching the flu

or

- To lessens the symptoms and duration

Tamiflu

- Interferes with the Neuraminidase, virus can’t replicate
- Must be taken within 2 days of onset of symptoms
- Most common side effect, nausea

  Take with food
- Take for full 5 days, even if symptoms better
- Safety of repeated courses not established

Marathon Tamiflu

- Will receive e-mail from corporate linking to a web-site
- Log on using your employee number
- Complete a questionnaire
- Spouse and dependents, who are covered by our health plan, complete a questionnaire too, using employee number

Marathon Tamiflu

- Questionnaires reviewed by an MD
- Qualified people (estimate 98%) will receive med by mail with instructions
- ***Hold*** med until symptoms, call your MD and ask if you should start the medication

- **NOT** intended for prevention

Symptoms

- Fever
- Extreme fatigue
- Muscle and Body aches
- Joint Aches
- Headache
- Eye Pain
- Sore Throat
- Stuffy or runny nose
- Dry cough initially, may become deep, hacking, painful cough
- No appetite for food or desire to drink fluids

Treatment

- Tamiflu in first 2 days
- Rest in bed
- Acetaminophen(Tylenol) or Ibuprofen(Motrin, Advil) *every* 4 to 6 hours to reduce fever, headache, pain
- **Do NOT give Aspirin to children under the age of 18, may cause Reyes Syndrome**

Treatment

- If you have a high fever, do not cover with a lot of blankets. Holds the heat in and raises the temp. Enough covers to prevent chills only.

- Give light foods. Fluids are more important than food, especially in the first days when the fever may be highest

When to See the Doctor

- If short of breath or breathing rapidly at rest
- If skin is dusky or bluish in color
- If disoriented, “out of it”
- If so dizzy or weak that standing is difficult
- If has not urinated in 12 hours
- If symptoms improve but then return with fever and worse cough

When to See the Doctor

- Fever that does not respond to Tylenol or Ibuprofen
- Severe or persistent vomiting
- Patient has a chronic illness (asthma, diabetes, heart condition)

When to See the Doctor

- Children can deteriorate *VERY* rapidly

- If they are not making urine
- If they cannot make tears
- If they are so irritable that the child does not want to be held
- Flu like symptoms improve but then return with fever and worse cough

If you get Sick

- Stay Home!
- Call your doctor about starting the Tamiflu right away
- Take care of yourself!

- Must wait 48 hours AFTER symptoms go away before returning to work
- See the nurse *before* you can come back to work

- Do not need a “Return to Work” note from a doctor

Questions?

Source: Catherine Rausch, MN, RN, Senior Occupational Health Nurse, Marathon Petroleum Co., St. Paul Park, MN.

Health & Safety Environmental Audit Checklist

CONTINGENCY PLANS

- Are employees aware of designated evacuation routes, and evacuation assembly areas outside of building? _____ _____ _____
- Emergency response Team easily Identified? _____ _____ _____
- Fire Drill performed within the last 12 months? _____ _____ _____
- Are evacuation diagrams posted in conspicuous locations in the building? _____ _____ _____
- Are employees instructed on how to report medical emergencies? _____ _____ _____

HOUSEKEEPING, MATERIALS HANDLING, AND STORAGE

- Materials / equipment stored neatly and orderly? _____ _____ _____
- Work and storage areas kept from trash and clutter? _____ _____ _____
- Fire extinguishers / electrical panels unobstructed? _____ _____ _____
- Are aisles, stairs, exits, floors kept clear, clean and dry?

FIRE PROTECTION AND PREVENTION

- Flammable liquids in approved safety cans, and stored in flammable storage cabinet when not in use? _____ _____ _____
- Extinguishers located in normal paths of travel? _____ _____ _____
- Are the extinguisher locations marked? _____ _____ _____
- Bulk drums of flammable liquids grounded and bonded to containers during dispensing? _____ _____ _____
- Is the inspection tag on portable extinguishers current, in good condition? _____ _____ _____

PORTABLE AND FIXED LADDERS

- Are ladders in good condition? Are they inspected and tagged? _____ _____ _____
- Metal ladders must never be used near electrical equipment? _____ _____ _____
- Portable ladders have non--skid feet , friction brakes or spring loaded supports? _____ _____ _____
- Condition of the non-skid stoppers? _____ _____ _____
- Hand railings for steps over four steps high?

WALKING SURFACES-EXIT WAYS/AISLE WAYS/STAIRS

- Aisles clearly identified - permanent markings? _____ _____ _____
- Are aisles, stairs, and walking surfaces clear? _____ _____ _____
- Are exits properly identified with signs, visible, and accessible?

HAND AND PORTABLE POWER TOOLS

- Tools in good condition? Proper and safe use of tools? _____ _____ _____
- Is ground prong in place on electric powered tools ?(except double insulated) _____ _____ _____
- Guards in place and functioning properly? _____ _____ _____
- Users wearing safety glasses? Other protective equipment.

COMPRESSED AIR

- Air hoses stored properly when not in use? _____ _____ _____
- Compressed air not to be used to clean clothing or work station? _____ _____ _____

HEALTH/SAFETY ORIENTATION-NEW OR TRANSFERRED EMPLOYEES

- Safety and Health Orientation been provided to employee? _____ _____ _____
- Orientation documents processed? _____ _____ _____

POWERED INDUSTRIAL TRUCKS

- Is the employee certified to operate a fork truck? _____ _____ _____
- Is the truck inspected prior to use for unsafe conditions and defects corrected immediately? _____ _____ _____
- Are battery charging installations located in designated areas? _____ _____ _____
- Are facilities provided for fire protection? For adequate ventilation from fumes? _____ _____ _____
- Are trucks equipped with amber flashing lights? _____ _____ _____
- Overhead truck guards in good condition? _____ _____ _____

COMPRESSED GAS CYLINDERS

- Cylinders secured in upright position? Capped when not connected? _____ _____ _____
- Cylinders stored in designated area? _____ _____ _____
- Cylinders marked to identify the contents? _____ _____ _____
- Cylinders marked full / empty? _____ _____ _____

INJURY/ILLNESS REPORTING

- Have personnel been instructed on where to report for medical treatment? _____ _____ _____
- Are injuries / illnesses reported in accordance with proper procedures? _____ _____ _____

TRAINING

- Do employees have ALL required training? _____ _____ _____
- Is training being documented and maintained in Health and Safety? _____ _____ _____

MOTOR VEHICLE SAFETY

- Do employees who operate a Scientific Atlanta vehicle, have a current valid drivers license? _____ _____ _____
- Are accident reporting kits provided in company vehicles? _____ _____ _____

FLAMMABLE OR COMBUSTIBLE LIQUIDS

- Flammable liquids storage cabinets used for designated purpose only? _____ _____ _____
- No combustible materials stored in or on top of flammable liquid storage cabinets. _____ _____ _____
- Are precautions taken to prevent / control ignition sources at or around flammable liquids? _____ _____ _____
- Are approved safety cans used for flammable liquids (except small plastic squeeze bottles). _____ _____ _____
- Adequate ventilation maintained where flammable liquids are used? _____ _____ _____
- Are grounding straps in place where flammable liquids are dispensed? _____ _____ _____
- All containers must be kept closed when unattended. _____ _____ _____

PERSONAL PROTECTIVE EQUIPMENT

- Are employees wearing safety glasses, goggles, face shields, gloves etc.? _____ _____ _____
- Is respiratory protection worn when job functions require? (Wave Solders) _____ _____ _____
- Has the employee been trained on the proper use and maintenance of respiratory protection devices? _____ _____ _____

SAFETY TAGS AND LOCKOUT

- Is the supervisor notified when Lockout devices are placed? _____ _____ _____
- Is the supervisor notified when Lockout devices are removed? _____ _____ _____
- Are Lockout devices tagged and signed and dated by person placing the device? _____ _____ _____
- Are employees authorized to place this device trained ? _____ _____ _____

HAZARD COMMUNICATION

- Hazardous Materials manuals indexed, organized, and maintained? _____ _____ _____
- Material Safety Data Sheets available? _____ _____ _____
- Has training been provided to new / transferred employees for the proper use of Hazardous Material? _____ _____ _____
- Are employees trained in the use of Material Safety Data Sheet information? _____ _____ _____
- Are containers properly labeled as to contents? Does label match MSDS on file? _____ _____ _____
- Are employees using required protective equipment? _____ _____ _____
- Is ventilation adequate for areas where materials are used? _____ _____ _____
- Small spills cleaned up promptly? _____ _____ _____
- Do employees know the procedure for reporting large chemical spills? _____ _____ _____
- Are containers closed (covered) when not in use? _____ _____ _____

EATING AND DRINKING

- Are appropriate signs posted at designated eating and drinking areas? _____ _____ _____

ELECTRICAL EQUIPMENT

- Exposed wire, frayed cords, bad insulation repaired or replaced? _____ _____ _____
- Junction boxes, outlets / switches, etc., covered? In good condition? _____ _____ _____
- Grounded extension cords? Ground prongs in place on ground plugs? _____ _____ _____
- Electrical disconnects or breakers covers in place? _____ _____ _____
- No flexible cords run through the ceiling, wall holes, doorways, etc. ? _____ _____ _____
- Flexible cords and cables not attached to building surfaces? _____ _____ _____
- Electrical disconnects or breaker panel accessible (36” of clearance), labeled? _____ _____ _____

MACHINE GUARDING

- Are machines anchored as required? _____ _____ _____
- Eye protection worn as required? _____ _____ _____
- Safety stops, interlocks in place and functioning properly? _____ _____ _____
- Controls properly identified? Electrical cords in good conditions? _____ _____ _____
- Machine guards in place? _____ _____ _____
- Preventive start up devices in place on woodworking machines? _____ _____ _____

Date:	_____
Location:	_____
Signature	

A	**=**	**Acceptable**
UN	**=**	**Unacceptable**
NA	**=**	**Not Applicable**

EMERGENCY EYEWASH STATIONS

- Are personnel trained in the proper use of Eyewash stations? _____ _____ _____
- Are Eyewash stations accessible? _____ _____ _____
- Are Eyewash stations periodically checked / cleaned by the responsible unit? _____ _____ _____
- Are clearances around the station clearly marked and free of obstructions?

HAZARDOUS MATERIAL BULK STORAGE

- Are spill kits and Personal Protective Equipment available? _____ _____ _____
- Are dispensing containers grounded? _____ _____ _____
- Are bonding wires used when dispensing flammable liquids? _____ _____ _____
- Are doors self-closing and closed when room is not in use? _____ _____ _____
- Air exhausts and electrical equipment explosion proof? _____ _____ _____
- Are empty drums kept stored upside down? _____ _____ _____
- Is smoking, eating, or drinking not permitted within 50 feet of this area? _____ _____ _____

OUTSIDE CONTRACTOR SAFETY

- Are outside contractors given rules and regulations for working on Scientific Atlanta's property or equipment documentation?

MANAGEMENT OF HAZARDOUS WASTES

- Are containers closed (tightly sealed) during storage? _____ _____ _____
- Are containers of hazardous waste properly labeled? _____ _____ _____
- Is emergency spill equipment in place and properly maintained? _____ _____ _____
- Only proper containers may be used for hazardous waste(55 gal. drums). _____ _____ _____
- Are empty containers accumulated and stored properly (e.g. 55 gallon drum stored upside down)? _____ _____ _____
- Individuals involved in the handling of hazardous wastes properly trained? _____ _____ _____
- No Smoking, Hazardous Waste Signage clearly visible? _____ _____ _____

TRANSPORTATION OF HAZARDOUS MATERIALS

- Are personnel properly trained (HM - 215)? _____ _____ _____
- Are hazardous materials packaged in accordance with Department of Transportation regulations? _____ _____ _____
- Are trucks and other vehicles used for the transportation of hazardous materials display proper placards? _____ _____ _____
- Has a Bill of Lading been generated for shipment of hazardous materials?

Date:	_____
Location:	_____
Signature	

A	**=**	**Acceptable**
UN	**=**	**Unacceptable**
NA	**=**	**Not Applicable**

	A	UN	NA
BATTERY CHARGING STATIONS			
• Class B or C fire extinguishers available in the area?	_____	_____	_____
• Is adequate ventilation available?	_____	_____	_____
• Are battery vent caps in place and compartment covers open?	_____	_____	_____
• Emergency eyewash stations available?	_____	_____	_____
• Personal Protective Equipment is worn (goggles, apron, gloves)?	_____	_____	_____
Miscellaneous items			
•	_____	_____	_____
•	_____	_____	_____
•	_____	_____	_____
•			

COMMENTS:

_____
_____
_____
_____
_____
_____
_____
_____

Source: Diane DeGaetano, RN, BSN, COHN-S, COHC.

HSE Audit Form

1.0 PURPOSE

Establishes a procedure to identify potential environmental hazards, health and safety hazards, or Federal/State regulatory violations and implements corrective actions to establish a safe and healthful workspace. *(OSHA Reg. 29 CFR, EPA-40, DOT-49)*

2.0 SCOPE

This policy applies to all employees (Full, Part-time, or Contract)

3.0 POLICY

Audits will be conducted by members of the Safety Committee along with the Safety Coordinator. This audit will be based on a conformance rating system. This rating system will provide a measure of compliance to Environmental, Health, and Safety rules and regulations. Deficiencies identified during the audit will be classified as major or minor, and assigned a numeric value. Major deficiencies are assigned a value of 5 and minor deficiencies a value of 1. The Safety Coordinator will be responsible for determining the classification of deficiencies found. Upon completion of an audit each deficiency will be multiplied by its assigned value. The assigned value of all deficiencies found are totaled and subtracted from 100 (100 = a perfect score). Resulting scores will be sent to the managers of the audited area with a copy to be sent to the Controlling Director.

4.0 DEFINITIONS

4.1 **MAJOR DEFICIENCY -** A deficiency that has the potential to seriously impact the environment, health or safety of guests or employees. Any deficiency resulting in the violation of Federal, State, or Local Agency regulation is defined as a Major Deficiency. A repetitive minor deficiency shall also be classified as major deficiency if it becomes systemic and reflects a lack of awareness training or self-governing.

4.2 **MINOR DEFICIENCY -** A deficiency, other than major, that is not part of established procedures or regulation and does not pose a serious threat to the environment, human health, or life.

5.0 PROCEDURES

5.1 Environmental, Health, and Safety Audits shall be conducted quarterly to insure Compliance of policies and procedures as well as current Local, State, and Federal Regulations utilizing the checklist provided in attachment 3.1.

5.2 Corrective action responses are required for all deficiencies within one week of the finding of the Safety audit. The corrective action shall identify the cause of the deficiency, target for completing the corrective action, and an outline for preventing the deficiency from recurring.

5.3 Audits may be supplemented by third party audits.

Date:	_____
Location:	_____
Signature	_____

A	**=**	**Acceptable**
UN	**=**	**Unacceptable**
NA	**=**	**Not Applicable**

A UN NA

CONTINGENCY PLANS

- Are employees aware of designated evacuation routes, and evacuation assembly areas outside of building? _____ _____ _____
- Emergency response Team easily Identified? _____ _____ _____
- Fire Drill performed within the last 12 months? _____ _____ _____
- Are evacuation diagrams posted in conspicuous locations in the building? _____ _____ _____
- Are employees instructed on how to report medical emergencies? _____ _____ _____

HOUSEKEEPING, MATERIALS HANDLING, AND STORAGE

- Materials / equipment stored neatly and orderly? _____ _____ _____
- Work and storage areas kept from trash and clutter? _____ _____ _____
- Fire extinguishers / electrical panels unobstructed? _____ _____ _____
- Are aisles, stairs, exits, floors kept clear, clean and dry?

FIRE PROTECTION AND PREVENTION

- Flammable liquids in approved safety cans, and stored in flammable storage cabinet when not in use? _____ _____ _____
- Extinguishers located in normal paths of travel? _____ _____ _____
- Are the extinguisher locations marked? _____ _____ _____
- Bulk drums of flammable liquids grounded and bonded to containers during dispensing? _____ _____ _____
- Is the inspection tag on portable extinguishers current, in good condition? _____ _____ _____

PORTABLE AND FIXED LADDERS

- Are ladders in good condition? Are they inspected and tagged? _____ _____ _____
- Metal ladders must never be used near electrical equipment? _____ _____ _____
- Portable ladders have non--skid feet , friction brakes or spring loaded supports? _____ _____ _____
- Condition of the non-skid stoppers? _____ _____ _____
- Hand railings for steps over four steps high?

WALKING SURFACES-EXIT WAYS/AISLE WAYS/STAIRS

- Aisles clearly identified - permanent markings? _____ _____ _____
- Are aisles, stairs, and walking surfaces clear? _____ _____ _____
- Are exits properly identified with signs, visible, and accessible?

HAND AND PORTABLE POWER TOOLS

- Tools in good condition? Proper and safe use of tools? _____ _____ _____
- Is ground prong in place on electric powered tools ?(except double insulated) _____ _____ _____
- Guards in place and functioning properly? _____ _____ _____
- Users wearing safety glasses? Other protective equipment.

Environmental Health & Safety Audit Check List

Date: _____
Location: _____
Signature

A	**=**	**Acceptable**
UN	**=**	**Unacceptable**
NA	**=**	**Not Applicable**

	A	UN	NA
COMPRESSED AIR			
• Air hoses stored properly when not in use?	_____	_____	_____
• Compressed air not to be used to clean clothing or work station?	_____	_____	_____
HEALTH/SAFETY ORIENTATION-NEW OR TRANSFERRED EMPLOYEES			
• Safety and Health Orientation been provided to employee?	_____	_____	_____
• Orientation documents processed?	_____	_____	_____
POWERED INDUSTRIAL TRUCKS			
• Is the employee certified to operate a fork truck?	_____	_____	_____
• Is the truck inspected prior to use for unsafe conditions and defects corrected immediately?	_____	_____	_____
• Are battery charging installations located in designated areas?	_____	_____	_____
• Are facilities provided for fire protection? For adequate ventilation from fumes?	_____	_____	_____
• Are trucks equipped with amber flashing lights?	_____	_____	_____
• Overhead truck guards in good condition?	_____	_____	_____
COMPRESSED GAS CYLINDERS			
• Cylinders secured in upright position? Capped when not connected?	_____	_____	_____
• Cylinders stored in designated area?	_____	_____	_____
• Cylinders marked to identify the contents?	_____	_____	_____
• Cylinders marked full / empty?	_____	_____	_____
INJURY/ILLNESS REPORTING			
• Have personnel been instructed on where to report for medical treatment?	_____	_____	_____
• Are injuries / illnesses reported in accordance with proper procedures?	_____	_____	_____
TRAINING			
• Do employees have ALL required training?	_____	_____	_____
• Is training being documented and maintained in Health and Safety?	_____	_____	_____
MOTOR VEHICLE SAFETY			
• Do employees who operate a Scientific Atlanta vehicle, have a current valid drivers license?	_____	_____	_____
• Are accident reporting kits provided in company vehicles?	_____	_____	_____

Environmental Health & Safety Audit Check List

Date: _____
Location: _____
Signature

A	**=**	**Acceptable**
UN	**=**	**Unacceptable**
NA	**=**	**Not Applicable**

	A	UN	NA
FLAMMABLE OR COMBUSTIBLE LIQUIDS			
• Flammable liquids storage cabinets used for designated purpose only?	_____	_____	_____
• No combustible materials stored in or on top of flammable liquid storage cabinets.	_____	_____	_____
• Are precautions taken to prevent / control ignition sources at or around flammable liquids?	_____	_____	_____
• Are approved safety cans used for flammable liquids (except small plastic squeeze bottles).	_____	_____	_____
• Adequate ventilation maintained where flammable liquids are used?	_____	_____	_____
• Are grounding straps in place where flammable liquids are dispensed?	_____	_____	_____
• All containers must be kept closed when unattended.	_____	_____	_____
PERSONAL PROTECTIVE EQUIPMENT			
• Are employees wearing safety glasses, goggles, face shields, gloves etc.?	_____	_____	_____
• Is respiratory protection worn when job functions require? (Wave Solders)	_____	_____	_____
• Has the employee been trained on the proper use and maintenance of respiratory protection devices?	_____	_____	_____
SAFETY TAGS AND LOCKOUT			
• Is the supervisor notified when Lockout devices are placed?	_____	_____	_____
• Is the supervisor notified when Lockout devices are removed?	_____	_____	_____
• Are Lockout devices tagged and signed and dated by person placing the device?	_____	_____	_____
• Are employees authorized to place this device trained ?	_____	_____	_____
HAZARD COMMUNICATION			
• Hazardous Materials manuals indexed, organized, and maintained?	_____	_____	_____
• Material Safety Data Sheets available?	_____	_____	_____
• Has training been provided to new / transferred employees for the proper use of Hazardous Material?	_____	_____	_____
• Are employees trained in the use of Material Safety Data Sheet information?	_____	_____	_____
• Are containers properly labeled as to contents? Does label match MSDS on file?	_____	_____	_____
• Are employees using required protective equipment?	_____	_____	_____
• Is ventilation adequate for areas where materials are used?	_____	_____	_____
• Small spills cleaned up promptly?	_____	_____	_____
• Do employees know the procedure for reporting large chemical spills?	_____	_____	_____
• Are containers closed (covered) when not in use?	_____	_____	_____

EATING AND DRINKING

- Are appropriate signs posted at designated eating and drinking areas? _____ _____ _____

Environmental Health & Safety Audit Check List

Date:	_____
Location:	_____
Signature	

A	**=**	**Acceptable**
UN	**=**	**Unacceptable**
NA	**=**	**Not Applicable**

	A	UN	NA
ELECTRICAL EQUIPMENT			
• Exposed wire, frayed cords, bad insulation repaired or replaced?	_____	_____	_____
• Junction boxes, outlets / switches, etc., covered? In good condition?	_____	_____	_____
• Grounded extension cords? Ground prongs in place on ground plugs?	_____	_____	_____
• Electrical disconnects or breakers covers in place?	_____	_____	_____
• No flexible cords run through the ceiling, wall holes, doorways, etc. ?	_____	_____	_____
• Flexible cords and cables not attached to building surfaces?	_____	_____	_____
• Electrical disconnects or breaker panel accessible (36" of clearance), labeled?	_____	_____	_____
MACHINE GUARDING			
• Are machines anchored as required?	_____	_____	_____
• Eye protection worn as required?	_____	_____	_____
• Safety stops, interlocks in place and functioning properly?	_____	_____	_____
• Controls properly identified? Electrical cords in good conditions?	_____	_____	_____
• Machine guards in place?	_____	_____	_____
• Preventive start up devices in place on woodworking machines?	_____	_____	_____
EMERGENCY EYEWASH STATIONS			
• Are personnel trained in the proper use of Eyewash stations?	_____	_____	_____
• Are Eyewash stations accessible?	_____	_____	_____
• Are Eyewash stations periodically checked / cleaned by the responsible unit?	_____	_____	_____
• Are clearances around the station clearly marked and free of obstructions?			
HAZARDOUS MATERIAL BULK STORAGE			
• Are spill kits and Personal Protective Equipment available?	_____	_____	_____
• Are dispensing containers grounded?	_____	_____	_____
• Are bonding wires used when dispensing flammable liquids?	_____	_____	_____
• Are doors self-closing and closed when room is not in use?	_____	_____	_____
• Air exhausts and electrical equipment explosion proof?	_____	_____	_____
• Are empty drums kept stored upside down?	_____	_____	_____
• Is smoking, eating, or drinking not permitted within 50 feet of this area?	_____	_____	_____

OUTSIDE CONTRACTOR SAFETY

- Are outside contractors given rules and regulations for working on Scientific Atlanta's property or equipment documentation?

Environmental Health & Safety Audit Check List

Date: _____
Location: _____
Signature

A	**=**	**Acceptable**
UN	**=**	**Unacceptable**
NA	**=**	**Not Applicable**

	A	UN	NA
MANAGEMENT OF HAZARDOUS WASTES			
• Are containers closed (tightly sealed) during storage?	_____	_____	_____
• Are containers of hazardous waste properly labeled?	_____	_____	_____
• Is emergency spill equipment in place and properly maintained?	_____	_____	_____
• Only proper containers may be used for hazardous waste(55 gal. drums).	_____	_____	_____
• Are empty containers accumulated and stored properly (e.g. 55 gallon drum stored upside down)?	_____	_____	_____
• Individuals involved in the handling of hazardous wastes properly trained?	_____	_____	_____
• No Smoking, Hazardous Waste Signage clearly visible?	_____	_____	_____
TRANSPORTATION OF HAZARDOUS MATERIALS			
• Are personnel properly trained (HM - 215)?	_____	_____	_____
• Are hazardous materials packaged in accordance with Department of Transportation regulations?	_____	_____	_____
• Are trucks and other vehicles used for the transportation of hazardous materials display proper placards?	_____	_____	_____
• Has a Bill of Lading been generated for shipment of hazardous materials?			
BATTERY CHARGING STATIONS			
• Class B or C fire extinguishers available in the area?	_____	_____	_____
• Is adequate ventilation available?	_____	_____	_____
• Are battery vent caps in place and compartment covers open?	_____	_____	_____
• Emergency eyewash stations available?	_____	_____	_____
• Personal Protective Equipment is worn (goggles, apron, gloves)?	_____	_____	_____
Miscellaneous items			
•	_____	_____	_____
•	_____	_____	_____
•	_____	_____	_____
•			

COMMENTS:

_____
_____
_____
_____
_____
_____

Source: Diane DeGaetano, RN, BSN, COHN-S, COHC.

HSE Audit—Office environment

1.0 PURPOSE

Establishes a procedure to identify potential environmental hazards, health and safety hazards, or Federal/State regulatory violations and implements corrective actions to establish a safe and healthful workspace. *(OSHA Reg. 29 CFR, EPA-40)*

2.0 SCOPE

This policy applies to all employees (Full, Part-time, or Contract)

3.0 POLICY

Audits will be conducted by members of Management and the HSE Manager/Coordinator to ensure compliance with Health, Safety and Environmental policy, rules and Federal regulations. Deficiencies identified during the audit will be report to the area manager and HSE members for the floor.

4.0 DEFINITIONS

4.1 MAJOR DEFICIENCY - A deficiency that has the potential to seriously impact the environment, health or safety of guests or employees. Any deficiency resulting in the violation of Federal, State, or Local Agency regulation is defined as a Major Deficiency. A repetitive minor deficiency shall also be classified as major deficiency if it becomes systemic and reflects a lack of awareness training or self-governing.

4.2 MINOR DEFICIENCY - A deficiency, other than major, that is not part of established procedures or regulation and does not pose a serious threat to the environment, human health, or life.

5.0 PROCEDURES

5.1 Health, Safety Audits shall be conducted on a frequent basis i.e. monthly or quarterly to insure Compliance of policies and procedures as well as current Local, State, and Federal Regulations utilizing the checklist provided in attachment 3.1.

5.2 Corrective action responses are required for all deficiencies within one week of the finding of the Safety audit. The corrective action shall identify the cause of the deficiency, target for completing the corrective action, and an outline for preventing the deficiency from recurring.

5.3 Audits may be supplemented by third party audits.

Date:		**A**	**=**	**Acceptable**
Building/Floor:		**UN**	**=**	**Unacceptable**
Auditors :		**NA**	**=**	**Not Applicable**
		Ma	=	**Major Issue**
		Min	=	**Minor Issue**

	A		**UN**		**NA**		**MA**
CONTINGENCY PLANS							
• Are employees aware of designated evacuation routes, and evacuation assembly areas outside of building, severe weather/take shelter areas?							
• Emergency response Team easily Identified?							
• Fire Drill performed within the last 12 months?							
• Are evacuation diagrams posted in conspicuous locations in the building?							
• Are employees instructed on how to report medical emergencies?							
• When were the emergency procedures last addressed							
HOUSEKEEPING, MATERIALS HANDLING, AND STORAGE							
• Materials / equipment stored neatly and orderly?							
• Work, filing and storage areas kept from trash and clutter?							
• Fire extinguishers / electrical panels unobstructed?							
• Are aisles, stairs, exits, floors kept clear, clean and dry?							
• Are there any objects hanging from ceiling?							
• Are there any flammable liquids in your area? quantities? Example: Frontline, Ivamecin							
• Are there any portable ladders, step stools in your area? Condition?							

Date:		**A**	**=**	**Acceptable**
Location:		**UN**	**=**	**Unacceptable**
Auditors :		**NA**	**=**	**Not Applicable**
		Ma	=	**Major Issue**
		Min	=	**Minor Issue**

	A		**UN**		**NA**		**MA**
FIRE PROTECTION AND PREVENTION							
• Flammable liquids in approved safety cans, and stored in flammable storage cabinet when not in use?							

• Extinguishers located in normal paths of travel?							
• Are the extinguisher locations marked?							
• Bulk drums of flammable liquids grounded and bonded to containers during dispensing?							
• Is the inspection tag on portable extinguishers current, in good condition?							

WALKING SURFACES-EXIT WAYS/AISLE WAYS/STAIRS

• Are aisles, stairs, and walking surfaces clear?							
• Are exits properly identified with signs, visible, and accessible?							

HEALTH/SAFETY ORIENTATION-NEW OR TRANSFERRED EMPLOYEES

• HSE Orientation been provided to employee?							
• Orientation documents processed?							

INJURY/ILLNESS REPORTING

• Have personnel been instructed on where to report for medical treatment?							
• Are injuries / illnesses reported in accordance with proper procedures?							

TRAINING

• Do employees have ALL required training?							
• Is training being documented and maintained in HSE?							

Date:		**A**	**=**	**Acceptable**
Location:		**UN**	**=**	**Unacceptable**
Auditors :		**NA**	**=**	**Not Applicable**
		Ma	=	**Major Issue**
		Mi n	=	**Minor Issue**

	A		**U N**		**N A**		**M A**

OUTSIDE CONTRACTOR SAFETY

GENERAL SAFETY: HVAC, Electrical, Elevators, Fire Systems, Crescent, Painters,

• Tools in good condition? Proper and safe use of tools?								
• Is ground prong in place on electric powered tools ?(except double insulated)								
• Guards in place and functioning properly? Standard – G.F.I.?								
• Users wearing safety glasses? Other protective equipment.								

ELECTRICAL EQUIPMENT

• Exposed wire, frayed cords, bad insulation repaired or replaced?								

• Junction boxes, outlets / switches, etc., covered? In good condition?							
• Grounded extension cords? Ground prongs in place on ground plugs?							
• Electrical disconnects or breakers covers in place?							
• No flexible cords run through the ceiling, wall holes, doorways, etc. ?							
• Flexible cords and cables not attached to building surfaces?							
• Are outside contractors given rules and regulations for working on Merial's property or equipment documentation?							

Date:		**A**	**=**	**Acceptable**
Location:		**UN**	**=**	**Unacceptable**
Auditors :		**NA**	**=**	**Not Applicable**
		Ma	=	**Major Issue**
		Min	=	**Minor Issue**

	A		**U N**		**N A**		**M A**

OUTSIDE CONTRACTOR SAFETY

PORTABLE AND FIXED LADDERS

• Are ladders in good condition? Are they inspected and tagged?							
• Condition of the non-skid stoppers?							
• Hand railings for steps over four steps high?							

HAZARD COMMUNICATION

• Material Safety Data Sheets available?											
• Has training been provided to new / transferred employees for the proper use of Hazardous Material?											
• Are employees trained in the use of Material Safety Data Sheet information?											
• Are containers properly labeled as to contents? Does label match MSDS on file?											
• Small spills cleaned up promptly?											
• Do employees know the procedure for reporting large chemical spills?											
• Are containers closed (covered) when not in use?											

Date:		**A**	**=**	**Acceptable**
Location:		**UN**	**=**	**Unacceptable**
Auditors :		**NA**	**=**	**Not Applicable**
		Ma	=	**Major Issue**
		Min	=	**Minor Issue**

	A		**UN**		**NA**		**MA**

OUTSIDE CONTRACTOR SAFETY

FLAMMABLE OR COMBUSTIBLE LIQUIDS

• Flammable liquids storage cabinets used for designated purpose only?							
• No combustible materials stored in or on top of flammable liquid storage cabinets.							
• Are precautions taken to prevent / control ignition sources at or around flammable liquids?							
• Are approved safety cans used for flammable liquids (except small plastic squeeze bottles).							
• Adequate ventilation maintained where flammable liquids are used?							
• All containers must be kept closed when unattended.							

PERSONAL PROTECTIVE EQUIPMENT

• Are employees wearing safety glasses, goggles, face shields, gloves etc.?							
• Is respiratory protection worn when job functions require? (Wave Solders)							
• Has the employee been trained on the proper use and maintenance of respiratory protection devices?							

SAFETY TAGS AND LOCKOUT

• Is the supervisor notified when Lockout devices are placed?							
• Is the supervisor notified when Lockout devices are removed?							
• Are Lockout devices tagged and signed and dated by person placing the device?							
• Are employees authorized to place this device trained ?							

Date:		**A**	**=**	**Acceptable**
Location:		**UN**	**=**	**Unacceptable**
Auditors :		**NA**	**=**	**Not Applicable**
		Ma	=	**Major Issue**

		Min	=	**Minor Issue**

	A		**UN**		**NA**		**MA**
Miscellaneous items							
• Mail Room/Oce – fire extinquisher location, housekeeping , storage							
• Soxeho/Café – venthood, grease trap, grease spills, do you use a Safety checklist which includes turning off the grill?							
•							
•							
•							

COMMENTS:

Source: Diane DeGaetano, RN, BSN, COHN-S, COHC.