HAT MAKING. Man using forming cone for hat felt.
Lee Hat Co., Danbury, CT. September 1941

Before mercury was banned from the hat industry (officially in May 1941), workers were exposed to mercury in each step of the felt hat-making process via dust from dried, carroted fur and steam from the mixture of fur and hot water in the felt making vats.
**YOUNG WORKER HEALTH**

The National Institute for Occupational Safety and Health (NIOSH) reports that an estimated 200,000 teens ages 14 to 17 are injured on the job every year in the United States (NIOSH, 1999). Many of these work-related injuries are preventable.

Recently, Connecticut Workers’ Compensation Commission (WCC) data from 1997-2001 was analyzed to provide a preliminary overview of occupational injuries and illnesses among Connecticut’s young workers 14-17 years of age. A total of 1,418 WCC reports were analyzed, the patterns of injuries, industries and occupations were examined, and the descriptions of demographic characteristics (gender and age) were reviewed for trends. Overall, the findings in Connecticut were consistent with those in other states. The total number of yearly reports received from WCC ranged from a high of 416 (29.3%) in 1999 to a low of 143 (10.1%) in 2001. The number of reported injuries increased across age categories and 94.6% of those reported injured were 16 or 17 years of age. Males accounted for 59.5% of reported injuries. Lacerations (22.2%), followed by sprains and strains (21.7%), were the most commonly reported injuries, and eating and drinking establishments accounted for almost twice as many reported injuries as other industries.

Connecticut’s Young Worker Safety Team is currently in the process of assessing this data in order to develop intervention strategies. The committee members are a collaborative group representing federal, state and local agencies that have been working together for the past 3 years to reduce the number of injuries and illnesses among young workers in Connecticut. For more information about the Connecticut Young Worker Safety Team, please contact Marian Storch at (860) 509-7791.

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**CONNECTICUT ABLES PROGRAM**

During the fourth quarter of 2003, the Connecticut Department of Public Health's (DPH) Adult Blood Lead Epidemiology and Surveillance (ABLES) Program received 130 reports of elevated blood lead levels (EBLLs) > 10 µg/dl, which is approximately 83% of the number of reports received during the comparable period from the previous year (156 reports). Of those, 21 reports were received regarding individuals with EBLLs > 17 µg/dl, which is approximately 62% of the number of reports received during the comparable period from the previous year (34 reports).

Individuals with EBLLs > 17 µg/dl receive a letter notifying them of their EBLL, accompanied by a Lead Fact Sheet and Take Home Lead Survey. Copies of the notification letters are also sent to the local health department where the individual resides to notify the Director of Health about the EBLL and keep them informed of our activities.

In addition, the ABLES program follows up with companies having workers reported with EBLLs ≥ 40 µg/dl. For the fourth quarter of calendar year 2003, eight workers were reported with EBLLs ≥ 40 µg/dl, which is twice the number received during the comparable period from the previous year (4 reports). In all cases, these individuals received letters notifying them of their EBLL, educational materials, and an adult blood lead surveys. Reports of these lead poisoned workers led to the following investigations by the Connecticut ABLES program:

- One individual was reported with an EBLL of 57 µg/dl. It was determined that this individual's EBLL was not related to the workplace, but was instead attributed to the individual’s activities scraping and sanding lead-based paint from a 200 year-old house outside of work.
• One worker who had been medically removed from his job, due to an EBLL ≥ 50 µg/dl was reported. This worker’s blood lead level has since decreased to 33 µg/dl over a six-week period.

• Another worker was reported with an EBLL of 40 µg/dl. During this employee's four years with their employer, the employee's blood lead levels have consistently ranged from 31µg/dl to 49 µg/dl. The employer was contacted to discuss their workers’ use of personal protective equipment, rotating lead-exposed positions among workers, and having all workers attend a Lead-Safe Training Program. In this case, an OSHA referral was also made.

• One individual was reported with an EBLL of 53 µg/dl. It was determined that this individual's EBLL was not related to the workplace, but was instead attributed to the individual's activities scraping and sanding lead-based paint from an older home outside of work.

• Three individuals were reported with EBLL's of 84.8 µg/dl, 53 µg/dl and 47 µg/dl, respectively. These individuals were all self-employed. These patients were contacted and given educational materials about lead-safe work practices. DPH will continue to follow-up with these three patients to ensure that their blood lead levels decreased to acceptable levels.

The Connecticut ABLES program is funded through a cooperative agreement with the National Institute for Occupational Safety and Health (NIOSH). For more information about the Connecticut ABLES program, please contact Deborah Pease at (860) 509-7744.

**OCCUPATIONAL DISEASE SURVEILLANCE**

Connecticut State Law requires any physician diagnosing a case of work-related illness to report that case within 48 hours using the Physician's Report of Occupational Disease. Data from these case reports is entered into the Department of Public Health's Occupational Disease Surveillance System (ODSS).

During the fourth quarter of 2003, the ODSS received 427 occupational disease reports. This is approximately 73% of the amount received during the same time period in 2002 (583 reports). During calendar year 2003, the ODSS received 1824 case reports, which represents approximately 85% of the number of reports received during calendar year 2002 (2149 reports).

For more information about the Connecticut Occupational Disease Surveillance System, please contact Ratan Singh at (860) 509-7744.
Each year there are more than 164,000 emergency room-treated injuries in the U.S. relating to ladders. The following safety precautions can help prevent ladder-related injuries on the job:

- Make sure the weight your ladder is supporting does not exceed its maximum load rating (user plus materials). There should only be one person on the ladder at one time.

- Use a ladder that is the proper length for the job. Proper length is a minimum of 3 feet extending over the roofline or working surface. The three top rungs of a straight, single or extension ladder should not be stood on.

- Straight, single or extension ladders should be set up at about a 75-degree angle. Use the 1:4 ratio where the ladder base is 1 foot away for every 4 feet of height to where it rests.

- All metal ladders should have slip-resistant feet.

- Metal ladders will conduct electricity. Use a wooden or fiberglass ladder in the vicinity of power lines or electrical equipment. **Do not let a ladder made from any material contact live electric wires.**

- Be sure all locks on extension ladders are properly engaged.

- The ground under the ladder should be level and firm. Large flat wooden boards braced under the ladder can level a ladder on uneven ground or soft ground. A good practice is to have a helper hold the bottom of the ladder.

- Do not place a ladder in front of a door that is not locked, blocked or guarded.

- Keep your body centered between the rails of the ladder at all times. Do not lean to the side while working. Move the ladder so you can safely reach your work.

- Always face the ladder and use both hands when climbing up or down. Carry your tools and other materials in a tool belt or pouch, or use a rope to raise and lower them.

- Do not step on the top step, bucket shelf or attempt to climb or stand on the rear section of a stepladder.

- Never leave a raised ladder unattended.

- Always store ladders where they are protected from the weather and other sources of damage.

- Follow use instruction labels on ladders. Do not use a ladder for any purpose other than that for which it was intended.
FLIGHT ATTENDANT STUDY RELEASED

A new NIOSH study, *Measuring and Identifying Large-Scale Metrics for Circadian Rhythm Disruption in Female Flight Attendants*, finds female flight attendants more likely to experience disruptions in circadian rhythm—the body clock—than a comparison group. The study compared melatonin levels, sleep and wake cycles, and work schedules of 45 flight attendants with 26 teachers. Results show that the flight attendants had much greater day-to-day variation in melatonin production than the teachers. The findings will help guide ongoing research to determine if such effects signal long-term risk for adverse reproductive effects. The study appears in the October 2003 issue of the *Scandinavian Journal of Work, Environment, and Health*. Access the abstract online at http://192.58.80.9/e/dept/sjweh/index.htm.

NIOSH AGRICULTURAL CENTER DEVELOPS A NEW RESEARCH TOOL

The NIOSH Pacific Northwest Agricultural Safety and Health Center, in cooperation with Microstrain, Inc. has developed Virtual Corset, a new research tool for preventing work-related musculoskeletal disorders. This device allows researchers to continuously collect data on workers’ postural exposures to better understand the relationship between cumulative postural exposures, load patterns, and musculoskeletal disorders. Virtual Corset can operate in two modes: two-dimensional measurements of limb/trunk postures or 360 degree measurements of limb rotation. The pager-sized unit can be mounted on the upper arms, sternum, or upper back of the individual. With two megabytes of memory, the device can collect data over a whole day or over multiple days, conditions not previously practical. Originally developed as part of an ongoing agricultural research project, the device should have wide application across the workplace. For more information on the Virtual Corset, contact Pete Johnson at petej@u.washington.edu.

FIRE FIGHTERS AT RISK FOR CARDIOVASCULAR DISEASE

Heart attacks are the most common cause of line-of-duty deaths for fire fighters. NIOSH investigates these fatalities by assessing the contribution of workplace and personal factors. The workplace evaluation includes estimating the immediate physical demands placed on the fire fighter, estimating the fire fighters acute exposure to hazardous chemicals, and assessing the fire department’s efforts to screen for coronary artery disease risk factors and implementing a fitness and wellness program. Like the Fatality Assessment and Control Evaluation (FACE) model, each investigation generates a report summarizing the incident and includes recommendations for preventing future similar results. These can be found on the NIOSH website http://www.cdc.gov/niosh/facerpts.html. For more information on the cardiovascular disease program, contact Tom Hales at trh1@cdc.gov.
SCHOOL SAFETY CHECKLIST PROGRAM

Administrators, coordinators, and teachers know that their schools should comply with Federal or State Occupational Safety and Health Administration regulations. However, the task may seem overwhelming! The NIOSH Safety Checklist Program for Schools can help these leaders bring their schools into compliance even when they have little safety and health experience, a busy schedule, and many unanswered questions.

Many states mandate that career-technical schools and institutions have safety and health programs in place, conduct hazard analyses for each career-technical program, do safety inspections and maintenance, and comply with safety and health and environmental regulations. In one easy-to-read source, the Safety Checklist Program provides information needed by schools to maintain safe classrooms, shops, and labs for teachers and students in career-technical education. This information can also be used by colleges and universities with occupational safety and health programs. The key to preventing injury and illness of school employees and students, and protecting the environment, is to establish a safety and health and environmental safety program.

How can the safety checklist program benefit schools?

The Safety Checklist Program can benefit schools by helping them do the following:

- Improve the safety and health environment in school
- Prevent injuries and illnesses among faculty and students
- Increase occupational and safety and health and environmental safety awareness in school
- Identify regulations that may apply to public secondary school and career-technical classrooms, shops, and labs
- Set up a checklist program that will help teachers do a safety and health hazard analysis for each classroom, shop, and lab
- Help students learn about (1) the regulations pertinent to particular classrooms, shops, labs, processes, and activities and (2) the benefits of using checklists to determine compliance
- Detect areas that need improvement in the school's occupational safety and health and environmental health


Additional resources are available from the EPA’s “Tools for Schools” Program. For more information about Tools for Schools, please contact the CT Tools for Schools Program Coordinator, Kenny Foscue, at (860) 509-7753.