

# ACTS FACTS

THE MONTHLY NEWSLETTER FROM

## ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

January 2008

Vol. 22, No. 01

## ACTS wishes you a healthy, happy 2008

**BOARD of DIRECTORS:** Monona Rossol, Tobi Zausner; Eric Gertner,  
Elizabeth Northrop, Diana Bryan, Susan Shaw,

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**RESEARCH:** Brian C. Lee, Sharon Campbell, Robert Pearl, Ted Rickard, Pamela Dale

### 22 YEAR ANNIVERSARY OF ACT FACTS

Age 22, and *ACTS FACTS* is still going. And it looks like we will be around for many years more. In fact, we are obligated to be here, because some of our subscribers renew for 5 years at a time or more! We have two subscriptions extended to 2017! If I live that long, it's a good deal for these individuals since in 2009, the price is going up by \$5.

In any case, your small subscription fee enables us to break-even on the newsletter's expenses--which is all we ask. In a sense, you enable us to keep in touch with all of you without taking resources from ACTS' other projects. And many of our articles were written in response to clippings you sent us or from comments in your calls, e-mails, and hand written notes on your renewal blanks. We think of the newsletter as a joint venture with you. Thank you.

### BIG HEADS ON COSTUMES CAN BE BIG TROUBLE

SOURCE: *Atlanta Journal-Constitution*, December 7 and 8, 2007

Well, it's happened again. Another large costume head worn by a dancer in a Christmas production has been associated with serious injuries.

**THE FIRST INCIDENT.** The April, 2001 *ACTS FACTS* reported on a Radio City Christmas ballet incident in Los Angeles involving one of the big costume heads some dancers wear. The helmet inside one head had been recently repositioned with a solvent-containing adhesive. The dancer that put on the head complained about the odor and was told it was safe. She went on stage to rehearse and collapsed with a permanently disabling stroke at age 32. The dancer sued and was given a large settlement by Radio City, the glue distributor, and costume companies.

**THE SECOND INCIDENT.** On December 2, 2007 another accident involving a large costume head occurred in Atlanta. A 17-year-old dancer fell off the stage during a matinee performance of *The Nutcracker*. The high school senior was wearing a panda costume which limited her vision when she fell about 12 feet into the empty orchestra pit. A week later she was still in serious but stable condition and recovering from spinal surgery at a local hospital.

The federal Occupational Safety & Health Administration (OSHA) is now investigating the Atlanta Ballet Company. Andre Richards, director of OSHA's Atlanta West Area Office said they will look into fall protection at the company, assess the safety programs they have in place, and "look at the costume to see what level of vision that person had."

In response to the accident, the Atlanta Ballet is raising the pit to a higher level and providing guides to assist each panda dancer. They also are making some modifications to the panda costume. Before the accident, the young dancer reportedly had told her high school friends she was worried about falling off the stage due to her limited vision from inside the costume. The costume head has a hole in the nose through which dancers can see.

The pandas were added to *The Nutcracker* production in honor of the Atlanta Zoo's mother and baby pandas which are considered icons of the City. The panda costumes were designed by a former costume employee April McCoy at the Atlanta Ballet. She is now head draper/workroom supervisor in the costume shop of the Boston Ballet. She declined to answer reporters' questions.

**RELATED ACCIDENTS.** Pit falls and costume heads have caused problems for decades. Ed Asner used to tell about one when he was a young actor in a *Midsummer's Night Dream*. He was wearing an ass-head costume in which the vapors from the glue with which it was made had not dissipated. Mr. Asner became intoxicated much as a glue sniffer and fell off the edge of the stage.

I have been retained in a number of pit fall accident lawsuits. One accident occurred 4 blocks from the Fox Theater in which the *Nutcracker* incident just occurred. It was at the Atlanta Civic Center theater. In this incident, a 9 year old boy fell from an unguarded orchestra pit floor into the hydraulic pit below. He was in a coma for two years before he died (*ACTS FACTS*, Oct. 2003).

The most recent case in which I'm retained involves a theater in the New York City area. After a show, a man from the audience was allowed on stage to take pictures of the cast. He alleges that he had one foot on the stage and the other on the pit cover rail when the wooden board on the pit rail broke and he fell into the pit. He sustained permanent injuries.

Pit falls can happen to professionals, too. On December 21, 1995, Dennis Larkin, President of Local 1, IATSE (International Alliance of Theatrical Stage Employes), a stage hand with 25 years of professional experience, made a single misstep. He fell 27 feet into the pit at Radio City Music Hall in New York City and he is now paralyzed from the neck down.

**COMMENT.** OSHA does not allow fully trained, healthy, construction workers to be near six foot falls without guarding the fall or putting them in fall protection gear. So we certainly can't permit untrained members of the public to be near fall hazards without accepting the liability for accidents they may have. Technical directors must not allow the public on the stage when the pit is down and all performers must be blocked and rehearsed to avoid coming too near the stage lip.

Costume and set designers also must keep ever in mind that they must not put performers of any age or experience at risk by creating sets that have fall hazards, or by making costumes which smell of toxic substances or which hazardously restrict vision, breathing, or mobility.

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## **2 STUNTMEN BURNED BY PYRO ON UNIVERSAL STUDIOS LOT**

AP wire 11/26/07: Los Angeles

Two Stuntmen were burned during the filming of Adam Sandler's latest comedy on a Universal Studios back lot on November 26. One person was burned on his hands and legs, and other on his back according to the Los Angeles County Fire Inspector. Both victims, whose identities were not released, were taken to a hospital, he said. A spokeswoman for the Grossman Burn Center said that one stuntman was in serious but stable condition and the other in stable condition.

ACTS would appreciate hearing any further information about this accident.

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## **HAWAII OSHA CITES 9 PUBLIC SCHOOLS**

*Star Bulletin*, Vol. 12, issue 352, 12/18/07

Hawaii education officials are promising to increase safety inspections of public schools in response to a fine of \$42,000 for 55 violations found on 9 school campuses by the Hawaii Occupational Safety and Health Division. More than half of the safety deficiencies discovered were considered “serious” and could have killed or badly injured students or employees, HIOSH reported. Most problems were found in shop programs. Examples included cracked insulation on electrical wires, table saws missing safety guards, gas cylinders lacking valve caps.

In summary HIOSH found: 43 electrical hazards; 14 unguarded machines with the potential to amputate, cut or send objects flying toward the eyes or mouth; 7 places where students and staff could trip or slip; and 8 fire or explosion hazards.

The statewide unannounced investigation began in December 2006 and ended November 2007. State inspectors said that the last inspection 10 years ago found problems, but conditions were not as dangerous as they are now. Inspectors said the safety issues could also explain a 9 percent increase in workers’ compensation cases involving Education Department employees from 972 in 2004 to 1,059 in 2005.

What is not known is how many students have been hurt. There is no state database carrying information about students’ injuries because individual schools track their accident records.

**COMMENT.** I don’t think I have ever inspected a public school or university that did not have serious safety hazards in the art, theater, or shop areas. And most schools keep their accident records to themselves—a practice which should be ended by law. Accidents should be reported just as criminal acts on campus must be reported and compiled in some states. Making accident rates public might motivate schools to better maintain their equipment and machinery.

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## **UPDATE ON YALE SCHOOL OF DRAMA FATAL ACCIDENT**

E-mail from Linda Young, Head Electrician, Yale School of Drama, 11/19/07;

*Yale Daily news*, 11/18/07 & 12/10/07, ([www.yaledailynews.com](http://www.yaledailynews.com)) ; & *The Hartford Courant*, 12/11/2007.

Last month *ACTS FACTS* covered the death of a Pierre-Andre Salim, 26, who was crushed when a stack of wood fell on him while unloading sets outside the Yale Repertory Theater on November 18<sup>th</sup>. Pierre was in his 2<sup>nd</sup> year of study in Yale’s Technical Design and Production program.

Technically, OSHA has no jurisdiction in this case, because Salim was not an employee. However, OSHA area director Robert Kowalski has an on-going training relationship with the Yale School of Drama. He gives a yearly presentation to theater management majors on workplace safety and OSHA regulations. So an investigation to find the cause of this accident proceeded.

Kowalski, shared the investigators’ preliminary findings with the Press. They found that the truck had been loaded incorrectly, creating a danger to anyone who was to unload it, and that students unloading the truck may not have had sufficient training to complete the task safely. The report recommends that Yale teach students how to safely unload props and that someone with authority oversee the unloading of heavy or awkward loads.

**COMMENT.** People often are unaware that there are basic principles of physics and ergonomics that apply to what is called “materials handling.” Training is needed. OSHA offered to provide this training for Yale. All theater and art schools should provide materials handling training.

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## **PAINING, NIGHT SHIFT WORK & FIRE FIGHTING CAUSE CANCER**

*Lancet Oncology* 2007; 8:1065-66, Policy Watch & *BNA-OSHR* 37(48) p. 1096

In October, 2007, a working group of 24 scientists from 10 countries met at the International Agency for Research on Cancer (IARC) in France to review available research. They concluded:

\* While occupational exposure as a painter has been classified as a cause of lung cancer since 1989, the IARC group added bladder cancer to painting's hazards. They also found significant increases in childhood leukemia associated with maternal exposure before or during pregnancy.

\* They found "limited evidence in humans for the carcinogenicity of shift-work that involves nightwork" and "sufficient evidence in experimental animals for the carcinogenicity of light during the daily dark period." They determined that "shift-work that involves circadian [24 hour cycle light/dark activity pattern] disruptions is probably carcinogenic to humans."

\* Epidemiologic studies of firefighters found excess risk for testicular cancer, prostate cancer, and non-Hodgkin lymphoma. But the picture is also complicated due to firefighters shift-work risks. Firefighting was classed as "possibly carcinogenic to humans."

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## **ACTS STIFFED BY CPSC**

Certified letter, 12/3/07, US CPSC, signed: Todd A. Stevenson

In September, ACTS filed a Freedom of Information Act request for the name of the toxicologist or physician who certified the Matel® water color set recalled due to its lead content. The Consumer Product Safety Commission refused to provide this information. Here's their reason!

*The records being withheld consist of internal staff memoranda and correspondence containing recommendations, opinions, suggestions and analyses of the commission's technical and legal staffs. The records constitute both pre-decisional and deliberative discussion that clearly falls within the attorney-client and attorney-work product privileges. Any factual materials in the records not covered by some other exemption are inextricably intertwined with exempt materials or the disclosure of the factual materials would itself expose the deliberative process. We have determined that the disclosure of these certain law enforcement investigatory records responsive to your request would be contrary to the public interest. It would not be in the public interest to disclose these materials because disclosure would (1) impair the frank exchange of views necessary with respect to such matters, and (2) prematurely reveal information used in the investigation, thereby interfering with this and other matters by disclosing the government's basis for pursuing this matter.*

**Whoa! I just asked for the toxicologist's name! Just who are we protecting and from what?**

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ACTS' financial support is primarily earned income from industrial hygiene services, lectures, and courses provided at below market value to schools, art and theater organizations, museums, and other art-related entities. Other income is from sale of publications and unsolicited donations from individuals and foundations. ACTS takes no money from industry or any party having a financial interest in our opinions about art products.

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February 2008

Vol. 22, No. 02

### ANOTHER METHANOL LAB ACCIDENT COSTS SCHOOL \$18.95M

[www.democrateandchronicle.com/](http://www.democrateandchronicle.com/) (accessed 9/5/07) *Rochester NY Democrat & Chronicle*, 8/31/07,  
[jhawver@DemocratandChronicle.com](mailto:jhawver@DemocratandChronicle.com); *Beacon Journal*, Katie Byard, 1/18/08 & Jewell Cardwell, 1/26/08,  
[www.ohio.com/news/](http://www.ohio.com/news/); & *Seattle Times*, 1/31/04 & 2/4/04.

In the October, 2007, *ACTS FACTS* we covered a lab accident occurring on June 7 in a Webster, NY, high school. A teacher was demonstrating the various colors of metal salts by burning them in open bowls using methanol as a solvent. A young woman student was seriously burned.

We are now aware of an almost identical accident that occurred on January 23, 2006, at Western Reserve Academy six months prior to the New York accident. Again, a fire ball resulted when methanol vapors met the flame. Again, the students were not wearing protective goggles or clothing. Again, the teacher had never had any formal safety training for her job from the school. Only this time, three students were injured.

Calais Weber, age 16, was burned over 46 % of her body. She was in the hospital over 3 months and the school settled with the Weber family for \$13.15 million in December 2007. Cecelia Chen, age 16, was burned over 18 % of her body. Chen and her family received \$5.8 million. Sam Pratt, the teacher's son who was visiting the class, age 11, was burned over 37% of his body and hospitalized for 30 days. There is no information on whether compensation was sought by his mother, July Pratt. She is still employed to teach science at the school, according to the news reports.

Western Reserve Academy said the \$18.95M settlement is covered by insurance and will not affect the school's finances. Calais Weber is putting up \$100,000 of her settlement to launch the Ohio Schools Science Safety Program developed by Jack Geriovich, a science-education professor at Drake University in Des Moines, Iowa. Calais says she did this "Because it was so preventable." Calais, who had done some professional modeling is now badly and permanently scarred.

**PREVIOUS ACCIDENT.** We were alerted to an even earlier of these accidents which occurred on January 30, 2004 at Federal Way High School in Seattle, WA. The science teacher and a student reportedly suffered third-degree burns to the head, face, arms, and hands, while another student had burns to his arms and hands. The *Seattle Times* reported that the experiment was "in a science book" and had been done repeatedly all day. This last time, the teacher didn't realize the methanol in one beaker had already been ignited. Burning methanol flames are nearly invisible. Pouring methanol into the burning beaker caused a fire involving the first two rows of desks. A student threw a coat over the teachers head to quell the flames and other students using extinguishers put out the fire.

**COMMENT.** Learning about the various colors generated when metal ions are heated is important. I still use this knowledge to make assumptions about the metal content of colored pyrotechnic effects. But years ago we learned this lesson by mixing the salts into tiny beads of melted borax at the end of a platinum wire and putting the bead in a flame. No flammable solvents were used. If teachers today must amuse our over stimulated children with flashy effects, they need better training.

## **PAINING CAUSES CANCER: ADDITIONAL INFO**

The January *ACTS FACTS* reported that a Working Group of 24 scientists from 10 countries met at the International Agency for Research on Cancer (IARC) in Lyon, France, to review research on painting as a profession and other cancer hazards. The group's decisions were reported in *Lancet Oncology*, 2007. The subject warrants more depth and *Lancet* made a small error corrected below.

**IARC WORKING GROUPS** meet periodically to review cancer studies world wide. They look at all of the studies, select those whose scientific protocols meet their standards. Then they place the substances under review in one of the IARC cancer categories. In summary, these categories are:

\* **Group 1:** "Carcinogenic to Humans" based on "sufficient evidence" in human studies, or a combination of "sufficient evidence" in human studies plus "strong evidence" in animal studies.

\* **Group 2A:** "Probably Carcinogenic to Humans" based on "limited evidence" of carcinogenicity in humans and "sufficient evidence" in animals.

\* **Group 2B:** "Possibly Carcinogenic to Humans" is based on "limited evidence" in humans and less than "sufficient evidence" in animals. It may also be applied when there is "inadequate evidence in humans, but "sufficient evidence" in animals.

\* **Group 3:** "Unclassifiable as to Carcinogenicity in Humans" means that the studies are inadequate in both humans and animals. This doesn't mean it is not a carcinogen, but the studies at this time do not support a conclusion.

\* **Group 4:** "Probably Not Carcinogenic to Humans" is the category for which the studies in humans and animals suggest it is not a carcinogen.

**MSDSs.** Material Safety Data Sheets should report IARC data. If IARC determines a substance is not a carcinogen, it would be listed as Group 4. If, instead, an MSDS states "not considered a carcinogen by IARC," be aware it means there are not enough studies for IARC to evaluate!!

**1989 IARC EVALUATION OF PAINTING.** IARC already determined in 1989 that studies of occupational exposures during painting provided "sufficient evidence" for carcinogenicity and placed this profession in Group 1. They did this on the basis of many studies of workers who are classified as painters in construction, manufacture, automotive work, refinishing and furniture manufacture. And they also considered the potential carcinogens that are in paints ranging from oil paints to water-based resin paints. They also corrected for the excess of smoking seen in this profession.

Based on these studies, IARC found an over all excess of cancer in painters at about 20% above the national average. Included were excess rates of lung, stomach and bladder cancer, leukemia, lymphatic cancer, cancer of the mouth and larynx, and skin and prostatic cancer. The lung cancer excess was found to be at about 40% above the national average that could not be explained by smoking among painters. (*Lancet* failed to report that lung and bladder cancer were already associated with painting prior to the 2007 review, implying this was new information.)

**NEW CLASSIFICATION.** The 2007 review of the studies including more recent ones led the Working Group to again conclude that painting belongs in Group 1 as a human carcinogen. This decision will be published in 2008 in Volume 98 of the IARC Monographs.

The big news is that the Working Group's evaluation of all the new studies found even stronger evidence for both lung and bladder cancer plus a significant increase in childhood leukemia associated with exposure to women painters before or during pregnancy. This is something that women planning families may want to consider when they schedule painting work.

## **CDC's NEW GUIDELINES FOR LEAD-EXPOSED CHILDREN**

MMWR, November 2, 2007 Vol. 56, No. RR-8

The Advisory Committee on Childhood Lead Poisoning of the Centers for Disease Control and Prevention (CDC) released guidelines for doctors and clinicians on "Interpreting and Managing Blood Lead Levels <10ug/dL in Children and Reducing Childhood Exposures to Lead." This is important because it details actions to take before blood lead levels (BLLs) reach 10 ug/dL (micrograms per deciliter), the level at which public health action is warranted. The document also reviews studies confirming there is no level below which a child's I.Q. is not adversely affected.

CDC recommends that doctors "provide anticipatory guidance to parents of all young children regarding sources of lead" in their environments including sources in their homes and unsafe renovation methods for lead paint. In addition, CDC says that doctors should "help parents to understand the uncertainty of a blood lead value and potential reasons for its fluctuation, including error introduced by the sampling methods and laboratory-, age-, and season-related exposures."

Regarding the tests, the CDC recommends physicians review the quality control data of the laboratories to which they send their samples and use those labs that can achieve routine performance of  $\pm 2$  ug/dL for blood lead analysis. And when interpreting lab data, consider that children's blood leads varies with the time of year, being higher in the summer than in winter. This is presumed to be due to increased exposure to lead in dust and soil.

In addition, the CDC pointed out that BLLs will increase quickly after an acute exposure to lead and then gradually lower over the next few weeks until they reach equilibrium with the body's stores of lead. However, in children with high body burdens, this decline in BLL can take much longer. While not stated by CDC, this indicates that children should be tested as soon as possible after a suspected acute exposure and, if the blood lead is elevated, followed up a few weeks later.

ACTS applauds the CDC's approach to prevention of childhood lead poisoning. However, doctors should also consider lead-containing art or craft materials which may be used in the home, the parent's workplace, or the child's school or day care classes as potential sources of exposure.

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## **NICKEL COATED PLASTIC TABLEWARE**

Toxicologist Brian C. Lee of Good Afternoon Toxicology Consulting, LLC, found a type of plastic tableware that could expose consumers to nickel. He e-mailed ACTS the following:

*For those of you with nickel allergy (nickel dermatitis), be wary of plastic forks, spoons, and knives with a brushed nickel finish. These used to be sold by Staples but they dropped the item from their website sometime in 2007. They are still made by Diamond...*

*Nickel allergy is a common contact dermatitis from jewelry, snaps, and fasteners. Reactions range from mild to severe. CPSC and FDA have little interest in nickel allergy from consumer products or tableware. The EU has a strong leachability standard for nickel in jewelry, but there is none in the US.*

Brian provided some sites for those interested in pursuing this issue. You can see pictures of the flatware at [www.expotv.com/videos/reviews/13/138/Nickel-Finish-Plastic-Flatware/109417](http://www.expotv.com/videos/reviews/13/138/Nickel-Finish-Plastic-Flatware/109417) and the results of nickel dermatitis on [www.painfulpleasures.com/xcart/costomer/pages/php?pageid=11](http://www.painfulpleasures.com/xcart/costomer/pages/php?pageid=11). Googling "REGULATION (EC) No 1907/2006 of the EUROPEAN PARLIAMENT" should lead you to the European Union's Nickel Directive as part of the EC regulations on page 422-3.

**COMMENT.** Many craft jewelers and teachers in colleges and high schools still use nickel/silver alloys. Jewelry suppliers such as Rio Grande still carry nickel silver casting alloys, wire, and more. They apparently don't know that jewelry should not contain this metal. Or that , it is illegal to sell jewelry that releases nickel to the skin in the whole European Community.

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**RABIES: MOM STEPS UP TO PLATE AT SOFTBALL TOURNY**

*MMWR*, January 4, 2008, Vol. 56, No. 51-52, pp. 1337-1340

On July 14, 2007, a softball coach from a North Carolina team found an apparently healthy and alert kitten in a garbage bin near one of the playing fields. The kitten was brought to at least six different games played that day. On July 15, the kitten began behaving abnormally and became increasingly lethargic. The coach's housemate brought the kitten to an emergency animal hospital for care. She did not disclose to the veterinarian that she had been bitten by the kitten. After an evaluation, the kitten was euthanized and held for cremation planned for July 18. Rabies was not suspected because the kitten showed no typical symptoms. Before leaving, the coach's housemate signed a routine form indicating the kitten had not bitten anyone during the preceding 10 days.

On July 18, the mother of a softball player from North Carolina, after learning from the coach that the kitten had become ill and was euthanized, contacted the animal hospital and asked whether the kitten had been tested for rabies. The mother had been bitten while trying to feed the kitten during the tournament. Learning that testing would not be done, the mother went to the clinic, requested the cat's body, and took it in her private vehicle to her local health department. On July 23, testing confirmed the kitten had rabies identified as the eastern United States raccoon variant.

Public health authorities investigating the incident determined that at least two other kittens of similar age were found in a parking lot near where the first kitten was found. These animals were also handled by various players but the kittens could not be located. Armed with lists of the tournament participants, authorities located potentially exposed persons in four states. All those who reported actual exposure to a kitten's saliva, either through a bite, a lick on the oral or nasal mucosa, or a claw scratch were provided prophylactic rabies shots.

**COMMENT:** Rabid animals do not always exhibit typical aggressive behavior. Any sick feral animal should be suspect. Healthy feral animals should not be adopted until they have had an examination and their shots. And this baseball Mom, who took charge, deserves a medal.

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*ACTS FACTS* sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many technical, health, art, and theater publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Diana Bryan, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale; Staff: John Fairlie, OES.

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March 2008

Vol. 22, No. 03

### RT VANDERBILT TO CEASE TALC PRODUCTION

[www.rtvanderbilt.com](http://www.rtvanderbilt.com) (Posted 1/11/08)

R.T. Vanderbilt Co., Inc., announced its decision to discontinue its NYTAL® and CERAMITALC® industrial talc product line, and to cease talc production at its Gouverneur Talc Division by the end of 2008. (The company will continue to mine and process wollastonite, which is sold under the trade name VANSIL®, at the facility.)

R.T. Vanderbilt has been processing talc since 1948. The volume of production at the Gouverneur facility reportedly dropped from over 200,000 tons in 1988 to approximately 80,000 tons today, an amount representing less than 7% of their total revenue in 2007.

Hugh B. Vanderbilt, Jr., chairman and chief executive officer, said “My father, my grandfather and I all believed strongly in this business, but the market for this product line has dropped steadily over the years while business costs have continued to increase. In the end, we ran out of options. We sincerely regret the impact this will have on the affected employees and on the community.”

Roger K. Price, president and chief operating officer of RT Vanderbilt says, “To allow our customers adequate time to reformulate their products, we made the decision to maintain production through 2008, and we will be providing technical assistance to them as well.” He said further that “In the coming weeks, we will also be discussing the impact of these decisions with the union that represents our hourly employees and with our salaried employees who are affected.”

**COMMENT.** In ACTS opinion, they are closing because 30 years of data and recent lawsuits linking this talc with asbestos-related diseases including mesothelioma has finally turned the tide.

### TALC “DEBATE” REPORTED IN CERAMICS MONTHLY

*Ceramics Monthly*, Feb, 2008 pp. 58-61; Mar, 2008, p. 10 & [www.ceramicartsdaily.org](http://www.ceramicartsdaily.org)

In the February *Ceramics Monthly*, there was an article written by Jeff Zamek claiming to fairly present both sides of the talc debate. On one side, Zamek quoted defense witnesses for talc manufacturer RT Vanderbilt in the trial recently lost to the widow of a potter who died from an asbestos-related cancer. These witnesses said the talc was safe. And as an opposing view, Zamek presented the opinion of Dr. Woodhall Stopford, the toxicologist for the Arts and Crafts Materials Institute. ACMI’s position is that they will no longer certify products containing the talc, but that the talc is not really hazardous (see *ACTS FACTS* 7/07).

A fair presentation of the opposing view would be that of the National Institute for Occupational Safety & Health (NIOSH) or any of many other experts who say the talc contains asbestos. In addition, Zamek did not disclose to the editors of *Ceramics Monthly*, or to readers, that he was an expert witness for Vanderbilt in that trial. This is unethical, and *Ceramics Monthly* promised to present a more balanced view in the April issue. Until then, my rebuttal to Zamek’s article can be viewed at : <http://www.ceramicartsdaily.org/magazines/Ceramics%20Monthly/currentissue.saspx>.

## **5 YEARS AFTER THE RHODE ISLAND PYRO DISASTER**

*New York Times*, AP files, 2/2/08 & 2/17; *Staten Island Advance*, A17, 2/18/08; & many others.

Many newspapers and TV stations covered the 5 year anniversary of the February 20, 2003 fire that claimed the lives of 100 nightclub patrons in a fire at the Station nightclub in West Warwick, Rhode Island. The blaze began when pyrotechnics used by the 1980's rock band *Great White* ignited highly flammable soundproofing foam around the band platform.

The many articles about the aftermath of this fire covered some of the multitudes of lawsuits related to the disaster. Some are brought by family members and dependants of the dead . Others are brought by over 200 people who were injured especially those who have lost ears, eyes, and noses, or use of their hands. Many are still having surgeries to try to restore their ravaged bodies.

Many of the lawsuits are being pursued by those who can no longer work due to their injuries. The majority of the injured were blue collar workers such as waitresses, house painters, and contractors. Most had no personal savings or income protection. Their Social Security Disability payments are not enough to provide a decent life. Funds raised in the early days after the fire and the state's Crime Victim Compensation Program awards averaging \$8,800 per person ran out long ago.

Everyone connected to the fire seems to be involved in one or more of these lawsuits. Even WPRI-TV station and their cameraman, Brian Butler, are being sued. Butler captured the most complete record of the early moments of the fire. His video showed the rapid spread of flames and the frantic rush for the exits. Butler has been accused of getting in the way of people fleeing. The TV station and the survivors and victims' relatives have reportedly reached a tentative \$30 million settlement.

This is the largest settlement of several reached so far with the dozens of people and companies being sued. There are still dozens of defendants in the case, including Anheuser-Busch, Clear Channel Broadcasting, several urethane foam manufacturers, the state of Rhode Island and members of *Great White*. Club owners Jeffrey and Michael Derderian were also sued but have received bankruptcy protection.

The criminal cases against the three men charged, that is, the two club owners and the pyrotechnician, were resolved in 2006 though plea deals. Daniel Biechele, the former *Great White* tour manager who pled guilty to igniting the pyrotechnics, is due to be released on parole this month after serving less than half of his four-year on sentence. Michael Derderian, one of the brothers who owned the club, was also sentenced to four years in prison. His brother, Jeffrey, was spared prison time and was sentenced to community service.

**COMMENT.** As ACTS pointed out at the time of the fire, none of these three men, or the band members and the agents who encouraged and paid Dan to use pyrotechnics without a license, or the Fire Marshal who did not enforce the regulations against using pyrotechnics without his approval, or the salesman who sold the club owners packing foam rather than the more expensive fire-retarded acoustical foam, or the club owners whose doors did not always open in the right direction for evacuation--none of them--did anything constituting more than a misdemeanor. Yet the combined effect of these many small misdemeanor violations resulted in a crime of immense proportions.

No story could better illustrate why it is important to follow regulations and rules to the letter.

## USING VOCs TO CALCULATE PAINT HAZARDS

Editorial/data sheet

If you use water-based latex paints on the job or at home, this article is for you. It will show you how to figure out how much of the “water-based” paint is actually solvent—even when the label and the material safety data sheet (MSDS) report few if any solvents.

**POOR QUALITY MSDSs.** The MSDS is supposed to list all potentially hazardous ingredients in the paints. Instead, I’m seeing more and more MSDSs with no ingredients listed at all. They are claiming that there are no ingredients in their paints that are regulated by the Occupational Safety and Health Administration (OSHA). OSHA defines as a health hazard any chemical for which even one study, including an animal study, indicates it could be harmful. OSHA requires such ingredients to be reported when they are present in amounts 1% or more by weight of the product. And if the ingredient is a carcinogen, it must be reported at 0.1%.

**TOXIC INGREDIENTS.** It is essentially impossible to make a latex paint without something toxic. There must be small amounts of solvents in the acrylic, vinyl, or other plastic resin globules suspended in the water-based emulsion or they cannot fuse (coalesce) to form a film when the paint dries. There also must be chemicals to keep the plastic emulsion stable plus a chemical to keep it from freezing easily in cold weather (usually ethylene or propylene glycol).

The white pigment in the paints also may be toxic. Titanium dioxide, the most common white pigment, is regulated as a workplace air contaminant by OSHA and is also considered a carcinogen by the International Agency for Research on Cancer (IARC) and the National Institute for Occupational Safety and Health (NIOSH). Since paints can be sprayed or sanded when dry, the hazards of this pigment by inhalation should be on the MSDS.

So if the MSDS or label that says there are no toxic ingredients, clearly, the manufacturer has decided not to tell you what’s in the paint.

**REPORTED "VOCs."** One way to get more information about potentially toxic ingredients in the paint is to look at the VOC content of the paint. This usually can be found on the label. It is required to be reported by the Environmental Protection Agency (EPA).

Strictly translated, VOC means "volatile organic chemical." And VOCs usually function as solvents. Some of us try to avoid solvents by using products labeled "contains low VOCs." But the VOC label term only refers to solvents that EPA has determined can create smog or damage the ozone layer. Many solvents such as acetone and ethyl acetate react negligibly in the atmosphere. These are called "exempt compounds" and are not labeled as VOCs. Legally, a can of acetone could be labeled as containing “no VOCs.”

**USING VOC DATA.** Recently I was sent a series of MSDS that listed no OSHA regulated ingredients, but provided VOC data. When this happens, you can use the VOC data to figure out the percentage of chemicals that probably should have been reported because they are volatile solvent-like chemicals. Here’s how:

1. You should see two sets of figures, one for Coating VOCs and the other for Material VOCs. Both will be in units of grams per liter (g/l). Ignore the Coating VOC figure, and look instead at the

Materials VOCs. These are the actual or real amount of VOCs in the paint that can be used to calculate the percentage of VOCs (solvents) in the paint..

2. Assume that the paint weighs about the same as water (it is mostly water). Since one liter of water weighs roughly 945 grams, you can calculate the % VOCs in the paint with the formula:  $\text{VOC g/l} \times 1/945 \text{ g/l} \times 100 = \sim\% \text{ VOCs}$ .

EXAMPLE: One paint MSDS listed “no reportable ingredients,” but said that there were 96 g/l of Material VOCs in the paint. And  $96 \text{ g/l} \times 1/945 \times 100 = \sim 10\% \text{ VOCs}$

So roughly ten percent of this paint is admittedly volatile and hazardous to the environment. There is no reason to assume that these same solvents are good for you. In addition, the actual percentage of solvents in the paint is probably greater than 10% for two reasons:

- a) VOCs are only the EPA-regulated volatiles. There could be other volatiles in the paint such as acetone, ethyl acetate, etc., that are not regulated by EPA but are still toxic to people.
- b) The paint may not be as heavy as water and the less the paint weighs, the higher the % VOC. If the MSDS provides the specific gravity of the paint, further calculations can be made to pin down the percentage of volatiles in the paint.

**THE BOTTOM LINE.** If you calculate the paint you are using contains from 1 to 10% VOCs, and if you apply this paint to large areas like walls or spray it in the air, you can assume you may have a significant exposure to the VOCs. Use ventilation if possible or an organic vapor respirator.

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## 2009 SUBSCRIPTION PRICES WILL RISE

We’ve looked at the bottom line, and it seems that we will have to raise the price of our subscriptions from \$20 to \$25 for US subscribers, from \$23 to \$28 for Canadian and Mexican subscribers and from \$26 to \$30 for other countries. But this will not happen until 2009. But for those who wish to renew for multiple years, this is the time to lock in years at the old price.

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*ACTS FACTS* sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many technical, health, art, and theater publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Diana Bryan, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale; Staff: John Fairlie, OES.

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# ACTS FACTS

THE MONTHLY NEWSLETTER FROM

## ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

April 2008

Vol. 22, No. 04

### EPA OZONE LEVEL REDUCED—BUT NOT ENOUGH.

*CE&N*, 3/17/08, p. 12, *Wash. Post*, 6/22/07 & 3/14/08, & [www.grist.org](http://www.grist.org), 3/14/08, June 11, 2007 proposed rule, 72 FR 37817-37919, new ozone NAAQS to be published in *Federal Register* soon.

The Environmental Protection Agency (EPA) announced it is tightening the National Ambient Air Quality Standard (NAAQS) for ground-level ozone from 0.08 parts per million (ppm) to 0.075 ppm. However, this was not the level that the EPA planned to set. Documents released by EPA show that interference from the White House forced them to set a less protective level than planned.

EPA's Clean Air Scientific Advisory Committee originally determined that a standard of between 0.06 and 0.07 ppm is needed to provide an adequate margin of protection for millions of people susceptible to respiratory illnesses and to protect the environment. EPA's proposal was to set the standard in this range, but President Bush overruled EPA officials at the last moment and ordered the agency to increase the limit. EPA administration lawyers hustled to craft new legal justifications for the weakened standard and EPA administrator Stephen L. Johnson was forced to postpone a scheduled news conference to announce the new rules five hours later than planned.

John Walke, clean-air director for the Natural Resources Defense Council said, "It is unprecedented and an unlawful act of political interference for the president personally to override a decision that the Clean Air Act leaves exclusively to EPA's expert scientific judgement." ACTS agrees.

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### DISNEY WORLD ADDS SAFETY FEATURES TO RIDE

*Orlando Sentinel*, 3/5/08, Scott Powers, staff writer

Orlando's Walt Disney World is making safety improvements to a roller coaster after a worker died at the Florida attraction last year, the company said. Alterations are being made to the Primeval Whirl ride in Animal Kingdom, where Disney worker Karen Price, 63, was fatally injured when hit by a roller-coaster car Nov. 24, 2007. The death reportedly is still being investigated by OSHA

The safety alterations include wide stripping added to entrance and exit areas and sensor mats which will shut the ride down if a person enters the restricted area. The mats should be of interest to theater people who could modify them to provide a sound or warning light for performers and stage hands who get too close to the edge of stages, traps, or set pieces. (See also page 4 this newsletter.)

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### PERMANENT URL FOR CERAMICS MONTHLY REBUTTAL

Last month, I referred readers to a rebuttal I wrote to Jeff Zamek's article about talc in *Ceramics Monthly*. The URL I provided was temporary, so it was no longer working by the time you got the newsletter. I got a number of e-mails informing me about this. Sorry. Here is the permanent URL: [www.ceramicartsdaily.org/magazines/past\\_articles\\_index.aspx](http://www.ceramicartsdaily.org/magazines/past_articles_index.aspx).

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## **STUDY LINKS CHEMICAL TO CANCER & DIABETES**

Primary Sources: *BNA-OSHR*, 38(11), 3/13/08, p. 199 & *Business Week*, June, 2000.

Workers with high exposures to a salt of perfluorooctanoic acid (PFOA) were more likely to die from prostate cancer or strokes than workers who had low or no exposure, according to a study 3M Company submitted to the Environmental Protection Agency (EPA). Why do you care? Because you probably carry this chemical or other closely related chemicals in your blood stream.

**THE 3M STUDY.** The study was funded by 3M Company and conducted by researchers from the University of Minnesota's School of Public Health. The researchers found that "Within the [workers] cohort, risk of death from prostate cancer and cerebrovascular disease was elevated for workers with higher estimated exposure."

The study also found that workers with some, but not high, exposures had an increased risk of diabetes. This is the second study to link PFOA exposure to diabetes.

**WORKERS STUDIED.** The study, submitted to an EPA docket Feb 20, examined 3,993 workers from 3M's facility in Cottage Grove, MN, some of whom had been exposed to ammonium perfluorooctanoate (APFO), a PFOA salt.

Based on work history records, the research team, lead by Associate Professor Bruce H. Alexander, divided the workers into three exposure categories: "definite occupational APFO exposure," "probably occupational APFO exposure," and "no or minimal occupational exposure." It also sought to calculate cumulative exposure throughout the career of the employees.

**INVESTIGATOR QUALIFIES RESULTS.** The findings are important, Alexander said, but he urged caution and said people should not make too much of the conclusions. Studies that rely on death certificates, "although cost effective and convenient, miss the cases that do not result in death," the study said. "Prostate cancer and cerebrovascular disease, the two findings of potential importance, do not always result in death and may not be listed as contributing causes of death on a death certificate," it said. Additional research is needed, Alexander said.

**COMPARISON TO GENERAL POPULATION.** Investigator Alexander also reported that the death rate of the highly exposed workers was not elevated when compared with the general population of Minnesota. And ACTS wonders why Alexander reported this fact.

Traditionally, epidemiologists compare workers to workers. This is the only valid comparison because of what is known as the "healthy workers effect." In short, workers are people healthy, strong, and young enough work. Comparing workers to the general population is invalid because the general population includes the disabled, elderly, unhealthy, and others not able to work.

In ACTS' opinion, it appears that university researchers compared workers to the general population to please the industries that make this chemical (DuPont) and fund the study (3M).

**ANOTHER OPINION.** ACTS agrees instead with the opinion of Olga Naidenko, a scientist working for the EPA's Environmental Working Group (EWG), which has sought to bring attention to health problems alleged to be caused by PFOA. "What is really important is that [the study] confirms that worker exposure to this chemical does give a higher risk of prostate cancer, diabetes,

and stroke,” she said. The death rate of the highly exposed workers should be compared with the workers with no or little exposure, not with the general population, she said.

She said EWG also disagrees with a statement DuPont has repeatedly made about PFOA, which is that to date, no human health effects are known to be caused by PFOA. A growing number of studies show health problems that illustrate “how broken the U.S. chemical regulation system has been,” Naidenko said, arguing that exposures to the chemical should have been reduced many years ago.

**DUPONT RESPONDS.** As expected, DuPont said the 3M study does not change its position that there are no human health effects known to be caused by PFOA. The company’s own worker mortality study showed decreased incidence of prostate cancer and cerebrovascular disease when the exposed workers were compared to non-exposed workers, West Virginia residents, and the entire U.S. population, DuPont said. (Note again the general population comparisons.)

**WHY DID 3M STUDY THIS CHEMICAL?** Back in 2000, 3M announced its phase out of the active ingredient in its popular Scotchgard® line used for 40 years to protect clothing, fabrics, upholstery, and carpets from stains (*ACTS FACTS*, June, 2000). This ingredient was closely related to the PFOA in the current 3M study. It is called perfluorooctanyl sulfonate (PFOS). Rats dosed at high levels with PFOS gave birth to offspring that died a few days after birth. Monkeys also have died in tests with PFOS. And it was one of hundreds of PFOS- and PFOA-related chemicals EPA had previously listed as "persistent, bioaccumulative and toxic" and subjected to special controls.

3M planned a study to defend their chemical. They wanted to compare their PFOS-exposed workers’ health records to those of unexposed people. But when they tried to find an unexposed population in the US, they could not. Their highly sensitive blood testing devices found tiny amounts of PFOS in blood drawn from people living all across the US, even in places far from 3M factories. PFOS also was found in flesh-eating birds in the Pacific Ocean and Baltic regions.

**COMMENT.** All of us on this continent, and even those on the other side of the planet, probably have small amounts of various PFOS- and PFOA-related chemicals in our bodies. Chemicals that EPA lists as “persistent and bioaccumulative” are ones likely to end up in us all.

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## **REFINISHING MATERIALS IGNITE SPONTANEOUSLY: KILLS ONE**

*NFPA Journal, March/April, 2008 p. 26*

The March/April *National Fire Protection Association Journal* reported on a fire that should remind us of the hazards of refinishing products, linseed oil, or other products containing setting oils.

The Journal describes a fire that started on the ground floor of a three-unit apartment building that spread undetected through the floor joists to the unit above, killing it’s occupant. By the time other occupants detected the fire and called 911, the fire fighters found flames and smoke coming from the ground-floor storage room. They forced the room’s door in order to extinguish the fire and a rescue company was sent to search the apartment above. The door was locked. They entered the apartment through a window and found an older woman dead in her bedroom.

In the ground floor room, investigators found numerous cans of wood finisher near where the fire started, some carrying warning labels about proper storage. They discovered that rags soaked in the finisher had been stored in plastic buckets and determined that the rags had spontaneously ignited.

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## **COURT CLARIFIES USE OF ALTERNATIVE TO WARNING LINES**

*BNA-OSHR, 37(46), 11/22/07, pp. 1058-1059*

A line spray painted six feet from an unguarded edge is not equivalent to a warning line system for the protection of workers against falls during leading edge construction work, a Washington state appellate court ruled November 14 (*J & S Services Inc. V. Washington State Dep't of Labor & Indus.*, Wash. Crt App., No. 35495-I-II, unpublished opinion 11/14/08). The Washington state Division II Court of Appeals thus affirmed a citation issued to steel contractor J&S Services for fall protection violations under the Washington Industrial Safety and Health Act.

On Nov. 7, 2003, an inspector from the Washington state Department of Labor and Industries saw J&S employees exposed to a fall hazard while building a roof deck. The employer's fall protection measures at the time consisted of a safety monitor and fluorescent lines spray painted six feet from the unguarded edge. The department cited the employer for failure to provide fall protection and for failure to have an adequate fall protection plan.

J&S challenged the citation, arguing that the Washington Administrative Code says that a warning line system "or a method which provides equivalent protection" must be erected. A warning line system is a barrier erected to warn workers that the area approaching an unprotected fall hazard in an area where there is no guardrail, body belt, or safety net. The employer asserted that spray painted lines are equivalent to a warning line system.

The case went through the court system ending in the Court of Appeals where the judge found that "A spray-painted line is not equal or identical to a warning line in power, force, effect, or function." Among other observations, the judge pointed out that an erected warning line can physically alert a worker as he nears the edge, while a painted line requires the worker to look for the line. In addition, it is easier for safety monitors to assess the proximity of workers to a warning line than to a painted line, the judge said.

**COMMENT.** This ruling should be kept in mind when planning theater fall protection. In general, fall hazards on stage or in the rigging must be guarded or the people near them must wear fall protection. But perhaps, in limited performance circumstances and with special training, a strong and almost invisible warning line made of something like 1/8 inch airplane cable could be used.

*ACTS FACTS* sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many technical, health, art, and theater publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Diana Bryan, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale; Staff: John Fairlie, OES.

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# ACTS FACTS

THE MONTHLY NEWSLETTER FROM

## ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

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May 2008

Vol. 22, No. 05

### **R.T. VANDERBILT LOSES SECOND MESOTHELIOMA SUIT**

*Products Liability Reporter*, Leonard M. Ream Law Center, Johnny Franklin v. R.T. Vanderbilt Docket No., 04-CI-00274 & depositions of Paul Vanderbilt, Thomas Rogers, and other trial materials

Johnny Franklin, husband of Flora Franklin, sued RT Vanderbilt under product liability negligence. In 2005, Flora Franklin died from malignant mesothelioma at age 68 after suffering from this disease for a year and a half. She worked as a tile sorter at Florida Tile in Lawrenceburg, Kentucky. Florida Tile used millions of pounds of RT Vanderbilt talc over the years and the dust was everywhere in the plant according to testimony from the Plant Manager and other workers. A Kentucky OSHA inspector also testified that when he measured the dust in the air, he identified tremolite asbestos in the talc.

Evidence at trial demonstrated that Johns-Manville, a large asbestos manufacturer, specifically tested RT Vanderbilt's product in the 1970s and determined the talc was asbestos-containing. And a 1980 NIOSH (National Institute for Occupational Safety & Health) study also found the talc contained tremolite and anthophyllite asbestos.

The Trial Court sanctioned RT Vanderbilt for repeatedly failing to turn over court ordered documents and produce individuals for depositions. Specifically, the court ordered the Chief Financial Officer to be deposed regarding the possibility of misconduct, but RT Vanderbilt refused to produce this witness for a deposition in direct and blatant violation of the Trial Court's order. RT Vanderbilt also ignored the Court's order to turn over internal documents regarding its own employees suffering from asbestos-related diseases, including malignant mesothelioma and they failed to comply with the court order to reveal the amount of money RT Vanderbilt has spent to try to have other laboratories and researchers classify its talc as a non-asbestos containing product.

The owner of the talc mines, Hugh Vanderbilt Sr., sent his son, Paul Vanderbilt, to oversee their defense team's jury selection process. In a surprise move, Plaintiff's Attorney, Joe Satterley, subpoenaed him while he was there. Paul Vanderbilt is Vice President, Secretary, and director of Environmental Affairs for RT Vanderbilt. Yet at trial, he testified that he had no knowledge of the number of his workers who developed asbestos-related diseases nor did he seem to have an interest in environmental safety. Joe Satterley's final question to Paul Vanderbilt and his answers were:

*Q. Final question: You'll agree that if it is determined that your product kills people, causes mesothelioma, and product should be banned from sale in the United States, correct?*

*A. If it causes mesothelioma, yes.*

*Q. It should be banned, right?*

*A. Yes.*

**PROOF POSITIVE.** Lawyer Satterley was also able to demonstrate to the jury using posters showing enlarged pictures of the fibers taken under the microscope by his experts, that the same kinds of fibers known to be in RT Vanderbilt talc were also present in Mrs. Franklin's lungs.

**DRAMATIC TESTIMONY.** Stunning evidence was presented by Thomas Rogers, a 72 year old former employee of RT Vanderbilt with a 10<sup>th</sup> grade education. He had worked 27 years for RT Vanderbilt as a miner, a mechanic, and in many other jobs. Rogers was asked about an incident that happened sometime in the late 70s or early 80s after a NIOSH study found that the ore contained asbestos, a fact which could have put them out of business. The jury heard testimony from Rogers that Hugh Vanderbilt, Sr., stated he would spend millions to fight the classification of the fibers in the talc as asbestos and if that was not successful, he had a Senator in his hip pocket. In Rogers' own words in deposition:

A. *Well, they was having quite a spell on whether that [the talc] was going to be called asbestos or not and, of course, they had their own labs I guess and they was testing against NYAS [sic. NIOSH] and he [Hugh Vanderbilt] said that in the end if all else failed he padded [patted] his back pocket he says, I got a Senator right here.*

Rogers also said that the researchers from the labs that RT Vanderbilt used to defend their talc were supposed to come to the mines without notifying people in advance and take samples at any locations they thought appropriate. But Rogers says it was management that told the workers where to take the samples and to give them to the researchers. This is consistent with the information I have from the first successful lawsuit (see below), in which researchers for the 1980 NIOSH study and other researchers observed that the asbestos occurs in pockets scattered throughout the ore. By carefully selecting samples, it would be possible to get ones that were asbestos-free.

**THE DECISION.** The jury awarded \$5,659,000 in total damages to Franklin. Those damages included \$5,000,000 in pain and suffering, \$20,000 in medical expenses incurred, awarded punitive damages and found in clear and convincing evidence of fraudulent concealment and gross negligence in the amount of \$450,000. The awards to the Franklin estate were reduced by 30% to reflect the jury's allocation of fault. They found RT Vanderbilt 70% at fault and a few other defendants (Ford Motors for brake linings, Georgia Pacific for joint compound used in the house, etc.) were found jointly responsible for the other 30%. After the apportioning fault, the court entered judgement against RT Vanderbilt totaling \$4,090,000. The date of the verdict was September 10, 2007.

RT Vanderbilt moved for a new trial and a Judgement notwithstanding the verdict. The Trial Court, after extensive arguments and hearing on the matter, denied RT Vanderbilt's post-trial motions.

**THE FIRST SUCCESSFUL LAWSUIT.** The Flora Franklin lawsuit was the second successful suit against RT Vanderbilt. Earlier, on November 16, 2006, the estate of a New Jersey pottery shop operator who had used RT Vanderbilt talc and who died of mesothelioma in 2004, was awarded \$3.35 million in compensatory damages by a Superior Court jury in New Brunswick. The jury awarded \$1.4 million for pain and suffering, \$1.45 million for loss of earnings and \$500,000 for his widow's loss of companionship. On December 7, the punitive damage phase of the trial ended in a settlement of an additional confidential sum. (See also *ACTS FACTS* 12/06)

**SUMMARY.** Many studies of this talc have determined that it contains asbestos, and now two juries have decided it causes mesothelioma. According to Paul Vanderbilt's own testimony, it should be banned. And RT Vanderbilt has announced they will close their mines at the end of this year. Since mesothelioma has a latency period of between 20 and 40 years after exposure, we can be sure this is not the last of these trials against RT Vanderbilt.

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## **SMOKING ON STAGE**

*Denver Post*, 2/17/08, [www.denverpost.com/thater/ci\\_8267018](http://www.denverpost.com/thater/ci_8267018), *New York Times*, Kirk Johnson, 3/28/08 & others.

**NO SMOKING LAWS.** There now are state laws prohibiting smoking in workplaces many states including Massachusetts, New York, Connecticut, Maine, Delaware, California, Colorado, New Jersey, Rhode Island, and more. If you work in these states, and if you don't see "No Smoking" signs on the walls or if you see people smoking on the job, your employer is violating the law.

Many states, such as New York, also ban indoor smoking of tobacco on stage. But the smoking of herbal cigarettes in New York and many states can be done without violation.

**COLORADO'S LAW.** The law in Colorado is different; it bans all types of smoking on stage and elsewhere. From a scientific standpoint, this ban is reasonable. All types of smoking materials are health hazards. The nicotine in tobacco is not a carcinogen. Instead, the cancer is caused by all those other chemicals that are released from the burning leaf and paper. There's no such thing as non-carcinogenic smoke from burning hydrocarbons. This includes smoke from incense, cooking fires, candles, wood, coal, gasoline, and more.

Colorado's law is being vehemently opposed by many theater groups and college performing groups. They say there is no other way to portray people for whom smoking was a part of their character.

**FAKE CIGARETTES.** This is untrue because there are a number of fake cigarettes on the market. Just as we can learn to fake bullet hits and knife fights, actors can learn how to use the phony cigarettes so well that no one in the audience will even think about it. It's just another acting skill.

And no one can tell me it can't be done. Over 60 years ago, I saw magicians, including my father, use phony cigarettes in ways that fooled the audience. It should be vastly easier now.

**COMMENT.** Real bullets are not used on stage, real knives are not plunged into the heart of Caesar, and Tosca doesn't have to really fall from a castle parapet. So also, we do not need real smoke from cigarettes on stage that raises the cancer risks for all who are exposed to it.

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## **FILM COMPANY FINED FOR DEATH OF A CANADIAN SET DRESSER**

Canadian Broadcast Company News: January 27, 2007 & April 10, 2008

Last month, the ministry of Labour in Ontario fined a film company \$250,000 for the death in 2007 of David Ritchie, age 56, a member of local 873 Motion Picture Studio Production Technicians. Ritchie, a veteran set dresser, was killed instantly on the Toronto set of the thriller *Jumper*, starring Samuel L. Jackson, after frozen earth and ice fell on him as he tried to tear the set down. A second man was sent to the hospital with serious head and shoulder injuries.

Toronto shooting on the film wrapped Jan 15, 2007. Ritchie was part of a crew that was dismantling a wall that formed part of a set. Four workers were sorting lumber debris in extremely cold conditions outdoors when frozen sand and gravel adhering to a wall broke away in large slabs and fell on top of two workers.

"It was just an unfortunate, fluke accident," Toronto police Staff Sgt. Joanne Verbeek told a reporter. Verbeek was wrong. Inspectors from Ontario's Ministry of Labour investigated and found

that vibrations from nearby heavy equipment contributed to the collapse and there were three Ontario safety regulations that were violated. Jumper Productions Limited pled guilty in the Ontario's Court of Justice to these counts under the Occupational Health and Safety Act:

- \* Failing to ensure that granular material was not placed or left in a manner that would endanger a worker as required under section 25(1)(c) of the OHSA
- \* Failing "to ensure that precautions were taken to prevent injury to a person on or near a project that might result from demolition, dismantling or moving of a structure" as required under Section 25(1)(c) of the OHSA
- \* Failing "to ensure that every worker wore protective head gear at all times while on a project" as required by section 25(1)(d) of the OHSA

In addition to the total \$250,000 fine, the court imposed a 25% victim fine surcharge on the total (\$62,500), as required by the Provincial Offences Act. The surcharge is credited to a special provincial government fund to assist victims of crime.

**COMMENT.** There have been three crushing deaths on which we have reported. In 2001, stage hand Doug Gettel, died after a piece of scenery fell during a change over on stage at the Houston Grand Opera. In 2007, graduate student Pierre Salim died when heavy flooring pieces in a truck shifted during a load-in at the Yale School of Drama (*ACTS FACTS* 12/07 & 1/08). And now this Toronto death. All theatrical workers should be trained in materials handling which helps them locate of the center of gravity of heavy objects and assess the stability of stacked materials. Basically, if stuff could fall, roll, slide or come loose, assume it will. Protect yourself.

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### **METROPOLITAN MUSEUM OF ART CITED BY OSHA**

*BNA-OSHR, 38(9). 22808, P. 172*

The Met is contesting a serious citation and a \$7,500 penalty for the alleged violation of five items, including: 1910.36(g)(1), failure to ensure that any projection from the ceiling was at least six feet eight inches from the floor; 1910.36(g)(2), failure to ensure that the exit access route was at least 28 inches wide at all points; and 1910.37(b)(4), failure to ensure that the direction of travel to the exit or exit discharge was immediately apparent, with signs posted along the exit route indicating the direction of travel to the nearest exit. It may be that the Met, like so many others museums, is over crowded with materials and uses basement areas for workspaces and hallways for storage.

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*ACTS FACTS* sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many technical, health, art, and theater publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Diana Bryan, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale; Staff: John Fairlie, OES.

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# ACTS FACTS

THE MONTHLY NEWSLETTER FROM

## ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

June 2008

Vol. 22, No. 06

### MERMAID ACTOR PLUNGES 20 FEET TO STAGE

SOURCES: *eflux News*, *AP wire service*, 5/11 & 12/08, TV reports, *NY1 News*, and gossip.

On Saturday, May 10<sup>th</sup>, just before the matinee performance of *The Little Mermaid* at the Lunt-Fontaine Theatre, 51-year-old Adrian Bailey fell through a trap door on the deck of a suspended boat to the stage 20 feet below. He was taken to Bellevue Hospital Center where it was found his injuries consisted primarily of two broken wrists. Bailey was fortunate: 20-foot falls are often fatal.

The actor was an ensemble cast member who was supposed to perform as a sailor in the opening scene. Reportedly, Bailey was walking across the deck of the boat to get to his place for the opening number, "Fathoms Below," when he fell through the trapdoor that had been accidentally left open. Maria Somma a spokeswoman for Actors Equity said that "We are doing the necessary inquiry to find out how this happened."

A spokesman for the production company said that the show was supposed to start Saturday at 2 pm but, due to the unfortunate event it was postponed until 3 pm. The audience was not aware that anything had happened to Bailey.

**NO NOVICE.** Bailey whose Broadway credits include *La Cage Aux Folles*, *Smokey Joe's Café*, *The Who's Tommy*, and *The Lion King*, says that this situation comes from a human error. Bailey plays various roles during the musical, show spokesman Chris Boneau said. On the opening night of musical in January of 1008, Bailey received the Actors Equity "gypsy robe," which is adorned with appliqués from other Broadway shows and is awarded to a show's cast member who has the most chorus credits.

**COMMENT:** Experience does not protect actors or crew from falls. This is why OSHA requires fall hazards be guarded or else all workers, including actors, must be wearing fall harnesses and tied off or protected in some other way from falling.

### CIVIL WAR CANNON BALL KILLS COLLECTOR

STEVE SZKOTAK, *Associated Press* Writer, Fri May 2, 4:25 PM ET

Sam White was hooked on the Civil War. He crisscrossed the Virginia countryside digging up wartime relics — rusting bullets, military buttons, weapons, battle flags, even artillery shells buried in the red clay. He sometimes put on diving gear to feel for treasures hidden in the black muck of river bottoms.

In February, White's hobby cost him his life. More than 140 years after Lee surrendered to Grant, a cannonball he was restoring exploded, killing him in his driveway and sending a chunk of shrapnel through the front porch of a house a quarter-mile away.

**BLACK POWDER.** The destructive force for Civil War cannonballs and artillery shells was black powder--a combination of sulfur, potassium nitrate and finely ground charcoal. Black powder requires heat (572 degrees Fahrenheit or more) and friction to ignite. The necessary heat and friction may have been provided by either a drill or a grinder attached to a drill that White reportedly was using to remove grit from the cannonball, causing a shower of sparks.

Experts suspect White was trying to disarm a 9-inch, 75-pound naval cannonball, a particularly potent explosive. These cannonballs have a more complex fuse and are many times more powerful than those used by infantry artillery. And as a naval shell, it also may have been made more water proof which would have kept the powder dry for a longer time than other shells.

Because this type of shell also has an uncommon fuse design, it may have appeared as though the cannonball's powder had already been removed. White may have mistakenly concluded that the ball was already disarmed and inert.

**OFFICIAL RESPONSE.** An investigation by the Bureau of Alcohol, Tobacco and Firearms will provide the final word on what killed White, but police who responded to the blast and examined shrapnel concluded that it came from a Civil War explosive.

After White's death, officials evacuated about two dozen homes for two days while explosives experts went through his collection, selected pieces, and detonated them. On the day White died, he had 18 cannonballs lined up in his driveway to restore. White's garage where he did most of his work was crammed with his collection of civil war relics.

**COMMENT:** White reportedly was considered an expert and had worked on about 1,600 shells for collectors and museums. I worry about the museums and collectors who relied on his expertise. White's experience consisted of a college education, serving on his local police force, then working for 25 years as a deliveryman for UPS. He retired in 1998 and devoted most of his time to relic hunting and learning about explosives in the process.

Museums that have shells and other ordinance items in their collections should make sure they have been evaluated by a qualified explosives expert to ensure they no longer contain explosive powder.

### **FILM COMPANY FINED FOR DEATH OF A CANADIAN SET DRESSER**

*Canadian Broadcast Company News: January 27, 2007 & April 10, 2008 & Government of Ontario, Canada - News,*  
<http://ogov.newswire.ca/ontario/GPOE/2008/04/10c4453.htm> 1

This past April, The Ministry of Labour in Ontario, Canada, fined a film company \$250,000 for the death of set dresser David Ritchie, age 56, a member of local 873 Motion Picture Studio Production Technicians. The accident occurred during a set strike in January 2007.

David was killed instantly on the Toronto set of the thriller *Jumper*, starring Samuel L. Jackson when frozen earth and ice fell on him as he tried to tear the set down. A second man was sent to hospital with serious head and shoulder injuries.

Shooting on the film in Toronto ended on Jan 15, 2007. David was part of a crew that was dismantling a wall that formed part of a set. Four workers were sorting lumber debris in extremely

cold weather outdoors when frozen sand and gravel adhering to a wall broke away in large slabs and fell on top of two of the workers.

“It was just an unfortunate, fluke accident,” Toronto police Staff Sgt. Joanne Verbeek told a Hollywood Reporter. Verbeek was wrong. Inspectors from Ontario’s Ministry of Labour investigated and found that vibrations of nearby heavy equipment were found to have contributed to the separation and collapse and there were three Ontario safety regulations that were violated. Jumper Productions Limited pled guilty in the Ontario’s Court of Justice to these three counts under the Occupational Health and Safety Act (OHSA). The violated regulations were:

- \* Failing to ensure that granular material was not placed or left in a manner that would endanger a worker as required under section 25(1)(c) of the OHSA
- \* Failing “to ensure that precautions were taken to prevent injury to a person on or near a project that might result from demolition, dismantling or moving of a structure” as required under Section 25(1)(c) of the OHSA
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In addition to the total \$250,000 fine, the court imposed a 25% victim fine surcharge on the total (an additional \$62,500), as required by the Provincial Offences Act. The surcharge is credited to a special provincial government fund to assist victims of crime.

The film’s director, Doug Liman, and his cast, including Canadian actor Hayden Christensen, have relocated to Tokyo for additional shooting on the sci-fi movie, which is based on a Steven Gould novel. At the time of the accident, Jumper Productions released a statement saying the company was “devastated” by David Ritchie’s death.

**COMMENT:** David was a veteran set dresser who colleagues describe as a “very kind man.” His credits include movies such as *The In-Laws*, *X-Men*, *The Corruptor*, and *Simon Birch*. It is not lack of experience that contributed to this accident. But a contributing factor may have been being a “nice” person who worked in extremely cold temperatures in a dangerous location without complaining. Be careful out there. Look around. If something could fall, collapse, break, slide or roll from its position, assume it will.

And US Producers should think twice about going to Canada to avoid US OSHA regulations. The rules in both countries are similar and the fines are likely to be higher in Canada.

### **TOXIC SOCKS**

*C&EN*, April 14, 2008, p. 10

Arizona State University researchers have found that socks impregnated with odor-fighting silver nanoparticles release the nanoparticles when washed. Well, duh!

**THE STUDY.** Troy M. Benn, a graduate student at ASU, presented the results of the washing study to the Division of Environmental Chemistry at the April, 2008 American Chemical Society’s national meeting in New Orleans. Details of the work, which Benn carried out with Arizona State University professor of civil and environmental engineering Paul Westerhoff, recently appeared in *Environmental Science & Technology* (DOI:10.1021/es7032718).

The study was needed because little is known about what happens to nanoparticles in the laundry. Yet nanoparticles are increasingly used by manufacturers to make clothing free of wrinkles and resistant to stains. The study showed that silver is released during washing in amounts that varied widely. It was assumed that this variability in silver-release is related to the different manufacturing processes used to deposit silver onto textiles.

**THE TEST.** The researchers shook each of six brands of socks in one-half liters of distilled water with no detergent for one hour and then analyzed the effluent with electron microscopy. The socks contained up to 1,360 micrograms (ug) of silver per gram of sock, and released as much as 650 ug of silver in both ionic and colloidal forms. (The effects of detergents and bleaches were not studied.)

**SILVER'S EFFECTS.** In the environment, nanosilver exhibits adverse effects on aquatic organisms. Dissolved (ionic) silver from processes like photography also are known to cause adverse effects and this form of silver is regulated in water discharges. The researchers' model indicated that both nanosilver and ionic silver would be released from the socks and trapped in the solid waste material created by the water treatment plant. This solid waste is usually used as fertilizer, but it would not be suitable for use in agriculture if it was laced with silver.

Benn noted that the EPA doesn't currently regulate silver levels in the solid waste from wastewater treatment facilities, but does list maximum concentrations for drinking water. And in 2006, EPA officials announced that the agency would begin regulating the silver ions that are intended to kill bacteria as a pesticide. This would presumably include regulating effluent from wash machines.

**COMMENT.** This seems to be one of the first published studies of the release of silver nanoparticles from commercially available clothing. And it was done at a University, not by a textile company. It is hard to understand why manufacturers of nanosilver-containing textiles do not have to study and publish data on the environmental fate of the silver BEFORE they put the textiles on the market.

## **2009 SUBSCRIPTION PRICES WILL RISE**

We've looked at the bottom line, and it seems that we will have to raise the price of our subscriptions from \$20 to \$25 for US subscribers, from \$23 to \$28 for Canadian and Mexican subscribers and from \$26 to \$30 for other countries. But this will not happen until 2009. But for those who wish to renew for multiple years, this is the time to lock in years at the old price.

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July 2008

Vol. 22, No. 07

### UPDATE ON THE BALLET ACCIDENT AT THE FOX THEATER

The *Atlanta Journal-Constitution*, Kirsten Tagami, [www.ajc.com](http://www.ajc.com), June 6, 2008

The January, 2008, *ACTS FACTS*, reported a serious accident at the Fox Theater in Atlanta, Georgia. A 17-year-old dancer fell about 12 feet from the stage into the orchestra pit during a Sunday matinee of "The Nutcracker" in December. Leah Boresow, a high school senior, was badly injured and had to have spinal surgery. She was wearing a panda costume that reportedly restricted her vision.

The federal Occupational Safety and Health Administration (OSHA) has cited the Atlanta Ballet for exposing dancers to the risk of falling into the empty orchestra pit during performances. In a letter dated May 30, OSHA described the violation as "serious" and fined the Ballet \$3,500 for failing to have a guard rail or equivalent system while the pit was lowered.

**EQUIVALENT SYSTEM.** A judge in a California OSHA case in 2001 (upheld on appeal, 2005) found that one "equivalent system" is to install temporary guardrails during rehearsals which are removed during performance. This should be combined with blocking and rehearsing performers to ensure they will not be near the fall hazard during performance when the guardrails are removed.

**THE CITATION.** The Ballet will fight the citation. In a written statement, spokesman Jeff Al-Mashat said, "The condition and safety of the environment in which our dancers perform has always been of paramount importance to the Atlanta Ballet. ... We continually evaluate our safety measures, which are consistent with the best practices for major dance companies throughout the country."

**COMMENT.** It is easy to be "consistent with the best practices for major dance companies" since many of them put performers at risk for orchestra pit falls. For years, producers and choreographers have mistakenly assumed that OSHA fall protection rules do not apply to the stage.

---

### UPDATE ON THE STATION NIGHT CLUB FIRE

Associated Press, June 27, 2008, as reported in the *Boston Herald*

The American Foam Company who sold the foam that fueled The Station nightclub fire that killed 100 people has agreed to pay \$6.3 million to settle lawsuits from survivors and victims' relatives. The agreement by American Foam brings total settlements offered in the case to about \$153 million.

The tentative settlement attaches the estate of Aram Dermanouelian, the company's former president who has since died, and Barry Warner, a company salesman, who lived near the club and suggested that club owners Jeffrey and Michael Derderian buy the foam to quell local noise complaints.

The February 20, 2003, fire at the nightclub began when pyrotechnics for the 1980s rock band Great White ignited the foam, which was used as soundproofing around the stage. The families alleged the company did not warn the nightclub owners that the foam was flammable. Experts say the foam burns like gasoline, emits a dense smoke with toxic gases, and is not suitable as acoustic insulation.

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## **FIRES CAUSE BY DECORATIVE GLASS ITEMS**

CPSC, *Press Release #08-274*. May 20, 2008, "The Home Depot Recalls Candle Holders Due to Fire Hazard," & *The Baltimore Sun*, Friday, July 1, 1988, pp. 1A and 3A

On May 20, 2008, the US Consumer Product Safety Commission (CPSC) in cooperation with the Home Depot of Atlanta, GA, announced a recall of about 14,000 candle holders because they can cause a fire.

**GLASS CANDLE HOLDER FIRES.** Candle holders are often recalled because they can cause fires in several ways. For example, they start a fire if the candle burns low, heats the glass, and it shatters spilling flaming wax. Or they can cause fires if they are unstable and tip over spilling hot wax. But this May 20<sup>th</sup> recall was not for any of the common reasons.

This particular glass holder reportedly caused a fire when sunlight, passing through the circular glass decorative portion of the holder, focused the rays and ignited nearby flammable materials. A picture of the glass holder can be seen at [www.cpsc.gov](http://www.cpsc.gov) by going to press release 08-274.

**ANOTHER GLASS STORY.** This reminded me of a similar story. In 1988, the cause of a housefire in Columbia, MD, that injured four people and damaged four town houses was a mystery to investigators. For three weeks they combed through the charred ruins of the town house complex. They ruled out electrical equipment and were on the verge of believing the cause might be arson.

Ed Shore, whose family and two other families were forced to relocate, remembered hanging a beveled glass ornament in the upstairs bedroom where the fire started. The \$18 ornament was bought by one of the other homeowners for Shore's daughter's birthday.

The presence of that ornament nagged at Mr. Shore. And his wife Linda had seen the fire flare from the daughter's second-floor bedroom window where the ornament had hung. For these reasons, Mr. Shore suspected the ornament within hours of the fire. However, officials discounted his theory.

Mr. Shore then bought a similar ornament and asked to meet with the fire investigator at the town house. Standing before a gaping hole where the bedroom window used to be, they held the glass up to the sunlight along with a piece of fiberglass curtain with cotton backing like that which had been in the room at the time of the fire. It was about 4:30 pm, a half-hour before the time that the fire had started three weeks earlier, so the angle of the sun was similar, Mr. Shore said.

The ornament caught the sun like a magnifying glass and the curtain took 15 seconds to catch fire.

**WHOSE TO BLAME.** Mr. Shore said he believed the ornament was handmade "by some craftsman working in his basement." At the time of the article, Mr. Shore had not yet complained to the merchant that the ornament left him homeless and caused \$500,000 damage to four town houses. I have never seen further information about the outcome of this incident, but the merchant and the craftsman could be held liable for this damage.

**COMMENT.** All glass workers should be aware that their medium can focus the sun's rays. Stained glass ornaments, candle holders, decorative sculptures, or any other glass item that has a circular section that is tapered on its edges can cause this problem. This design element should be carefully avoided.

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## **ANTHRAX UPDATE: ANOTHER DRUM MAKER GETS THE ILLNESS**

*MMWR*, 57(23), June 13, 2008, pp. 628-631

We have covered a number of illnesses and even the death of one drum maker from anthrax (April 2006, Sept 2006, Oct 2007 issues of *ACTS FACTS*). Now more cases were reported in the June 13 *Mortality & Morbidity Weekly Report* from the Centers for Disease Control. The incidents were again related to using untreated animal hides.

On July 22, while sanding a newly assembled goat-hide drum in his backyard shed, the drum maker reportedly felt a sting on his right forearm. He then proceeded to an upstairs bathroom in his house to wash his arm. Two days later a painless 2 centimeter sore appeared and the man sought medical attention. He was prescribed medication for what was assumed to be an infected spider bite.

By August 28, the skin lesion had spread and was affecting his lymph nodes and the man consulted an infectious disease practitioner. It was diagnosed as anthrax and the patient was given ciprofloxacin, an antibiotic recommended for treatment of anthrax.

On August 31, The Connecticut Department of Public Health was notified of a second suspect case of skin anthrax in the drum maker's 8-year-old child. He had developed an ulcer on his shoulder that did not improve with common antibiotics. The child had never participated in any drum making and had no known exposure to animal hides. He played indoors on carpeted floors and was prohibited from entering the shed. The drum maker also alleges that he routinely left his clothing and all drum-making materials in the shed. He also usually wore a respirator which may be why he did not contract the more deadly inhalation anthrax. The inhalation form of anthrax is the disease that made one New York drum maker deathly ill and killed another in Scotland.

The goat skins, allegedly from Guinea in West Africa, were purchased at the end of June from a contact the drum maker made in New York City. The transaction was carried out on a street corner in the City. Whether or not these goat hides were imported legally is unknown.

On September 5 & 6, the Federal Bureau of Investigation, the Environmental Protection Agency, and the Connecticut Department of Environmental Protection inspected the house and took samples. The tests were positive for anthrax on 24% of the 25 drum heads, 42% of the 35 hides, 100% of the 16 dust samples from the shed and the car trunk, and 26% of the 72 house samples including vacuum samples from the upstairs hallway, both patients' bedrooms, the laundry room and upstairs bath room. In other words, the spores, despite the drum maker's precautions, were throughout his shed, his home and the trunk of his car.

Federal, state and local officials removed the family from the house and undertook a comprehensive remediation process that included fumigation of the house with chlorine dioxide. The house and shed were cleared for occupancy by December 22, 2007 and the drum maker was finally allowed home. The drum maker also had to take ciprofloxacin for 60 days after the last presumed date of exposure to insure that any spores that were inhaled would not cause further disease. Except for scarring of the drum maker's arm, both the drum maker and his son recovered.

**COMMENT.** It is clear there is little or no control over the importation of anthrax-contaminated materials and buyers need to be very wary.

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## **CIRQUE DU SOLEIL CONSIDERS INJURY PREVENTION PROGRAM**

“Occupational Hazards,” Laura Walter, 2008 *Penton Media, Inc.*, May 28, 2008

A new 5-year study was released on May 28 at the 55<sup>th</sup> Annual Meeting of the American College of Sports Medicine (ACSM). The study reveals that performers in *Cirque du Soleil* exhibit the same patterns of injuries found in elite athletes. *Cirque du Soleil* shows are often an artistic blend of athletic, acrobatic, theatrical, and circus performance skills.

Researchers accessed the *Cirque du Soleil* injury database and studied 18,000 injuries that occurred from 2002 to 2006. They found that lower extremity injuries of the knee and ankle were most common. The majority of injuries (45%) were to muscles and tendons. Shoulder injuries represented half of all injuries to the upper extremity, while fractures, head injuries and concussions were rare (less than 5% combined). Females and males exhibited injuries in the same anatomical locations and the pattern of injuries has remained consistent from year to year.

According to *Cirque du Soleil*, they plan to use the injury surveillance data to establish potential injury trends, develop and implement strategies in order to minimize injury rates and further protect the artists’ physical integrity and optimize their performance longevity. The study is the first step in developing an injury prevention program which should be applicable to *Cirque* and to other performance companies.

“The common types of injuries you see in trained elite athletes are not unlike what the *Cirque du Soleil* artists are experiencing when they get injured. There are acute injuries such as sprains and strains, and over use injuries such as tendonopathies,” said Ian Shrier, M.D., Ph.D. “After they rehab, just like other athletes, they have the opportunity to return to performance.”

**COMMENT.** Once again, *Cirque du Soleil* is leading the industry with their comprehensive response to accident and injury prevention. And when more is known about the percentage of workers that are injured in dance and other types of athletic performances, it is likely that the rate of injury will be found to be well over the 5% that generally causes an industry to be considered “high risk” by OSHA. We think the entertainment industry has been greatly overlooked by regulators.

*ACTS FACTS* sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many technical, health, art, and theater publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Diana Bryan, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce; Staff: John Fairlie, OES.

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### LASER SHOW AT FESTIVAL PARTIALLY BLINDS PARTYGOERS

<http://www.reuters.com/article/newsOne/idUSL1452972520080714?sp=3Dtrue>, Monday July 14, 2008, 4:23pm EDT, Chris Baldwin (Additional reporting by Tatiana Ustinova; Editing by Giles Elgood)

Reuters reported that dozens of partygoers at an outdoor open air festival near Moscow have lost partial vision after a laser light show burned their retinas. Moscow city health department officials confirmed 12 cases of laser-blindness at the Central Ophthalmological Clinic, and the daily newspaper *Kommersant* said another 17 were registered at one of the City Hospitals in the capital.

Attendees at the July 5 Aquamarine Open Air Festival in Kirzhach, 50 miles northeast of Moscow, began seeking medical help days after the show, complaining of eye and vision problems, health officials told Reuters. "They all have retinal burns, scarring is visible on them. Loss of vision in individual cases is as high as 80 percent, and regaining it is already impossible," *Kommersant* quoted a treating ophthalmologist as saying.

Attendees said heavy rains forced organizers to erect massive tents for the all-night dance party, and lasers that normally illuminate up into the sky were instead partially refracted into the dancers' eyes.

The owner of a Moscow laser rental company told Reuters the blindings were due to "illiteracy on the part of technicians." "Somebody set up an extremely powerful laser for such a small space," said Valentin Vasiliev, who said it was not his company that provided the Aquamarine lasers.

Cosmic Connection, promoters of the Aquamarine party, were unreachable and did not list contact numbers on their Web site.

**COMMENT.** In the US, all indoor and outdoor laser shows, must be approved by the Food and Drug Administration (FDA) and must be in compliance with 21 CFR 1040(c) unless a variance application is granted by FDA. Yet there is a history of similar eye damage, both permanent and temporary from laser shows, especially outdoor shows in Las Vegas (*ACTS FACTS*, 6/96 & 9/99).

In late 1995, the Federal Aviation Administration (FAA) reported that 52 incidents of aircraft "illuminations" from outdoor light show lasers had occurred in or near Las Vegas since 1993. Eleven incidents resulted in temporary blindness of flight crew members, and 24 took place during critical flight times. One incident occurred in 1995 when a Southwest Airlines' pilot was temporarily blinded by a laser light and the plane's captain had to take control until the pilot regained his sight.

A Memorandum of Understanding (MOU) between FDA and Federal Aviation Administration (FAA) was signed in November of 1998 that requires cooperation between the two agencies. Now, whenever the FDA permits an outdoor show, the FAA is consulted to insure the lasers do not intersect with flight paths. Indoor shows require FDA approval only.

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## **GRIND WHEEL “EXPLODES” & KILLS WORKER**

*Erie Times-News*, by Tim Hahn, July 22, 2008, from [www.goerie.com](http://www.goerie.com)

Michael E. Robinson, 35, was killed when a grinding wheel that he was working on exploded on the morning of May 27, according to the Crawford County Coroner's Office. These kinds of “explosions” occur when abrasive wheels, turning at rapid speeds, become worn or unstable. Then they shatter, throwing pieces of the abrasive wheel at the speed of bullets at the user. These pieces are capable of penetrating safety glasses and face shields. (*ACTS FACTS* 8/99, 3/03 & 9/03).

Robinson's accident occurred at Eagle Tool Group, Bloomfield Hills, Michigan. Occupational Safety and Health Administration (OSHA) investigated the shop on the day of Robinson's death, and did a follow-up investigation on June 5. On July 8, the agency issued Eagle Tool Group a Citation and Notification of Penalty that listed 14 violations. They included the absence of a self-closing guard on the abrasive wheel that Robinson was using to clean C-clamps, and the lack of employee certification on what personal protective equipment to use.

Other violations included a lack of employee training on the use of fire extinguishers, the improper use of some equipment, and the lack of protection on other equipment.

Ten of the 14 violations included proposed penalties from \$450 to \$1,500 each and total \$8,250. Each violation must be abated by Aug. 22, the citation said. Officials at Erie Tool & Forge declined comment Monday.

**COMMENT.** Grind wheels are in almost every art school I see. Often the guards are missing or not properly adjusted, the wheel is not dressed (i.e., the grinding edge must be reground to be perfectly flat after each use), or the wheel is being used improperly. Two common examples of improper use are grinding on the side of the wheel or raising the guard to grind objects that won't fit in between the guards. Failure to use grind wheels properly put the life of the user at risk.

Grindwheels are only suitable for sharpening flat objects such as chisels. Any other use that requires lifting the guard is improper and dangerous. Grind wheels especially do not belong in potteries where they will be used to grind glaze imperfections from the bottoms of pots.

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## **THREE ROYAL SHAKESPEARE COMPANY TECHNICIANS INJURED**

[StageDirections.com/index2.php?option=com\\_content&task](http://StageDirections.com/index2.php?option=com_content&task), May 29, 2008

Three Royal Shakespeare Company (RSC) stage technicians were injured when a piece of scenery collapsed during a set change at Stratford-Upon-Avon's Courtyard Theatre.

According to reports, RSC Stage Supervisor Roger Haymes was seriously injured when a large Perspex (acrylic plastic) Sheet at the back of the stage fell and hit Haymes during a changeover from a production of *A Midsummer Night's Dream* to *Merchant of Venice*. Haymes was airlifted to the hospital where he was treated for a slight skull fracture and released the next day. The other two stage technicians received minor injuries. The production of *Merchant of Venice* continued as scheduled. Police and the local authority environmental health office are investigating the accident.

**COMMENT.** Change overs, load-ins, and load outs are high hazard activities in theater. Special can and training in materials handling is needed for all theater workers.

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## **GRANITE COUNTERTOPS, FOSSILS, & OTHER RADON SOURCES**

*New York Times*, "What's Lurking in Your Countertop?" Kate Murphy July 24, 2008

**COUNTERTOP STORY.** *New York Times* reporter, Kate Murphy, wrote a story about a woman in New Jersey who's summer home was found to have elevated levels of radon gas on a routine inspection. A technician traced the problem to a cream, brown and burgundy granite countertop. It turned out that this granite contained uranium which is not only radioactive, it releases radon gas as it decays. Radon is a radioactive gas that can cause lung cancer.

The Environmental Protection Agency (EPA) recommends taking action if radon gas levels in the home exceeds 4 picocuries per liter of air (a measure of radioactive emission). This level is at about the same risk for cancer as smoking a half a pack of cigarettes per day. In the New Jersey kitchen, 100 picocuries/liter were recorded. Yet in the basement, where radon readings are expected to be highest because the gas usually seeps into homes from decaying uranium underground, the readings were only 6 picocuries/liter. This indicates the high kitchen levels were definitely from the granite.

**HISTORY.** Allegations that granite countertops emit dangerous levels of radon and radiation have been raised periodically over the past decade. In the past, the Marble Institute of America has said such claims are "ludicrous" because, although granite is known to contain uranium and other radioactive materials like thorium and potassium, the amounts are not enough to pose a health threat.

In the past, health physicists and radiation experts agreed that most granite countertops emit radiation and radon at extremely low levels. But more recently, preliminary results from research scientists at Rice University in Houston and at the New York State Department of Health show that of the 55 samples collected from fabricators and wholesalers, all of which emit radiation at higher-than-background levels, a handful have tested at levels 100 times or more above background.

**RADIATION STANDARDS.** Lou Witt, a program analyst with EPA's Indoor Environments Division explained that countertops that emit extremely high levels of radiation, as a small number of commercially available samples have in recent tests, could expose body parts that were in close proximity to the counter for two hours a day to a localized dose of 100 millirem in just a few months. This is significantly above the 100 millirem per year that is the limit of additional radiation exposure set by the Nuclear Regulatory Commission for people living near nuclear reactors.

(This 100 millirem radiation limit/year is the amount allowed in addition to the 360 millirem of background radiation/year that the average person is subjected to from sources such as the radiation that is constantly raining down from outer space or seeping up from the earth's crust plus that emanating from manmade sources like X-rays, luminous watches and smoke detectors.)

**INDUSTRY RESPONDS.** The Marble Institute of America now says it plans to develop a testing protocol for granite. "We want to reassure the public that their granite countertops are safe," Jim Hogan, the group's president, said. "We know the vast majority of granites are safe, but there are some new exotic varieties coming in now that we've never seen before, and we need to use sound science to evaluate them." (ACTS is always suspicious of trade associations that develop a testing protocol when their expressed purpose is to reassure the public that their products are safe.)

**WHAT HAS THIS TO DO WITH ART?** The problem of radioactive rocks and minerals are relevant to sculpture and lapidary work which create dust from these radioactive rocks and to museum conservators and specialists who work with geology collections or fossils.

In *ACTS FACTS* August, 1999 issue, we covered the National Institute for Occupational Safety and Health's (NIOSH) *Health Hazard Evaluation Report* 96-0264-2713. This was a study of conditions at the National Park Service's Hagerman Fossil Beds National Monument (HAFO) in Hagerman Idaho. HAFO's primary activities are excavation, preparation, display, and storage of fossilized mammal skeletons.

NIOSH noted a radiological hazard from radon gas generated by the decay of uranium in the fossils (a common ingredient in fossils). Air in the poorly vented collections room where the fossils were stored had radon concentrations of about 8 picocuries/liter. Levels inside the fossil storage cabinets ranged from 128 to 500 picocuries/liter. These levels are well above the 4 picocuries/liter limit NIOSH and EPA recommend.

**ADDITIONAL RISKS TO ARTISTS & MUSEUM WORKERS.** Exposure to ionizing radiation also can occur if dusts are generated from fossilized materials, granite or other radioactive rocks when they are cut, shaped, abraded, ground, cleaned, or otherwise treated. These procedures can put radioactive dust in direct contact with lung tissue or into the digestive tract when these dusts are cleared from by the lung's cilia (hair like cells that raise dust to the throat to be swallowed).

It is crucial that museum workers, sculptors and lapidary artists provide local ventilation systems to capture dusts, wash hands thoroughly after handling materials, prohibit food, drink, tobacco, and storage of personal items in work areas, leave clothing and shoes at work, and more.

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### **HOW TO GET THE EPA BOOKLET**

We've had questions about how to get the "*Environmental Health and Safety Guide in the Arts: K-12 Schools, Colleges & Artisans.*" Go to [www.epa.gov/region02/capp/](http://www.epa.gov/region02/capp/) and in the middle of the page, click on "K-12 Schools." This is where people who want college information go wrong, because there are a number of college and university items to click on that look more related. We recommend reading these, too. However, for the booklet, clicking on "K-12 School" will get you to the right place. The Guide will be listed as well as ways to download it or order a paper copy free.

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*ACTS FACTS* sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many technical, health, art, and theater publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Diana Bryan, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale; Staff: John Fairlie, OES.

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# ACTS FACTS

THE MONTHLY NEWSLETTER FROM

## ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

September 2008

Vol. 22, No. 09

### METHYLENE CHLORIDE KILLS AGAIN

*SOURCE: Johnson County Daily Journal via WISH-TV, Chanel 8, 8/13/08, 02:12pm "Company cited for not training staff."*

Crystal Bowen, age 27, died last March after exposure to a paint-stripping product containing methylene chloride. This solvent, like all solvents, can cause central nervous system damage. But in addition, methylene chloride is known to metabolize in the blood stream to form carbon monoxide which can cause asphyxiation.

**THE INCIDENT.** Bowen was removing paint and glaze from bath tubs in an apartment complex in a Greenwood, Indiana, for a company called True Finish Electrostatic Painting & Reglazing. Bowen, a wife and mother of three, died March 27 while working alone stripping a bathtub. The owner of the company she worked for found her and carried her into the hallway. Company owner Shell Carper then called 911.

Emergency workers arrived just after 5 pm and had to wear protective gear to protect themselves from the solvent vapors in the area. Bowen died at the scene, and her death was classified as a workplace accident, according to the Johnson County Coroner.

**OSHA CITATIONS.** The Indiana Occupational Safety and Health Administration (IOSHA) has fined the company \$10,200 after an investigation into Bowen's death and into the working conditions for other employees. The findings include 30 serious violations, such as not warning employees of the dangers of the chemicals they would be using (1910.1200), improper ventilation of work areas and providing inadequate respiratory protection for workers (1910.134), and not meeting various requirements of the methylene chloride standard (1910.1052).

The company also did not report the death until several days later. This violates OSHA's requirement to notify them of occupational deaths or major accidents within 8 hours.

**METHYLENE CHLORIDE REGULATIONS.** OSHA has a separate standard for methylene chloride. This worker should have been protected under this standard. The requirements of this standard include air sampling to determine the level of exposure during the work. But since every bathroom in which these workers toiled would be a different size with differing characteristics and ventilation, checks would have to be made repeatedly.

Respiratory protection is required if the amount of methylene chloride detected in the air is over the action level of 12.5 parts per million. And air-supplied types of respirators must be used—not cartridge air-purifying respirators. Medical surveillance and many other provisions also would apply to Bowen's type of work. Clearly these precautions make it financially impractical for small contractors like this Indiana company to use methylene chloride.

**COMMENT.** When the OSHA Methylene Chloride Standard was instituted in the late 1990s, stories of deaths and injuries from exposure to it were regularly in the news. But after 10 years, the memories of many deaths similar to that of Crystal Bowen's have faded. People again are using this chemical without proper precautions. I often see products containing methylene chloride in art and scenic art studios and schools. This is particularly distressing because it is easy to get paint strippers and other solvent products that do not contain methylene chloride.

Methylene chloride is one of a limited number of chemicals ACTS believes are too toxic for use in most types of small art businesses and schools.

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### **DEATH ON A FILMSET WAS A FAMILY TRAGEDY**

SOURCE: AP Entertainment writer, Anthony McCartney, 08/07/08, filed 2:44pm, *losangeles.metromix.com*  
Nick Papac, age 25, was the son of longtime Hollywood propmaster, Mike Papac. Nick was following in his father's footsteps and working as an assistant propmaster on the set of "The Kingdom" in 2006 when he was killed.

**THE ACCIDENT.** Nick was operating a golf cart-sized vehicle on a road that was part of a closed set in Arizona for "The Kingdom," an action thriller starring Jaime Foxx and Jennifer Garner. Nick's small vehicle was hit by Director Peter Berg's SUV.

The film had just finished shooting for the day on a closed stretch of highway on the far eastern side of metropolitan Phoenix when Nick Papac was struck by the SUV. A statement released by the film makers at the time said that he was attended by paramedics for Universal Pictures/Forward Pass and died later at a hospital with his father at his side.

**THE LAWSUIT.** Last month on August 6, Nick's father and mother filled suit in Los Angeles Superior Court against Peter Berg, a driver, and a production company. They are asking unspecified damages that would include the costs of the funeral, lost earnings and medical expenses.

Berg, whose directing credits include this summer's blockbuster "Hancock" and previous films such as "Friday Night Lights," was not injured in the crash.

**COMMENT.** Theater and film workers should keep in mind that they come under worker's compensation and cannot sue their employers if they are injured. And families of workers killed on the job only receive a small death benefit.

However, parents, wives, children, and others affected financially by a worker's death or injury usually can sue the worker's employers, supervisors or other responsible parties.

I have been retained as an expert witness by lawyers for several injured and deceased theatrical workers. In one case, the family consulted with lawyers after they realized that the small weekly death benefit payments from workers' compensation were not going to support this breadwinner's spouse or put their two boys, aged 6 and 9, through school. In cases like this, there is almost no option other than to file suit against the employer.

Nick Papac's parents have lost their son and, with him, their hope of continuing the artistic legacy of his father. ACTS extends its deepest sympathy.

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## **SPECTRUM GLAZES: SAFE ENOUGH TO EAT?**

Editorial

An advertisement for Spectrum Glazes that has been appearing in *Ceramics Monthly* and *Clay Times* for some months has bothered me so much that I feel I need to comment. The caption reads:

**WE WANT TO BE SURE**

**THEY'RE SAFE**

The FIRST glaze company to

commit to being

100% LEAD FREE

The ad shows a table with containers of glaze on it, a plastic container with brushes in it, and a white cup which appeared to me to be a Styrofoam beverage cup of some sort. Seated at the table is a girl that seems to be about 12 years old. Her hands are raised palms forward. One palm is covered with yellow glaze, the other with red, and she is holding a brush crosswise in her teeth.

It is clear that if this little girl has used that brush with those dirty hands, glaze was transferred to the handle in her mouth. ACTS believes people will interpret this ad to mean that accidental ingestion of small amounts of these glazes is of no concern if Spectrum glazes are used. Or that common sense precautions and hygiene are no longer necessary in the studio if lead-free glazes are used.

**LEAD-FREE GLAZE HAZARDS.** Even lead-free glazes must contain highly toxic metals to obtain certain colors. To support this contention, I looked at Spectrum's material safety data sheets (MSDSs) on their website. I selected the glazes I most often see in the schools I inspect: the 250 series of Satin Glazes, the 500 series Underglazes, the 600 series One-Stroke glazes, the 700 Opaque Gloss Glazes, and the 800 Semi-Transparent glazes.

First, not all of these glazes are "lead-free." For example, the MSDS for One-Stroke #601 Orange Sherbert lists red lead tetroxide ( $Pb_3O_4$ ) at 15-20%. (It also contains 7-9% antimony oxide which is also very toxic.) The fact that lead and lead-free glazes are in the same series may cause teachers to be confused about which are which. But the MSDS on #601 does not claim it is "lead-free."

When I restricted my search to MSDSs that clearly say "lead-free" on the product identification line, I found that the colorants in these glazes included cadmium, cobalt, vanadium, copper, cerium, selenium, and more. Some One-Stroke red glazes # 630, 631, 632, 637 and 639 contain a cadmium/zirconium pigment at 40-60%. This is probably one of the "incorporated" zirconium pigments for which I can find no data on their absorption when they are ingested or inhaled.

**FRITTING.** To defend Spectrum's nontoxic claims, the MSDSs for all these products say:

*Glaze contains the oxides listed in the chemical formula in form of ceramic frit. Some of these oxides are on the ingredient disclosure list, once these oxides are fused and converted into frit they are no longer available in toxic form even though testing would detect the presence of these oxides. (Frit is essentially an insoluble substance). ....*

"Fritting" is a process by which glaze ingredients are fused together with heat. This makes the frit less acid-soluble than the raw compounds. But this solubility argument was put to rest in the 1990s when several patients in nursing homes who accidentally ingested insoluble frit glazes labeled "nontoxic" were poisoned or died. And in 1997, two lawsuits were brought on behalf of parents of children with intellectual disabilities whose mothers had worked with these glazes during pregnancy. I quoted toxicologist, Dr. Woodhall Stopford's sworn testimony in one of these cases in *ACTS FACTS* (2/98). In reference to the nursing home poisonings Dr. Stopford said: "Well, it's apparent that they would be at risk if they ingested either soluble or insoluble lead glazes."

**MSDS ERROR.** I was also concerned about some MSDSs for “lead-free” glazes that listed red lead as an ingredient ranging from 0.25 to 3%. These were: underglaze 540 denim blue; and five Opaque Gloss glazes: #720 Light Peach; #724 Mango; #725 Banana; #727 Flesh; & #728 Apricot. Richard Arnfield, General Manager of Spectrum Glazes, said these MSDSs were incorrect and the glazes are truly “lead-free” and “well below the legislated limit of 0.06% (i.e., 600 ppm).” He said they will correct these MSDSs and “make every effort to ensure that it does not happen again.”

**SUMMARY OF AD ISSUES.** Consumers looking at Spectrum’s ad claiming to be “the FIRST glaze company to commit to being 100% LEAD FREE” may think all the Spectrum products they buy will be lead-free. Richard Arnfield says they are committed to getting all lead out of all the glazes and they are working toward this goal—but are not there yet. In fact, Arnfield suggested my attention would be better served by criticizing other manufacturers who don’t plan to eliminate lead from their glazes at all. That’s a good point. They’re now on my short list.

Arnfield also said the “cup” on the table actually is a ceramic item painted to look like an icecream cone holder. I pointed out that people couldn’t possibly tell what this item is by looking at the ad and they are likely to associate this image with food.

Arnfield also believes that use of acid-insoluble frits or stains makes the toxic metals in the lead-free glazes safe for children. He cites Dr. Stopford (who certifies Spectrum glazes) as his source for this opinion. To counter this opinion, I have prepared, and will send to interested readers, a two-page article that provides a brief history of frits, some of the research, citations for the lawsuits referred to above, and more of Dr. Stopford’s testimony. Send a self-addressed, stamped envelope to ACTS.

## **2009 SUBSCRIPTION PRICES WILL RISE**

We’ve looked at the bottom line, and it seems that we will have to raise the price of our subscriptions from \$20 to \$25 for US subscribers, from \$23 to \$28 for Canadian and Mexican subscribers and from \$26 to \$30 for other countries. But this will not happen until January 2009. Those who wish to renew for multiple years can lock in their subscriptions at the old price.

*ACTS FACTS* sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many technical, health, art, and theater publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Diana Bryan, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce; Staff: John Fairlie, OES.

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### **VET CLINIC SUED FOR PREGNANCY DISCRIMINATION: LESSON FOR ART BUSINESSES & SCHOOLS**

L.M. Sixel, for *Houston Chronicle*, Aug 20, 2008,

houston\_chron196:<http://www.chron.com/disp/story.mpl/buzz/5956708.html>Yahoo!

When hospital manager, Lisa Davila, at Aggeland Animal Health Clinic, College Station, Texas, discovered that one of the technicians was pregnant, she said her first thought was safety. Davila went through all the chemicals to identify which ones were dangerous, changed the employee's work duties to eliminate exposure to radiation or cat litter, and checked the Occupational Safety and Health Administration's Web site to make sure the clinic was taking the necessary precautions to keep its employee safe.

Davila studied OSHA's Web site, which explained that while an employer can't discriminate against a pregnant worker, the company was expected to provide a safe environment. She identified the risks and devised a new schedule for the employee that eliminated her Saturday hours, Davila said. The clinic didn't want her working alone with radiation equipment, which was required on Saturdays.

Davila wrote up the work restrictions and asked the employee to agree to them. Instead, the worker refused to sign any documents, including a statement that they had even had a meeting on this subject. At that point, Davila said, the employee became upset and walked out of the clinic.

The worker then quit and filed a complaint with the Equal Employment Opportunity Commission. The EEOC sued, taking the position that the Pregnancy Discrimination Act was violated and the employee felt compelled to sign a statement or resign which meant she was effectively terminated. "No woman should be punished for bringing new life into the world by having her livelihood threatened," EEOC regional attorney Jim Sacher said in a news release.

Aggeland Animal Health Clinic agreed to pay her \$15,000 to settle the case in August of 2008. Carla Cotropia, a lawyer representing the clinic, said the clinic settled to avoid the legal expense.

**HISTORY OF THE PREGNANCY DISCRIMINATION ACT.** This is an instance in which ACTS is on the side of the employer. And to understand why, it is necessary to look at the history of the regulations that apply to pregnant workers.

The problem came to a head in 1991 when the U.S. Supreme Court decided a case against a battery-making company, Johnson Controls. This company prohibited all fertile women from jobs that would expose them to lead. Johnson Controls said it thought it was protecting female employees. But the court ruled that it was up to the women to decide whether they want to risk their own reproductive health. Apparently, the rights of the fetus were not considered.

With this lawsuit, women won the right to permanently damage their children's brains by exposing themselves to lead. At the time of the trial, it was known that 1) the mother and the fetus share a blood supply with about the same level of lead in both, and 2) blood lead levels of 10 micrograms per deciliter ( $\mu\text{g}/\text{dL}$ ) reduce mental acuity in young children and are probably even more damaging to the fetus. However, OSHA regulations allow workers to have blood lead levels of 40  $\mu\text{g}/\text{dL}$ !

Lawyers analyzing the meaning of the Johnson Control also concluded that mentally defective children created by these exposures could later sue the employer for damages, even though the employer met or exceeded all the OSHA rules.

Lawyers also determined that, under the EEOC rules, if a pregnant employee comes forward and asks for accommodation such as modifying her work to exclude such things as heavy lifting or chemical exposure, the employer would be at risk of being sued for refusing to make these changes---the same kinds of changes that the Veterinary clinic was sued for making!

This is a no win situation for employers. And it is wrong.

**WHAT SOME EMPLOYERS DO.** Most lawyers suggest employers walk the fine line between warning pregnant employees about the hazards and pressuring them to make changes. A common strategy is to inform the worker that the employer will be happy to make any accommodations the woman and her doctor might think are wise and leave the decision up to the woman.

ACTS think this is a bad idea. Many pregnant women are very young or not be well-educated about chemical risks. And many doctors do not ask their pregnant patients what kinds of chemicals are present in their workplaces, or wouldn't know the risks these chemicals pose even if they were told. Employers and their safety personnel often have better access to information about the chemicals that are used than the pregnant employees or their obstetricians.

**APPLICABILITY TO ART.** Many art schools and businesses run the same lawsuit risk as the veterinary clinic if they try restrict the activities of pregnant teachers or employees. And substances known to be hazardous to the fetus are used in art. Lead, cadmium, and other highly toxic metals are commonly found in artist's paints and printmaking inks, in sculptor's welding and casting alloys, jeweler's solders and metals, ceramicist's glazes, and glassblower's colorants and batch melts. Fetus-damaging solvents also are used in art painting, printmaking, and sculpture.

**ACTS RECOMMENDATIONS.** We suggest that all businesses including art schools provide, as required by OSHA regulations, mandatory hazard communication training for all employees. This training should include the special risks to the fetus and information about the employer's policy to accommodate pregnant employees. This would eliminate tense moments of confrontation at the time of pregnancy. Instead, all employees should be fully aware of the risks in detail from the start.

Ideally, every job should be made safe enough for even pregnant women. But that is not a realistic expectation. For this reason, the law should be changed to identify conditions under which intervention and accommodation--without loss of job, seniority or pay--could be made mandatory.

Students do not come under the EEOC. Policies to protect them should be set up and enforced. Students should be included in school hazard communication training at the college level.

## ARE DANCE COMPANIES A “HIGH RISK” INDUSTRY?

Editorial

Recently, I ran across three studies indicating that injury rates in professional dance companies are vastly higher than in other industries, particularly higher than industries recognized by OSHA as “high risk industries.” OSHA requires high risk industries to keep and compile injury and illness statistics that are reported nationally. For example, the construction industry is a high risk industry whose injury rate was reported by OSHA to be 4.6% in 2005. But OSHA does not consider theatrical work to be high risk and no records are compiled.

**DEFINITION OF INJURY:** Recordable occupational injuries are defined by OSHA to include 1) fatalities, 2) injuries causing one or more lost workdays, or 3) injuries which do not result in any lost workdays, but which cause employees to transfer to another job, results in job termination, requires medical treatment (other than first aid), or which involves a loss of consciousness or restriction of work or motion.

**DANCERS INJURIES.** The three studies of professional dancers that I found showed astonishing rates of injury—higher than the construction industry’s rate of 4.6%.

- a) A study of 70 dancers in the Boston Ballet during one season (fiscal 1993-4) recorded 137 injuries during that year – approximately 2 injuries/year for each dancer or a ~200% injury rate.<sup>1</sup>
- b) A study of Broadway dancers found a mean average of 1.08 injuries per performer per year in 1993 which is about a ~100% injury rate.<sup>2</sup>
- c) A study of ballet dancers by Ronald Smith, a University of Washington psychology professor published in the October, 2000, issue of *Anxiety, Stress and Coping* said that 61% of 46 dancers in the Northwest Ballet Company in Seattle suffered an injury in an 8-month period which would extrapolate to ~92% injury rate for the whole year.<sup>3</sup>

**COMMENT.** ACTS fails to see why dancers’ injuries should not be taken as seriously as the injuries in any other profession. OSHA should require record keeping for these and other types of performers. The records could be used to develop strategies to reduce injuries and provide assistance to performers whose careers are altered or ended by injuries.

ACTS also suspects that injury rates in several other areas of theater are as high or higher than those of construction workers. For example, the carpenters, riggers, and scenic artists who build and install scenery, hang lights, and paint, are construction workers in every sense of that word. Yet their data has never been compiled. OSHA should require reporting in the theatrical and film industries in order to identify those jobs whose injury rates warrant further surveillance and intervention.

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Footnotes:

1. Solomon R, Micheli LJ, Solomon J, Kelley T. The “cost” of injuries in a professional ballet company: anatomy of a season. *Med Probl Perform Art.* 1995;10:3-10
  2. Evans WE, Evans RI, Carvajal S, Perry, S. A survey of injuries among Broadway performers. *Am Jour Pub Health.* 1996; 86, (1): 77-80
  3. “Dancer’s injuries as common, severe as athletic injuries,” *Science Daily*, October 12, 2000.
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## **ROCK BAND WILL PAY \$1M TO SETTLE FIRE SUITS**

AP wire service, Providence, RI, Wed. Sept 5, 2008, *Metro* p. 5

Members of the 1980s rock band whose pyrotechnics sparked the nightclub fire that killed 100 people have agreed to pay \$ 1 million to survivors and victims' relatives, according to court papers filed on September 4, 2008. The settlement offer from Great White is the latest stemming from the February 2003 fire at *The Station* nightclub in West Warwick, RI. Roughly \$175 million has now been offered by dozens of defendants to settle lawsuits which also injured more than 200 people and is the fourth deadliest nightclub fire in U.S. history. (See *ACTS FACTS*, 4/03, 9/03, 7/07, & 10/07.)

## **WHISTLEBLOWING TEACHER: A CLASSIC STORY**

New York Teacher, NYSUT, [nyteach@NYSUTmail.org](mailto:nyteach@NYSUTmail.org), May 22, 2008, cover story

The May 22 cover story of the *New York Teacher* is 5 months old, but the story is a classic. It describes how one teacher made a difference, but how administrators resisted making changes every step of the way. Every safety-conscious teacher should read this article.

James McConnell, a Connetquot High School science teacher noticed toxic waste oozing up through science classroom floor drains and gurgling into sinks. Memos he wrote received no response. His local union and the New York Committee on Occupational Safety and Health weighed in. Still nothing happened. Administrators conceded that the chemical waste tank had "never worked" and they had to use a "dipstick" to see when it was full. But they still did nothing.

Then, administrators announced they had hired an outside environmental firm and their analysis found chemicals in the sludge to be "far below the threshold for concern." But when chemistry teacher McConnell read the report, he saw they took samples from his room and mixed them with fluids from sink traps of 14 other sinks to dilute the sample. At that point, the Department of Environmental Conservation was called in. The DEC found:

- "the sink traps contain high levels of several toxic metals and VOCs..."
- Cesspool water was "severely contaminated with toxic silver-containing wastes."
- District waste treatment, storage and disposal practices violated state law.
- The district failed to train employees on waste handling and emergency procedures and lacked a written manual or emergency response plan.

The district was given 30 days to develop a plan and to address the violations or face fines of \$37,500/day and higher. ACTS assumes the problem was addressed since we heard nothing further.

*ACTS FACTS* sources: the *Federal Register (FR)* the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many technical, health, art, and theater publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Diana Bryan, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce; Staff: John Fairlie, OES.

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# ACTS FACTS

THE MONTHLY NEWSLETTER FROM

## ARTS, CRAFTS AND THEATER SAFETY (ACTS)

181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

November 2008

Vol. 22, No. 11

### EPA FINES KANSAS UNIVERSITY \$80,000

SOURCES: *Lawrence Journal World & News*, Andy Hyland, Lawrence, KS, 9/29/08,

[www2.ljworld.com/news/2008/sep/29/ku\\_fined\\_80000\\_improper\\_handling\\_hazardous\\_waste/Today's news](http://www2.ljworld.com/news/2008/sep/29/ku_fined_80000_improper_handling_hazardous_waste/Today's%20news)

Following a legal settlement, Kansas University (KU) will have to pay more than \$80,000 after being cited for violations related to improper handling of hazardous waste, according to the Environmental Protection Agency. The fine structure has two parts. The University will:

- pay a \$39,431 civil penalty for the violations; and
- spend \$41,585 on a new program involving data collection, evaluation and additional training for those who work in all 301 labs at the university. (According to confidential correspondence I have received, some of the violations were also in art classroom labs).

The fines were for violations found during an inspection on Dec. 12, 2007. These included:

- Failing to determine whether some waste produced by the school was hazardous.
- Allowing incompatible chemicals to be stored on the same shelf.
- Operating as a hazardous waste treatment facility without a permit.

KU was cited three previous times for failure to determine whether some university-produced waste was hazardous: in 1994, 2000, and 2005. After the 2005 citation, KU officials tested the waste as EPA required, and everything was proven to be nonhazardous. (It is irrelevant whether the waste was hazardous or not, it must be tested before it is discarded).

In a press release, Don Steeples, senior vice provost for scholarly support, said that as part of the remedy to the situation, the university would find ways to reduce the use of chemicals and hazardous waste in its labs. "We're pleased the EPA has worked with us to make such a project possible, because we believe it will result in improved laboratory waste handling procedures," Steeples said.

Mike Russell, director of environmental health and safety for KU, said it was likely that the \$41,585 cost to institute the new program would come from his department's budget. He said three or four staff members who deal primarily with waste disposal could be incorporated into development of the new program over the next two years by adding the program to their duties.

**COMMENT.** ACTS is concerned that KU was fined so little for a violation they were cited for four times since 1994. The fines actually are only ~\$39K. The other \$41K is really for a program KU should have had in place since 1994. In other words, EPA is only forcing KU provide a more appropriate budget for their environmental waste program—about the cost of a part-time employee's salary. That is not enough. ACTS predicts that once KU spends the \$41K and sets up this program, they will not continue to fund it properly since they now know it is cheaper to pay the fines.

## **NICKEL IN THE NEWS: ITCHING TO USE YOUR CELL PHONE?**

SOURCES: "Cell Phone Making You Itch?" by Miranda Hitti, WebMD Health News, 10/17/08, Bercovitch, L. CMAJ, Jan. 1, 2008; vol 178: pp 23-24.

The British Association of Dermatologists issued a news release on October 16 to inform doctors about an allergic skin rash some cell phone users get from the nickel in their cell phones. They have dubbed the disease "mobile phone dermatitis."

Nickel allergy is common. People sensitized to nickel may get a rash on their cheek or ear if they spend a lot of time talking on nickel-coated cell phones or on their fingers if they send lots of text messages, according to the association.

Not all cell phones contain nickel. Earlier this year, researchers at Brown University tested 22 wireless communication devices and found that 10 of them contained nickel. The researchers -- who included dermatologist Lionel Bercovitch, MD, of Brown's Warren Alpert Medical School -- noted a pattern to help identify which phones contain nickel and which don't. Bercovitch and his colleagues noted in the January 1 edition of the *Canadian Medical Association Journal*:

*Cell phones intended for rugged use ... often have rubber coating and no surface nickel. Those with more fashionable designs often have metallic accents and are more likely to contain free nickel in their casings.*

**TESTING FOR NICKEL.** To be certain phones are nickel-free, Bercovitch's team advises nickel-sensitive people to spot-test cell phones before purchasing them using test kits made for consumers. If you google "nickel test kit" you will find a number of these on the market. ACTS has not road tested these kits, but our experience with a company called LeadChek have been good. LeadChek provides a nickel test kit that also appears to be less expensive than some of the others.

**ARE NICKEL-PHONES ILLEGAL?** The European Union has a law designed to protect people from exposure to nickel on items such as clothes and jewelry. On July 20, 1999, the European Community (EC) enacted the Nickel Directive (76/769/EEC -later 94/27/EEC). The Nickel Directive became law in the European Union on the 20th January 2000. Then in December of 2006, the Nickel Directive became part of the new Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).<sup>1</sup>

The Directive specifies the amount of nickel that can be released per week from jewelry or from "articles intended to come into direct and prolonged contact with the skin." Earring posts must release less than 0.2 micrograms/centimeter<sup>2</sup>/week. Other objects that contact the skin must release less than 0.5 µg/cm<sup>2</sup>/wk. Objects with non-nickel coatings must not release nickel for a period of at least two years of normal use.

These limits are so low, that nickel is essentially banned from such objects. It would seem that in Europe, at least, sale of these nickel-coated cell phones is probably a violation of the law.

**US LAWS.** As usual, US citizens are not protected from nickel exposure. Yet governmental health experts are well aware of the problem. The U.S. Agency for Toxic Substances and Disease Registry's fact sheet on nickel says:

***How can nickel affect my health?** The most common harmful health effect of nickel in humans is an allergic reaction. Approximately 10-20% of the population is sensitive to nickel. People can become sensitive to nickel when jewelry or other things containing it are in direct contact with the skin for a long time. Once a person is sensitized to nickel, further contact with the metal may produce a reaction. The most common reaction is a skin rash at the site of contact. The skin rash may also occur at a site away from the site of contact. Less frequently, some people who are sensitive to nickel have asthma attacks following exposure to nickel. Some sensitized people react when they consume food or water containing nickel or breathe dust containing it.<sup>2</sup>*

Nickel and its compounds are also considered to be carcinogens by most US and European occupational health agencies.<sup>3</sup>

**SOME SOURCES OF EXPOSURE.** Nickel-sensitive people in the US have no laws protecting them from nickel exposure. Instead, they need to avoid all potential sources of nickel. In addition to nickel coated cell phones, common sources of nickel exposure include:

**JEWELRY ALLOYS:** including but not limited to white gold, nickel silver, Monel metal, and many shiny costume jewelry pieces coated in nickel/chrome alloys. Some school jewelry programs still teach projects in which nickel/silver alloys are cast or flat sheets of nickel are used for jewelrymaking. This could expose students to airborne fume and dusts as well as the solid metal.

**STAINLESS STEEL ITEMS:** The most common stainless steel (304 grade) contains 8% nickel, 18% chromium, and the balance iron. This steel is used for such items as spoons and forks, saucepans and kitchen sinks. While these steels do not usually release much nickel, they could be a problem for nickel-sensitized people.

**PLASTIC WITH METALLIC FINISH:** An unusual source of nickel is plastic dinnerware sold by Staples (Item 636632 Diamond® Signature Series Cutlery) has a brushed nickel finish on it.<sup>4</sup> This surface coating may be used on other metal-coated plastic items.

**GLAZED CERAMIC FOOD WARE:** Nickel is a common glaze colorant. ACTS appeals to potters to forego use of glazes containing nickel for ware to be used with food. There is no easy way for nickel sensitive people to know if this ware is contributing to their problems by ingestion.

ACTS also appeals to schools to forego using nickel-containing glazes in their ceramics programs because cancer- and allergy-causing nickel compounds can be inhaled from the dust produced by use of these glazes.

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Footnotes:

1. Google; Regulations (EC) No 1907/2006 of the European Parliament, see page 422.

2. <http://www.atsdr.cdc.gov/tfacts15.html>

3. International Agency for Research on Cancer, The National Institute for Occupational Safety and Health, the National Toxicology Program, and the German MAK (maximum workplace concentration) Commission that sets most of the standards for the EU, all list nickel and its compounds as carcinogens. The lone major dissenter is our own American Conference of Governmental Industrial Hygienists which lists it as A5: "Not suspected to be a cancer agent."

4. My thanks to Brian C. Lee of Good Afternoon Toxicology for catching this one and checking it out at <http://www.expotv.com/videos/reviews/13/138/Nickel-Finish-Plastic-Flatware/109417>.

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## **WILDLAND FIREFIGHTERS STUDY: RECOMMENDED READING**

Source:see footnote

Author Claire Austin, has written a report\* which compiles data from almost everything published on wildfire smoke and related issues. It is well organized, highly referenced (about 1800 references), and clearly written. She breaks the smoke chemicals into three groups.

1. Substances of greatest concern: carbon monoxide, formaldehyde, acrolein, and airborne particles. Both respirable particles (under 10 microns in diameter) and the larger sized inhalable particles.
2. Substances of concern, but present at proportionally lower concentrations: benzene, carbon dioxide, nitrogen oxides, polycyclic aromatic hydrocarbons (PAHs), ammonia, and furfural.
3. Substances of concern, but present in still smaller concentrations: acetaldehyde, 1,3-butadiene, methane, methanol, styrene, acetonitrile, propionaldehyde, toluene, methyl bromide, methyl ethyl ketone, acetone, methyl chloride, xylenes, phenol, tetrahydrofuran, methyl iodide, and mercury.

Claire Austin also found data to support the conclusion that firefighters who are exposed to workplace limits for carbon monoxide\*\* (25 parts per million), are simultaneously overexposed to formaldehyde, acrolein, a carcinogenic PAH (benzol[a]pyrene) and respirable particles.

**COMMENT.** Of most interest to ACTS is the lists of chemicals in wood smoke. We find it very hard to convince people that the lovely odor of burning wood smoke is actually a combination of toxic substances. Wood smoke contains chemicals we usually associate with industrial processes such as formaldehyde, acrolein, benzene, acetaldehyde, styrene and toluene. Even methyl bromide, a pesticide banned from most uses in the US, is generated by burning trees.

It's important for artists to know that burning any organic substance, whether from trees, cigarettes, coal or candles, will produce hundreds, often even thousands of toxic chemicals.

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\* Claire Austin, PhD, CMC, CIH, "Wildland firefighter health risks and respiratory protection," Report R-572, *IRSST*, Vol 06-06, Oct. 30, 2008. *IRSST* is the *Institut de recherche Robert-Sauvé en santé et en sécurité du travail*. The paper can be downloaded without cost from their website: [www.lrsst.qc.ca](http://www.lrsst.qc.ca)

\*\* The American Conference of Governmental Industrial Hygienist's threshold limit value.

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*ACTS FACTS* sources: the *Federal Register (FR)*, the *Bureau of National Affairs Occupational Safety & Health Reporter (BNA-OSHR)*, the *Mortality and Morbidity Weekly Report (MMWR)*, and many technical, health, art, and theater publications. Call for information about sources. Editor: Monona Rossol; Research: Tobi Zausner, Diana Bryan, Sharon Campbell, Robert Pearl, Brian Lee, Pamela Dale, Kathy Hulce; Staff: John Fairlie, OES.

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181 THOMPSON ST., # 23,

NEW YORK, NY 10012-2586

PHONE 212/777-0062

December 2008

Vol. 22, No. 12

### **15-YEAR OLD DRAMA STUDENT KILLED BY “FAKE” GUN**

Source: *The Salt Lake Tribune*, Jasons Bergreen & Mark Havnes, staff writers, 1/18/08, pp. A1 & 4

In St. George, Utah, the Desert Hills High School administrators and a school resource officer thought a pistol they approved for use in the play “Oklahoma” was a harmless fake until a blank discharged from the gun and killed a 15-year-old student. The .38 caliber pistol that killed Tucker Thayer was offered to the school’s drama instructor by the parent of a student in the play. An official for the school district reportedly said that the parent didn’t tell authorities the gun was real.

Several hours before the play was to start, Tucker removed the gun from a locked cabinet and it somehow discharged, according to St. George police. The gun was loaded with a blank that struck Tucker in the head. Blanks are cartridges tipped with plastic or cardboard instead of metal and contain gunpowder and primer and quite capable of killing at close range. Administrators and the resource officer, who is employed by the St. George Police Department, allowed the “blank gun” to be used as an off-stage sound effect, according to the police.

The Desert Hills school has guidelines that place responsibility for the safety of guns loaned for events such as this on the parent. The guidelines were put into place only a month earlier in response to a previous incident which also involved Tucker. Tucker had taken a wooden, nonfiring rifle home to fix during his lunch break. When he returned to school, police were told that a student had brought a real rifle to school and the school went into lockdown. The police investigated and confirmed that the rifle was a prop for the same play. The guidelines were intended to prevent similar scares.

Parker Thayer, the victim’s 13-year-old brother, said Tucker was a person who would bend over backward to get things done. He liked working behind the scenes of the musical and was there every night for two months of rehearsals and during performances that had started the Wednesday prior to his death.

**EDITOR’S COMMENT.** I owned and used guns for years before I came to New York. This experience makes it hard for me to understand how the school resource officer, who was a Police Department employee, did not know that this gun was real. The police are investigating further. We will update this story if the information becomes available.

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### **15-YEAR-OLD CONSTRUCTION WORKER KILLED IN ATLANTA**

Source: *Atlanta Journal Constitution*, 11/15/08 & 11/17/08 ([www.ajc.com](http://www.ajc.com))

Officials are investigating the death of a 15-year-old boy working on a construction project at a mall in Atlanta. The boy fell 40 feet through an empty escalator shaft. He was not wearing any safety equipment. The OSHA regulations do not allow young workers on hazardous construction jobs.

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## **ANOTHER DRUMMER DIES OF ANTHRAX**

Source: [www.guardian.co.uk/world/2008/nov/03/anthrax](http://www.guardian.co.uk/world/2008/nov/03/anthrax)

Popular Spanish folk musician, Fernando Gomez, 35, from Hackney, east London, died on November 2, 2008, after a week in intensive care. His life was claimed by inhalation anthrax. He contracted the disease from contaminated imported animal hides used in making drums. His workshop has been sealed off and eight people who had been present in rooms in which the drums were made have been treated prophylactically with antibiotics. None have symptoms.

**PAST CASES & UPDATE.** We have covered a number of anthrax cases from drum making (*ACTS FACTS* 4/06, 9/06, 10/07). The first documented case of inhalation anthrax in the US associated with drum making occurred in New York City in 2006. This man was gravely ill, but survived. Shortly after this, also in 2006, a Scottish drum-maker died. We reported that this man was infected during drum making, but the British Health Protection Agency (HPA) told a different story:

*... Extensive microbiological investigations did not support the initial hypothesis that he had been exposed while working with animal skins, but suggested an alternative route: that he became infected as a result of using or handling West African style drums at drumming classes or workshops. ... It is possible that the patient had increased susceptibility to anthrax due to a previous medical condition (acute myeloid leukaemia in remission). \**

This is disturbing, because it may mean that immune-compromised individuals are at risk from merely playing drums that have been contaminated with anthrax spores. It will be interesting to see what the investigation of this latest death in London will find.

**IMPORT INSPECTIONS.** It is likely there will be more cases in England. The HPA's website has a Q&A section which notes that "importations of animal hides are required to undergo a veterinary inspection and must be accompanied by relevant health certification. However these import requirements are not aimed at detecting the presence of anthrax."

The HPA points out that the problem is with untreated and untanned hides. They say there is far less risk with hides that have been tanned, hard-dried, pickled (soaked in a salt solution), or treated with lime. However, the skins that caused skin anthrax in two family members in Connecticut were hard dried. We can expect to see more of these incidents because only the untreated hides have the acoustical properties the drum makers desire.

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\* Anthrax and animal hide drums: summary literature review and risk assessment," Health Protection Report, HPA, UK, Vol 2, No 45, 11/7/08

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## **ASBESTOS SNOW**

Source: [www.ehs.utah.edu/docs/AsbestosFactSheet.pdf](http://www.ehs.utah.edu/docs/AsbestosFactSheet.pdf)

The University of Utah Department of Environmental Health & Safety has a wonderful fact sheet on asbestos on their site. If you need a good picture for your safety talk, it is on the first page of this fact sheet. It is a picture of the box of the type of artificial snow that fell on Dorothy in the Wizard of Oz movie filmed in 1939. The bright red, white and blue box boasts:

**Asbestos Pure White Fire Proof SNOW. Looks like real snow. Cleanest-whitest-best.**

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## **CARPET REPLACEMENT LEADS TO ASBESTOS ABATEMENT**

Source: *Regional Standard*, Middletown, CT, 11/04/08, "Carpet replacement leads to asbestos abatement," Diane Church, Staff Writer, also at [www.RegionalStandard.com](http://www.RegionalStandard.com)

What started out as a routine minor expense blossomed into a \$22,500 project to the dismay of First Selectman Bill Black of Middletown, CT. For several years, he patrolled town hall with a pair of scissors in hand, looking for rips, snags, loose threads, and small holes at the edges of the red, gray and black carpet. The carpet was expected to last 10 years, and this year it was 25 years old.

While the budget for the last fiscal year was being prepared, the selectmen included money to replace the carpet. But they had all forgotten to take into account the history of their townhall.

**HISTORY.** The current town hall was built in 1947 as the Mary Hall School, named after the Marlborough resident who was the state's first female lawyer. Later, the Elmer Thienes School, named after a popular local pastor, was built nearby. When the two merged in 1984, the older school became town hall. Floor tiles were removed and asbestos was discovered in the mastic (glue) that held the tiles to the floor. At the time, the law did not require the asbestos mastic to be removed, and another layer of mastic, without asbestos, was laid over the original to hold the new carpet in place.

But 25 years of foot traffic had disturbed the mastic layers. As the old carpet was being removed, the carpet contractor found asbestos underneath. Now that asbestos must be removed. Because of the additional cost, the renovation project was halted as selectmen sought more funds. Seeking guidance, selectmen invited the state's OSHA consultation service to come to town hall and look at the carpet this past summer. In a letter sent in August, OSHA said the carpet posed a "serious hazard," not because of the asbestos, but because it "was worn to the point of creating a tripping hazard." OSHA told the town to get it corrected by November 14. Just a few days after selectmen got the letter, a town hall employee tripped and fell when her heel got caught in a portion of worn carpet. Fortunately, she just skinned her knee.

The carpet had to be replaced right away. Since this would expose the asbestos, it also had to be abated. Black said he asked the board of finance to approve an emergency transaction of \$22,500 in September for asbestos abatement. Since projects that cost more than \$10,000 need to be approved at a public hearing. A hearing was tentatively scheduled for October 8, but it never took place. The Chairman of the board of finance, said the board tabled the issue until the November meeting because members felt they did not have enough information to justify the expenditure.

After a number of delays, the big project finally got underway. After much of the furniture was removed from his office, Black found himself with a small table instead of his desk. His computer was on a shelf and the large impressive conference room became a store room where a jumble of furniture from offices throughout the building was stored during the abatement.

As for the OSHA consultants, they are now looking at possible mold behind the refrigerator in Richmond Memorial Library's kitchenette. Black said that if mold is found, OSHA will monitor the building's air quality and could inspect the rest of the building. Since the building is an old one, more expenses could be looming.

**MORAL:** It's usually better to remove asbestos when you find it. Encapsulating asbestos behind layers of mastic, flooring, or wall board is legal and cheaper. But years later it can become an even greater expense, especially if time and wear release asbestos fibers. In addition, people commonly forget that the asbestos is there. This is one reason OSHA requires public buildings to have written asbestos management plans which identify all locations where asbestos remains.

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