

PS Asks Monona Rossol

PS: Your book is *The Health & Safety Guide for Film, TV & Theater*. What is the general attitude toward safety that you have noticed in film, TV and theater production?

Monona: I've seen attitudes ranging from producers who want to meet and even exceed safety standards to those who think safety is for sissies. The median attitude, sadly, lies closer to the latter view. Some hold the myth that risk is inherent in our business and that casualties are expected and acceptable. These people need to get a grip. This is not a war or a cure for cancer; it is entertainment. Our risks are artistic and intellectual. There is never a legitimate reason to risk anyone's life or health. My father was a magician and escape artist. I learned as a child that our job was to make tricks look dangerous without actually being dangerous.

PS: What do you think causes this attitude and how can it be shifted to make for a safer and healthier environment?

Monona: An attitude adjustment can be made with better education. This should start in schools—beginning with high-school productions where a great training opportunity is usually lost. College theater and film departments should institute a required course devoted to OSHA and EPA rules, building and electrical codes, and theatrical safety standards, as they specifically apply to performers and technical theater workers. Instead, we are graduating young people with the illusion that they are prepared for a career when they don't know their basic rights or how to protect themselves. In my experience, this failure happens because most teachers do not know much about safety either.

Once young people are employed in our business, the training should be provided by employers. Many OSHA regulations require employers to provide their workers with formal, documented training and regular refresher training.

I have only rarely seen OSHA training done in professional theaters and shops, and I have yet to see OSHA training done on any film of commercial location unless they have been visited by some entity that can compel them to train, such as OSHA or a union safety officer, or if the production is located in California. The California film industry has a safety program that requires union workers to complete various training modules before they can take a job.

PS: In the book, you discuss everything from the hazards of cosmetic ingredients to set construction. What are the main risks?

Monona: It depends on the consequences you are trying to avoid. If you are concerned about immediate hazards to life and limb, then failure to meet OSHA fall protection rules is the most proximate cause. It is a violation of OSHA regulations to place a hefty, well-trained construction worker in broad daylight closer than 6 ft to a fall hazard of 6 ft or more. It clearly is insane to think it is acceptable to place an overweight, elderly or child performer next to a 10-ft fall into the orchestra pit, put bright lights in their eyes, blow theatrical smoke in their faces, go to black and direct them to exit. Performers and technical workers are falling from stages and sets, from mechanical lifts and ladders, from rigging, during flying sequences and more. I have yet to see one of these many falls that couldn't have been prevented by following OSHA rules.

But if instead you are looking at deaths and disability from cancer, chronic lung diseases and a host of other occupational illnesses, then this risk is caused by on-the-job exposure to toxic substances. For example, we see asbestos diseases such as mesothelioma among theater and film workers. Our people need to know that fibers can be shed by old theater fire curtains, old theatrical lighting cords or the damaged pipes, walls and tiles in an abandoned building's movie location that scouts find irresistible.

Chronic diseases and occupational illnesses also can be caused by lead from old paints, cancer-causing dyes, solvents, paints, plastic resin products and more. OSHA requires that workers be informed about the location of lead paint and asbestos before they work in a building built before 1980 and be provided with access to ingredient information on all the products used in the course of their work and trained formally on how to protect themselves from these hazards. I don't see this happening in many theater, film and entertainment venues.

PS: What other hazardous aspects of film, TV and theater production are often disregarded as risks?

Monona: Another disregarded risk is providing workers with a false sense of security by using PPE incorrectly.

For example, theater people using a hazardous product on the job commonly go to a local hardware store to buy a mask or respirator. Employers are violating OSHA regulations if they permit employees to wear this equipment. Instead, OSHA requires employers to have a written respiratory protection program detailing how they will provide the various services needed to correctly use the equipment. A few years ago, a major scene shop in the New York area was fined and closed by OSHA until the employer got this program and a HazCom program up and running.

The first duty incumbent on the employer is to determine the identity of the airborne chemical and its approximate concentration. Only when this is known can the correct mask or respirator cartridge be selected. Some chemicals used in production, such as two-component urethane foam and molding products, have no mask or cartridge approved. Cartridges are not approved for A/B urethane products because these contaminants (diisocyanates) do not have good odor warning properties. The wearer will not know when the cartridge is spent because the odor cannot be detected until the worker is significantly overexposed. OSHA does allow cartridge respirators to be used if the employer hires a professional to monitor workers' exposures to determine when the cartridges should be replaced. For most productions, this is an unanticipated expense for which there are insufficient funds. Workers exposed to this product should be trained to wear air-supplied respiratory protection.

For workers to wear air-purifying masks or respirators, they must pass a medical certification test administered by a health professional. This will weed out any workers with heart, lung or other health problems that would be made worse by the breathing stress caused by respirators.

Next, the workers must be fit tested by an OSHA-approved, trained administrator. Then, workers must be trained to use the equipment properly and to change cartridges or masks on the schedule required. Retraining has to be done whenever the chemical in the air, the conditions or the equipment is changed.

Similar training and rules exist for using the right footwear, fall protection harnesses, chemical gloves, protective eyewear and more. Wearing the wrong PPE can be a hazard in itself or give the wearer a false sense of security.

PS: To what extent is an actor responsible for safety on the set? To what extent is the director responsible?

Monona: That's an interesting question because it assumes the director has some responsibility for safety.

If the director is employed by the theater, TV or film production company, s/he is not legally responsible for safety. Instead, the employer is responsible for safety. The employer is allowed to delegate safety duties to directors or other employees, but it is still incumbent on employers to ensure that the delegated authority is properly exercised and that the rules are enforced. OSHA citations are never given to an employee at any level; they are given to the employer. If an employee violates an OSHA rule, it demonstrates that the employer's training, oversight and enforcement programs are deficient.

Theater and film production employers seem to think that if they hire actors and technicians with long lists of credits they must have all the safety expertise necessary. I'd like producers to tell me where they think actors got their safety training. We know they don't get it in college or in acting schools. Where would actors have learned about the chemicals in their cosmetics, theatrical fog and costume dyes? Who told them about the regulations that apply to fall hazards, set elements that require guardrails and hosts of other rules?

The technical workers are no better off. Few courses and certification programs in theater electrical work and rigging address OSHA and codes, but most technical workers have not taken these courses.

Instead, most theater and film professionals learned by the seat of their pants from older workers who also learned by the seat of their pants. As a result, most theater workers are seriously deficient in their understanding of OSHA regulations, fire, building and electrical codes, and theater safety standards.

Another huge problem is that OSHA regulations are written with the implied assumption that employers know the rules. They don't. But, employers are legally responsible for knowing the rules and ensuring that the rules are enforced. The buck has to stop at the top—the employer is the only person with the power to make safety happen.

Major film companies protect themselves by employing or retaining CSPs and CIHs. In California, they also have a passport training program which requires technical workers to have certain training. I've read these training materials and the emphasis is on making the employee responsible for meeting the California OSHA programs. Actually, it is the production company that needs to set up and run these programs.

So to answer the original question, if the employer assigns responsibility for safety to the director and the technical director, I suggest these directors accept these duties only if the employer provides: 1) the training necessary to be fluent in the regulations; and 2) the contractual authority to enforce them. Then it is the actors' job to follow the safety rules. If actors and technical workers don't comply, the director and technical director have the obligation to dismiss them since refusal to follow the rules puts the employer (producer) at risk of citations, fines and liability.

If the directors are independent contractors instead of employees, they'd be wise to get professional liability insurance and have their contracts written by a savvy attorney to limit their liability. Independent contractors working any theater or film job have serious liability issues.

PS: What have you learned since publishing your first book, *The Artist's Complete Health & Safety Guide*, that you were able to apply to this book?

Monona: Actually, *The Artist's Complete Health & Safety Guide* is now in its third edition, and I'm starting work on a fourth. My first theater safety book was written in 1986 and titled *Stage Fright: Health & Safety in the Theater*. It is now out of print, but this book was the precursor to *The Health & Safety Guide for Film, TV & Theater*. It was published in 2001, and there was a lot of updating to do. And since both the art and theater books are used as college texts, I can't let them get too far out of date.

The second edition of the theater book examines applicable portions of dozens of OSHA rules and strategies for complying with those rules; covers recent OSHA citations, including those that have finally made clear how their fall protection rules apply to the stage and sets; covers the new standards and certification programs of PLASA (formerly the Entertainment Services Technology Association); discusses what we've learned from a number of accidents and lawsuits; and catalogs a large amount of new information about the chemicals used in cosmetics, fog and other special effects, dyes, paints, plastics and more.

Information on both American Society of Heating, Refrigerating and Airconditioning Engineers and American Conference of Governmental Industrial Hygienists ventilation standards is covered along with other precautions and protective equipment. In addition, this book has always been useful to teachers as OSHA training material, especially for HazCom and PPE.

PS: What drives your interest in safety and the entertainment industry? What keeps you motivated to do this job?

Monona: This work is not what I do, it's what I am. I was a prop in my father's act at age 1 and a card-carrying union entertainer by age 3. I have no memory of any time in my life that I didn't have a job in some aspect of theater or entertainment. I am well aware that a lot of people in this business don't like me or my opinions. Well, tough. Those people are all part of my family anyway. You don't let your family hurt themselves if you can prevent it. So, I'll keep trying.

PS: If you could leave readers with the most important bit of safety advice, what would it be?

Monona: You can never know too much about safety. That sums it all up for my readers in the biz. I want them to get as much safety training as they can squeeze in. If they are union members, they should contact their locals and see if they have programs for safety training. If they belong to any theatrical or entertainment union, my local will let them into my training sessions when there is room. They can contact me (actsnyc@cs.com), and I'll tell them where I'm training next. There are committees for occupational safety and health (COSH groups) in many states that also offer free training to all union members. They should do a Google search for the COSH nearest them.

If they are working as independent contractors, they especially need training because they are legally an employer and can be cited by OSHA or even sued if someone is hurt on their watch. I would actually counsel them to get a prestigious job and apply for membership in the appropriate union.

If they are theatrical or arena riggers or entertainment electricians, they should contact www.plasa.org and follow the links to the entertainment technicians certification program. There will soon be certification programs for a host of other theatrical and film jobs. Also, I'd encourage them to attend the U.S. Institute of Theater Technology conferences regularly and any other event at which professionals network.

And if any readers also happen to have a degree in a hard science such as chemistry or physics, I'd like to talk to them about considering a career in theatrical and entertainment safety. There's work out there for people who know this business.

Monona Rossol is a chemist, artist and industrial hygienist. She was born into a theatrical family and worked as a professional entertainer from age 3 to 17. She enrolled in the University of Wisconsin where she earned a B.S. in Chemistry with a minor in math, an M.S. majoring in ceramics and sculpture, and an M.F.A. with majors in ceramics and glassblowing and a minor in music. While in school she worked as a chemist, taught and exhibited artwork, performed with university music and theater groups and worked yearly in summer stock. Currently, Monona is president/founder of Arts, Crafts and Theater Safety Inc., a not-for-profit corporation dedicated to providing safety and health services to the arts. In addition, she is health and safety director for Local 829 of the United Scenic Artists, International Alliance of Theatrical Stage Employees. She has lectured and consulted in the U.S., Canada, Australia, England, Mexico and Portugal.