## STANDARD DEVIATIONS: Relax, It's Labor Day!?!

Greetings,

For most, Labor Day is designated to honor the American worker. For some, we're just working short-handed.

For many of you on the bench, it's just another day of doing what you do. 24/7/365, hospitals and care-givers deliver their dedicated services. Holiday or not, healthcare labors away.

The first Labor Day holiday was celebrated on Tuesday, September 5, 1882, in New York City (organized by the Central Labor Union). The idea spread with the growth of labor organizations, and in 1885 Labor Day was celebrated in many industrial centers of the country.

The first governmental recognition came through municipal ordinances passed in 1885 and 1886. From these, a movement developed to secure state legislation. The first state bill was introduced into the New York legislature, but the first to become law was passed by Oregon on February 21, 1887. By 1894, 27 more states had adopted the holiday, and on June 28, 1894, Congress passed an act making the first Monday in September of each year a legal holiday in the District of Columbia and the territories.



The struggles of labor for the rights and protections we enjoy are legend. Conflict has been the basis for many of the gains we take for granted. We owe a debt of thanks to unions for the 40-hour work week, sick pay, overtime, basic worker rights and even FMLA. Union strength in the face of political and industrial power paved the way for most of the rights we now consider basic rights of the worker. And struggle continues to be a part of the battle to maintain our worker rights. I hope the history of making the "American worker" is kept alive.



Worker protection is now law. OSHA, Occupational Safety and Health Administration (1971), is the enforcing agency of worker protections. And worker safety has been dramatically affected by the agency, state partners, health professionals, unions and advocating bodies. Since being enacted, injury and illness declined from 11 per 100 workers in 1972 to 2.8 per 100 in 2017.

So what? Well, hospitals are still one of the most dangerous work environments. Injury and illness in hospitals are nearly double the rate for private industry, overall, and still higher than construction and manufacturing.

Consider: It isn't just slip-n-fall. In our profession we're challenged with:

- **Physical Hazards** lifting patients and awkward positioning are obvious, but what about sharps? Needle sticks are still a biggie.
- **Chemical Hazards** and not just our reagents (which can be pretty noxious) but how about cleaning and disinfecting? Just on the bench, we're using phenolics, quaternary ammonium compounds, and bleach. Then there's the histology fixatives like xylene, toluene, and formaldehyde. And the stuff we use on people, such as neoplastic drugs, anesthetic gases and aerosolized meds.
- **Infectious Agents** Yikes! Not only are we threatened by Bloodborne pathogens, but respiratory agents like Influenzas, SARS, MERS, and TB. Emergent bugs like Ebola are just waiting for their day and antibiotic resistance will resurrect threats we thought were long gone.
- Work-related Stress well, if this isn't a concern....lucky you.

## What's a tech to do?

The law requires employers to provide their employees with working conditions that are free of known dangers. The OSH Act created the Occupational Safety and Health Administration (**OSHA**), which sets and enforces protective workplace safety and health standards. Here are some milestones of the OSHA timeline relevant and specific to the medical profession:

- June 7, 1972. Asbestos. This affected nearly everyone.
- January 29, 1974. Fourteen **Carcinogens Standards**. Important because of the recognition of safety cabinets, PPE, closed containers, hand washing. Ether and chloroform designated as carcinogenic.
- November 25, 1983. Right to Know Regulations. This opened the door for **chemical** hazard awareness.
- June 22, 1984. **Ethylene Oxide Rule**. Established toxicity of a ubiquitous healthcare sterilizing agent.
- September 11, 1987. **Benzene Standard.** A common laboratory reagent, the chemical is a causative agent of leukemia.



- January 31, 1990. Laboratory Safety Standard. Recognized unique dangers posed to laboratory workers while handling dangerous chemicals.
- December 6, 1991. **Bloodborne Pathogens Standard**. HIV and Hepatitis B drive the development of standards to protect 5.6 million workers exposed to pathogens. This is a landmark in laboratory safety.
- November 6, 2000. **Needlestick Safety and Prevention** Act. Dealt with sharps procedures and handling.
- January 18, 2001. **Protecting Healthcare Workers.** After passage of the Needlestick Safety and Prevention Act, OSHA strengthens worker protections for bloodborne pathogens.

Now, you guys know my spiel...risk recognition, mitigation, and promotion of safety awareness, blah, blah. Here is evidence that our profession involves risk and hazards. I can only add that our efforts to protect the healthcare worker demand continued and enhanced diligence and effort. My focus expands the nature of risk to include the emergence of new and recurring pathogens, improving our current practices and implementing protective measures that make laboratory science safer. I believe Labor Day represents a good avenue to describe the importance of these considerations for our field.



Because of the American labor force, we enjoy the highest standard of living and the greatest production the world has known. Our economic and political democracy are held as a model for raising the quality of life for all our citizens. Take off that PPE, wash up, drive safe and relax; you deserve it.

Have a great week and be safe,

Bryan







