



Mass**COSH**

The Massachusetts Coalition for Occupational Safety and Health

Enactment of State Employee Safety and Health Law

One Year Progress report

March 24, 2015 – 2016



On March 24, 2015, a new state employee safety and health statute was enacted, extending federal safety and health standards to executive branch employees. The law addressed a gap in Massachusetts statutes which exempted the executive branch from workplace safety and health requirements.

Prior to the law's passage, the Patrick Administration released a report, documenting the cost of having inconsistent safety and health measures across the Commonwealth's workforce contributed to injuries, illnesses and fatalities. The report highlighted the toll on the health and safety of state workers and the cost to the Commonwealth: over \$31 million in medical and workers compensation wage costs associated with executive branch injuries and illnesses.

The report noted that comprehensive and effective worker health and safety management saves money, which has been well-documented in the private sector. "Making improvements to worker health and safety can offset the significant financial losses incurred by not taking action," the report said. "In addition, through assessment mechanisms, a risk-based approach, information and resource sharing, and access to technical guidance... the maximum reduction in risk can be achieved from every dollar spent on health and safety."

The law passed with the universal support of the Administration, the legislature, as well as impacted workers, unions and occupational health and safety experts.

The following report highlights the progress the Commonwealth has made toward achieving the above and areas that remain to be developed further.

Enforcement and incorporation of new federal safety and health standards into executive branch operations

The Department of Labor Standards (DLS), the agency responsible for the law's enactment, conducted 93 investigations in response to occupational health and safety incidents, complaints and programmed inspections.

For each investigation, DLS issued (or is in the process of completing) a detailed report describing relevant workplace hazards and safety and health measures that can prevent future incident, consistent with national standards. DLS has reported that, as a result of each investigation, all agencies have either already enacted the new measures or are in progress. To date, no agency has been reported to the Attorney General's office due to their lack of response to the DLS report.

Some public employees who had brought forward a health and safety complaint praised the efforts of DLS and the importance the investigation and the report were to instituting health and safety measures.

Within a few months of implementation of the new law, the state's Department of Labor Standards was called in to a Worcester state hospital to address serious incidents of workplace violence. "The investigation revealed a serious lack of a comprehensive safety plan, and an inadequate response to workplace violence," said Michael D'Intinosanto Sr., a nursing supervisor and president of Massachusetts Nursing Association unit that represents state employees. "The investigation revealed a serious lack of a comprehensive safety plan, and an inadequate response to workplace violence," said D'Intinosanto. "As a result of this investigation, major changes are in the process of being implemented to protect workers and patients at that facility. Without these protections, it would be difficult for workers to speak out about unsafe working conditions."

Not all agencies have consistently responded quickly, according to some employees, but agencies were far more responsive to DLS than they had seen previously.

On the other hand, some agencies were proactive in seeking to address health and safety concerns. For example, the Massachusetts Military Division invited the Department of Labor Standards to conduct a voluntary safety inspection at two of their National Guard armories. The Massachusetts Military Division operates 40 sites. DLS conducted a safety inspection at the Bedford and Pittsfield locations, and the agency shared lessons learned with their other facilities. The DLS inspection reports contained corrective actions to correct electrical receptacles, electrical cords, and handrails on stairways. The conditions identified could cause employee injuries such as an electric shock or fall. The Massachusetts Military Division was able to take workplace safety improvements at one site and apply the knowledge at their other 38 locations.

Similarly, the Department of Public Utilities (DPU) took action to prevent their employees from being exposed to toxic lead and cadmium dust. DPU has field inspectors who perform quality control testing on gas meters before they are installed by utility companies at customers' homes. In June 2015, DPU officials learned that their quality control inspectors could be exposed to Cadmium and Lead because the workstations they used at host utilities were adjacent to paint scraping and refurbishing of meters. The Department of Public Utilities requested a voluntary safety and health inspection from DLS. DLS conducted air and wipe sampling which determined that state employees had exposure to Lead and Cadmium dust. The DLS inspection report provided corrective actions to

remove dust contamination at workstations, and provided detailed procedures and training to prevent the dust exposure from recurring. The DPU was able to take workplace safety improvements at one quality control site and apply the knowledge at their other nine sites.

While 93 inspections in its first year is substantial, there remain numerous state agencies in the Commonwealth that have never been visited by DLS and may be less familiar with their responsibilities. DLS lacks the resources to conduct investigations throughout the executive branch, leaving many executive branch workers vulnerable in workplaces that have not yet instituted safety and health measures.

Resource sharing and increased capacity to promote safety and health

As a result of the large number of inspections and the attention to safety and health that has been generated as a result, DLS has seen an increase in resource sharing, communication and coordination around safety and health, magnifying the impact of the site inspections.

Furthermore, in the past year, 13 state agencies obtained \$250,000 in capital grants to make safety improvements within their department. Several state programs, serving people with developmental disabilities who are non- or partially-ambulatory, purchased lift equipment to move residents with reduced risk of painful back and shoulder injuries. The Department of Agricultural Services was able to purchase special LED lights for staff who work on roadways in poorly lit areas to reduce the risk of being hit by fast-moving traffic. The Massachusetts Department of Transportation instituted a pilot program using noise-canceling headsets to allow first responders to better hear each other when trying to communicate urgent calls, while reducing the risk of hearing loss.

“Research shows that lifts with slings may decrease the burden of staff injury due to lifting by approximately 40% when combined with education and training regarding the use of lift equipment, and combining that with a minimal lift policy,” wrote the director of staff development at a state hospital following receipt of their grant. “... The acquisition of an additional lift was necessary to care for patients on multiple floors This grant has made that possible. In alignment with safety, we have implemented our Safe Patient Handling Policy, and expect that these safety initiatives will prevent or reduce back and limb injuries that are often the cause of many industrial accidents...”

Several other letters from agencies that received the capital grants reported that enormous benefit of the program. The funds were only available during this first year, and expansion of the program would help ensure that other agencies can invest in safety and health infrastructure as well.

Technical assistance and information sharing

Over the past year, DLS conducted 32 in-person and webinar trainings on priority health and safety topics, building the knowledge and capacity of well over 1,000 executive branch workers and supervisors. According to DLS, many employees were eager to obtain the information – they requested the recorded version to share with coworkers, asked to participate in future workshops, and noted that they were not familiar with OSHA prior to attending.

Impact and cost-effectiveness

While it is well-documented that investing in health and safety saves lives and money, the following examples of actual executive branch hazards, the types of injuries they could or did cause, and the cost to enact safety measures, highlights the benefits and cost-effectiveness of comprehensive safety and health programs:

Description of Workplace Injury Inspected by DLS	Agency	Cost of Injury* (medical plus wage workers Compensation)	Cost of Prevention
Broken bones when employee was hit by a falling branch during tree trimming.	MassDOT	From June-Dec 2015 there were 58 injuries associated with equipment use or maintenance among executive branch agencies (not just MassDOT) for a cost of \$149,000	<p>Provide full-day training on chainsaw operation and tree trimming safety.</p> <p>Estimated cost: Training: \$500 per employee</p> <p>Preventive Maintenance per equipment owner's manual: \$0 – 500. For many sites, there is no costs. If an employee attends a train the trainer class, the cost could be up to \$500. Many equipment sales reps provide this training for free, if asked.</p>
Chemical burn to hand when transporting pool chemicals	DCR	From June-Dec 2015 there were 73 injuries associated with lack of gloves or PPE among executive branch agencies (not just MassDOT), for a cost of \$83,850 (\$1,100 average per injury)	<p>Conduct a job hazard analysis for selection of Personal Protective Equipment</p> <p>Estimated cost for assessment: \$750 for all tasks at site</p>

Contusion and muscle strain when employee was struck by a patient.	Dept of Mental Health	From June-Dec 2015, there were 365 assaults on executive branch state employees (not just DMH) which required medical treatment. Facilities that experience assaults can have more than one assault occur per week. These incidents resulted in a cost of \$987,073.	Implement a Workplace Violence Prevention Program Estimated costs: Program development: approx. \$10,000 Training: approx. \$1500 per employee for a 5-day training course Facility and furniture improvements: Approx. \$20,000
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*The injury costs include costs for medical treatment, and workers compensation wage costs. In addition to these direct costs, there are also significant indirect costs: These include:

- Replacement worker costs
- Lost time
- Wages paid to injured workers not covered by workers compensation
- Administrative time by supervisors and others in paperwork and incident follow-up
- Training costs for replacement worker
- Lost productivity related to work rescheduling, new employee learning curves, and accommodation of injured employees; and
- Clean-up, repair, and replacement costs of damaged material, machinery, and property.

OSHA’s Safety Pays tool for estimating the indirect costs outlined above uses an indirect to direct cost ratio which ranges from 4.5:1 to 1.1:1 with 4.5 for the least costly to 1.1 for the most costly injuries. An American Society for Safety Engineers (ASSE) review of research studies indicates that the ratio of indirect to direct losses can range from 1:1 to as high as 20:1. A common estimated ratio used for total indirect to direct costs is 4:1. Therefore, you can assume that by including indirect costs, the total losses from an accident will be at a minimum double your direct losses, and will more typically be higher than double.

Conclusion

In just a year, the law has already made strides in its goals of building the capacity of state agencies to implement safety and health programs, provide enforcement and education to facilitate compliance with OSHA and promote resource sharing to enhance the effectiveness of the agencies to achieve a safe and healthy work environment.

“As a result of our agency working in consultation with DLS to conduct inspections, we are already seeing a downward trend in incidents in the workplace,” said Darryl Forgione, chair of the health and safety committee for the Massachusetts Department of Conservation and Recreation and member of the Massachusetts Organization of State Engineers and Scientists. “At the same time, there is a lot more that needs to be done. For example, the DLS training topics are valuable, but not all staff have

the opportunity to participate, and management should be strongly encouraged to participate. While the general training provided by DLS is excellent, funding is needed for training on specific hazards.”

In order for DLS to be able to extend education and enforcement throughout the executive branch, it needs to expand its staffing capacity.

Joe Dorant, president, Massachusetts Organization of State Engineers & Scientists, concurs, “We've come a long way with workplace safety in just one year, but we can do more. To support a safe environment where workers leave for work and come home safely at the end of the day, we need to provide proper resources to the Department charged with ensuring their safety in the workplace. We owe that to our workers and ourselves.”