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Year One of OSHA's Severe Injury Reporting Program: An Impact Evaluation

By David Michaels, PhD, MPH Assistant Secretary of Labor for Occupational Safety and Health

Every year, tens of thousands of men and women across the United States are severely injured on the job, sometimes with permanent consequences to themselves and their families.

But until last year, the Occupational Safety and Health Administration (OSHA) lacked timely information about where and how most of those injuries were occurring, limiting how effectively the agency could respond. Too often, we would investigate a fatal injury only to find a history of serious injuries at the same workplace. Each of those injuries was a wake-up call for safety that went unheeded.

Now, under a requirement that took effect Jan. 1, 2015, employers must report to OSHA within 24 hours any work-related amputation, in-patient hospitalization, or loss of eye. (The requirement to report a fatality within 8 hours was unchanged.) Injuries may be reported directly to an OSHA field office, to the OSHA toll-free number, or via an online form; details are available at www.osha.gov/report.html. OSHA instituted the new reporting requirements to:

- Enable the agency to better target our compliance assistance and enforcement efforts to places where workers are at greatest risk, and;
- 2. Engage more high-hazard employers in identifying and eliminating serious hazards.

Experience in the field and data from more than 10,000 reports of severe injuries tell us that both goals are being met. We are confident that the events triggered by these reports have eliminated the potential for many more thousands of injuries in U.S. workplaces.

The 2015 experience

In the first full year of the reporting program, employers notified OSHA of 10,388 incidents involving severe work-related injuries, including 7,636 hospitalizations and 2,644 amputations.

The reports were from federal OSHA states only and do not include injuries from states that administer their own safety and health programs. Even so, the numbers amount to 30 work-related severe injuries a day — evidence that, despite decades of progress, many U.S. worksites remain hazardous to workers.

Injury reports were filed from towns and cities across the country, by businesses large and small: A pharmaceutical lab in New Jersey, a supermarket in Florida, a boat builder in Connecticut, and an erosion control firm in Pennsylvania were among the broad range of affected workplaces.

For a breakdown of hospitalization and amputation reports by industry, please see Figure One: Reports filed by industry sector. The 25 industry groups reporting the largest number of severe injuries can be found in Table One. A complete list of injury reports by industry is available at www.osha.gov/ injuryreport/2015_by_industry.pdf.

Most of the hazards that led to these severe injuries are well-understood and easily prevented. They also account for a majority of work-related fatal injuries. And we know that, in most cases, employers can abate them in straightforward, cost-effective ways, such as by providing fall protection equipment, installing guarding over dangerous machinery, or clearly marking pathways.

One important objective of our program is to encourage employers to evaluate their own processes and equipment and determine what went



^a Other industry sectors include: Accommodation and Food Services; Other Services (except Public Administration); Agriculture, Forestry, Fishing, and Hunting; Professional, Scientific, and Technical Services; Public Administration; Arts, Entertainment, and Recreation; Information; Utilities; Real Estate and Rental and Leasing; Educational Services; Finance and Insurance; and Management of Companies and Enterprises. wrong. Working with OSHA, many employers have found ways to eliminate hazards and protect other workers from the same injuries. Nothing illustrates this more powerfully than actual cases, workers injured in incidents that OSHA learned about because of the new reporting program:

- In Chicago, a conveyor loaded with liquid chocolate suddenly started up as a worker was cleaning a roller. Her arm was pulled in and mangled so badly that its repair required a plate and skin grafting. To prevent future injuries, the employer installed metal guards to shield workers' arms and hands from moving machinery as well as warning alarms and flashing lights that are activated 20 seconds before the conveyor moves.
- In Idaho, a valve cover snapped shut on the hand of a truck driver who was loading creamer into a tanker, severing his fingertip. Drivers had long known the valve was problematic. After the amputation, the employer devised a new handsfree tool for closing the valve, and alerted the manufacturer and other employers likely to use the same equipment.
- At a wastewater treatment facility in Illinois, a worker was overcome with heat exhaustion and hospitalized. The employer immediately instituted more frequent employee breaks with water provided, and within weeks had installed cooling fans and submitted plans for a new ventilation system to control worker exposure to excessive heat.
- When a mechanized blender at a meat processing plant in Missouri suddenly started up, it caused the amputation of both lower arms of a sanitation worker who was cleaning the machine. The employer immediately reengineered the blender's computer control

Table One: Top 25 Industry Groups Reporting Severe Injuries (by 4-Digit NAICS)

		Severe Injury
NAICS Title	NAICS	Reports
Foundation, Structure, and Building		
Exterior Contractors	2381	391
Building Equipment Contractors	2382	343
Support Activities for Mining*	2131	323
Nonresidential Building Construction	2362	271
Postal Service	4911	229
General Medical and Surgical Hospitals	6221	221
Grocery Stores	4451	215
Animal Slaughtering and Processing	3116	213
Utility System Construction	2371	201
Plastics Product Manufacturing	3261	196
Services to Buildings and Dwellings	5617	187
Highway, Street, and Bridge Construction	2373	162
Other Specialty Trade Contractors	2389	159
Employment Services	5613	158
Warehousing and Storage	4931	157
General Freight Trucking	4841	155
Architectural and Structural Metals Manufacturing	3323	146
Other Wood Product Manufacturing	3219	139
Building Finishing Contractors	2383	124
Other Fabricated Metal Product Manufacturing	3329	112
Sawmills and Wood Preservation	3211	104
Electric Power Generation, Transmission and Distribution	2211	101
Grocery and Related Product Merchant Wholesalers	4244	100
Ship and Boat Building	3366	97
Converted Paper Product Manufacturing	3222	94

* Consists of Drilling Oil and Gas Wells and Support Services for Oil and Gas Operations

system and changed safety interlocks, and enhanced worker training and supervision, significantly reducing the risk of amputation. Thankfully, the worker's arms were later surgically reattached and he is undergoing rehabilitation.

What we have seen over and over again is that the prompt reporting of worker injuries has created opportunities for employers to work with OSHA specialists to keep similar incidents — or worse from happening again.

Our goal is safer workplaces

The new program is guided by the principle that when employers engage with OSHA after a worker suffers a severe injury — whether or not a workplace inspection is launched — they are more likely to take action to prevent future injuries.

We responded to 62% of the 2015 reports, including 69% of hospitalization reports, not by sending inspectors to the scene but by asking employers to conduct their own incident investigations and propose remedies to prevent future injuries. We provide employers with guidance materials developed by OSHA and by the National Safety Council to assist them in this process.

Known as a Rapid Response Investigation (RRI), this collaborative, problem-solving approach invites the employer and an OSHA Area Office expert to work together toward the shared goal of fixing hazards and improving overall workplace safety. In a typical RRI, the employer analyzes the incident to identify the causes, and presents to OSHA its findings and proposed abatements — which can include changes to processes and equipment as well as training. The conversation may be in person or by phone and email, and abatements may be verified with blueprints and photos.

This was how OSHA officials in Hawaii worked with the employer at a tuna cannery in remote American Samoa, following the amputation of a worker's finger. OSHA officials consulted with the employer

When a temporary worker is injured, who is responsible for notifying OSHA?

It's important to remember that both host employers and staffing agencies have roles in complying with workplace health and safety requirements and they share responsibility for ensuring worker safety and health. Therefore, it is essential that both employers comply with all relevant OSHA requirements. *The employer who provides the day-to-day supervision of the worker must report to OSHA any work-related incident that results in a worker fatality, in-patient hospitalization, amputation or loss of an eye.* The first year data shows that more than 6% of the Severe Injury Reports involved a temporary worker. by phone on the day of the incident, and by the following week, the cannery had provided a detailed report and designed and installed an improved guard on the canning machine.

Even when a severe injury occurs around the corner from a field office, OSHA officials often choose to respond via RRI rather than an inspection. We have found this process to be extremely effective in abating hazards while also using far fewer OSHA resources than are required for on-site inspections. In this way, we are able to use agency resources more efficiently and, ultimately, better protect the safety and health of workers.

Reporting leads to productive inspections

OSHA responded to about a third of all injury reports, and 58% of amputation reports, with an inspection by a compliance officer after determining that the hazardous conditions described warranted one.

These inspections enabled OSHA to investigate firsthand the immediate cause of the incident and learn whether hazards remained to threaten the safety and health of additional workers. In most cases, OSHA would never have learned about the hazards had it not been for the severe injury report. These inspections also opened a door to some emerging and fast-changing industries that have had relatively few OSHA inspections, such as suppliers to oil and gas operations. Most employers who experienced a severe injury to a worker were eager to cooperate with OSHA inspectors to prevent anything similar or worse from happening again. In fact, many went above and beyond what was required by OSHA to protect their employees.

At a sawmill in Idaho, a chipper operator's arm was amputated after he tried to clear a jam in a conveyor. In response, the owner closed the sawmill for a week and made improvements that went far beyond what OSHA required, including installing electrical shutoffs within easy reach of all workers, placing catwalks around the entire mill, and providing handheld radios for all employees to improve communications.

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In a small Illinois town, a worker at a food processing plant was hospitalized with severe injuries after his arm was mangled in a screw conveyor. Following an inspection that resulted in citations, the employer installed guards and hand rails around the machinery, added a nitrogen monitoring system for another part of the plant, and conducted extensive employee training. Then he urged other employers in the area to check for hazards, and invited OSHA to make a safety presentation to the local Chamber of Commerce.

Food Slicer Amputations

Soon after the requirement to report severe work-related injuries took effect, OSHA's southeast regional office noticed a surprising trend: Numerous reports of fingertip amputations among workers using food slicers in supermarket delis and restaurants. The Atlanta-based staff quickly developed a plan to contact food service employers across the region — which spans eight states — with information about the hazards of food slicers and simple, low-cost ways to keep workers safe. A letter from Regional Administrator Kurt Petermeyer and a newly developed fact sheet on Preventing Cuts and Amputations from Food Slicers and Meat Grinders was distributed by email and postal service to more than 3,000 locations, from major national supermarkets to small individually owned groceries, as well as many federal facilities, including military bases, federal prisons, and VA hospitals. Compliance specialists also placed an article on deli slicer hazards in a widely distributed industry publication, Edge Magazine. Because of the new reporting requirement, OSHA was able to spot an unrecognized hazard and take fast action to prevent future injuries.

In hundreds of cases that we learned about through the new program, we have seen that our interactions with employers through inspections have inspired larger changes in the company's overall safety program. Some employers have changed their incentive programs to reward activities that abate hazards and prevent injuries, rather than offering prizes for not reporting injuries. Others hired safety and health consultants to review potentially hazardous work practices, or signed up for OSHA's free and confidential on-site consultation services.

Revealing patterns and attempts to conceal

The new reporting requirements have also led OSHA to employers who, even after experiencing horrific employee injuries, continue practices that put workers at risk. Some have gone to great lengths to try to hide hazards in order to avoid fixing them.

In one stunning example, a manufacturer tried to conceal an entire production line from OSHA inspectors after a staffing agency reported the amputation of a worker's finger. When inspectors arrived, the employer closed interior doors and parked forklifts in front of them, then turned off the lights and told workers to be quiet. Inspectors who uncovered the back room found a row of machinery with exposed parts that could have caused other workers to lose their fingers.

In another case, OSHA inspectors learned through witnesses that a temporary worker had asked in vain for fall protection before he fell through the roof on a construction project, sustaining multiple fractures and other severe injuries. An investigation found that, rather than immediately report the incident, the employer delayed three days while he bought the required fall protection gear and coached other workers to claim they'd had it all along. They were told to blame the victim for not wearing it.

Reporting has also revealed recurring patterns of injuries at certain workplaces. OSHA compliance officials could barely keep up with the reports from a single food processing facility in Georgia. There, within six weeks, one worker lost a finger, another lost a hand, and a third was hospitalized with burns and lacerations. Prior to the new requirements, OSHA would not have learned about any of these injuries.

Some Employers are Not Reporting Severe Injuries

OSHA believes that many severe injuries — perhaps 50% or more — are not being reported. We base this conclusion on several factors, including injury claim numbers provided to us by state workers' compensation programs.

Because the majority of first year reports were filed by large employers, we believe that many small and mid-sized employers are unaware of the new requirements. For them, we are developing outreach strategies, including working through insurers, first responders, and business organizations.

In other cases, employers are choosing not to report because they perceive the cost of not reporting to be low. They should know that, now that the requirement is in its second year, OSHA is more likely to cite for non-reporting. In addition, the agency recently increased the unadjusted penalty for not reporting a severe injury from \$1,000 to as much as \$7,000. And that amount will increase even more when higher penalty levels recently approved by Congress take effect.

If OSHA learns that an employer knew about the requirement but chose not to report it promptly, the fine can be much higher. Already, one employer has been assessed enhanced penalties of \$70,000 for willfully failing to report.

Conclusions

Results from the first year of severe injury reporting demonstrate the program's success in both helping OSHA focus its resources where most needed, and engaging employers to identify and eliminate serious hazards at their workplaces.

OSHA will continue to evaluate the program and make changes to improve its effectiveness. For example, we are refining guidance to the field about when a Rapid Response Investigation is appropriate and when an inspection should be called. And we are seeking new ways to make sure that small employers know about their reporting obligations and the resources available to them.

Beyond the numbers and the success stories, we know that each case reported to us under this new requirement involved a human being who went to work one day and suffered an unexpected trauma. Some, along with their co-workers and families, were changed forever. To help bring meaning to their suffering, we can at least ensure that all severe workrelated injuries are reported to OSHA, and that they lead to safer working conditions for others.



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