Worker Safety in Healthcare: A $13 Billion Challenge

Scott Harris, PhD, MSPH

Session Objectives

Describe the scope, magnitude and cost of healthcare worker injuries and illnesses in 2013

Identify conditions within healthcare that have led to recent OSHA scrutiny

Clearly articulate the case for safety culture in healthcare
### Polling Question #1

More of the 134 million U.S. workers in 2013 were in

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>16.1 million</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>15.1 million</td>
</tr>
<tr>
<td>Education</td>
<td>12.1 million</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>12 million</td>
</tr>
</tbody>
</table>

### Polling Question #2

Healthcare workers made up 12% of the 2013 U.S. workforce. The majority were in

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing and Residential Care</td>
<td>3.4 million</td>
</tr>
<tr>
<td>Hospitals</td>
<td>6.1 million</td>
</tr>
<tr>
<td>Ambulatory Health</td>
<td>6.6 million</td>
</tr>
<tr>
<td>Physician offices (2.5 m)</td>
<td></td>
</tr>
<tr>
<td>Home healthcare (1.2 m)</td>
<td></td>
</tr>
<tr>
<td>Outpatient / ASC (.7 m)</td>
<td></td>
</tr>
<tr>
<td>Other…</td>
<td></td>
</tr>
</tbody>
</table>
Polling Question #3

With 12% of the 2013 U.S. workforce, healthcare accounted for what percentage of OSHA inspections that year?  

3
11
16

Hospital OSHA Inspections

2013 (States)
277 at hospitals

2013 (Fed)
185 at hospitals

0.47% of inspections

Hospital worker population (4.6%) = 4,507 potential inspections
### Nursing Care OSHA Inspections

- **2013 (States)**
  - 988 at NCFs
- **2013 (Fed)**
  - 557 at NCFs

1.6% of inspections

Nursing Care worker population (2.5%) = 2,450 potential inspections

### Ambulatory Health OSHA Inspections

- **2013 (States)**
  - 599 at AHFs
- **2013 (Fed)**
  - 405 at AHFs

1% of inspections

Ambulatory Health worker population (4.9%) = 4,801 potential inspections
OSHA Inspection Priorities

8+ million covered workplaces
- 1 CO per 59,000 covered employees
- Typically 1% of workplaces inspected yearly

OSHA prioritizes based on
- Imminent danger
- Fatalities and catastrophes
- Complaints / referrals
- Programmed
  - High injury & illness rates
  - "High-hazard"

Polling Question #4

You are more likely to be injured at work in

- Transportation and warehousing ?
- Healthcare & social assistance ?
- Manufacturing ?
- Construction ?
- Mining ?
**Distribution of nonfatal occupational injuries and illnesses by private industry sector, 2013**

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Number of Cases (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care and social assistance</td>
<td>580.7</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>434.0</td>
</tr>
<tr>
<td>Retail trade</td>
<td>428.7</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>277.6</td>
</tr>
<tr>
<td>Construction</td>
<td>197.3</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>189.4</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>158.8</td>
</tr>
<tr>
<td>Administrative and waste services</td>
<td>115.1</td>
</tr>
<tr>
<td>Other services (except public administration)</td>
<td>71.9</td>
</tr>
<tr>
<td>Professional and technical services</td>
<td>71.1</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation</td>
<td>59.4</td>
</tr>
<tr>
<td>Agriculture, forestry, fishing and hunting</td>
<td>51.4</td>
</tr>
<tr>
<td>Real estate and rental and leasing</td>
<td>51.4</td>
</tr>
<tr>
<td>Information</td>
<td>35.3</td>
</tr>
<tr>
<td>Educational services</td>
<td>35.0</td>
</tr>
<tr>
<td>Finance and insurance</td>
<td>34.7</td>
</tr>
<tr>
<td>Management of companies and enterprises</td>
<td>21.6</td>
</tr>
<tr>
<td>Mining</td>
<td>15.9</td>
</tr>
<tr>
<td>Utilities</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Similar to the distribution of injuries and illnesses reported among all private industry establishments in 2013, injuries accounted for most cases reported among individual industry sectors. Illnesses accounted for only a small fraction of cases reported in each industry sector.

**Incidence rates and numbers of nonfatal occupational injuries and illnesses by private industry sector, 2013**

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Incidence Rate (per 100 full-time workers)</th>
<th>Number of Cases (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, fishing and hunting</td>
<td>5.7</td>
<td>64.9</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation</td>
<td>4.8</td>
<td>61.4</td>
</tr>
<tr>
<td>Health care and social assistance</td>
<td>4.7</td>
<td>192.0</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>4.0</td>
<td>476.7</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>Retail trade</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>3.1</td>
<td>289.0</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>2.9</td>
<td>173.8</td>
</tr>
<tr>
<td>Real estate and rental and leasing</td>
<td>2.7</td>
<td>52.4</td>
</tr>
<tr>
<td>Administrative and waste services</td>
<td>2.5</td>
<td>126.0</td>
</tr>
<tr>
<td>Other services (except public administration)</td>
<td>2.3</td>
<td>75.0</td>
</tr>
<tr>
<td>Utilities</td>
<td>2.0</td>
<td>11.4</td>
</tr>
<tr>
<td>Mining</td>
<td>2.0</td>
<td>16.9</td>
</tr>
<tr>
<td>Educational services</td>
<td>2.0</td>
<td>36.9</td>
</tr>
<tr>
<td>Information</td>
<td>1.5</td>
<td>38.0</td>
</tr>
<tr>
<td>Management of companies and enterprises</td>
<td>1.2</td>
<td>22.8</td>
</tr>
<tr>
<td>Professional and technical services</td>
<td>1.0</td>
<td>74.7</td>
</tr>
<tr>
<td>Finance and insurance</td>
<td>0.7</td>
<td>38.6</td>
</tr>
</tbody>
</table>

More than 1 in 5 cases reported by private industry employers in 2013 occurred among healthcare and social assistance industries. More than half (51.4 percent) of all nonfatal injury and illness cases reported among private industry establishments in 2013 occurred in three industry sectors alone—health care and social assistance, manufacturing, and retail trade.

Healthcare Incidence Rates

Total Injury & Illness Rates per 100 Employees (2013)

- Ambulatory Health
- US Average - All
- Hospitals (Private)
- Hospitals (State)
- Hospitals (Local)
- Nursing Care (P)
- Nursing Care (S)
- Nursing Care (L)

Incidence rates of nonfatal occupational injury and illness cases with days away from work, job transfer, or restriction, by private industry sector, 2013

The rate of job transfer or restriction only (JTR) cases in the manufacturing industry sector has exceeded the rate of cases involving days away from work (DAFW) every year since 1998. Manufacturing remained the only private industry sector in 2013 in which the incidence rate of JTR cases (1.2 cases per 100 full-time workers) exceeded the rate of DAFW cases (1.0); both of these rates declined in manufacturing by 0.1 case from 2012.

Optimized workplace health and safety doesn't cost, it pays.

The path runs from Compliance through Commitment to Culture. It's not about training, it's about learning.

By working with thousands of clients, we've identified three significant principles common to successful workplace health and safety programs.
Days Lost from Injuries (2013)

- Ambulatory: 338
- Nursing Care: 681
- Hospitals: 946
- Total: 1,966

Lost-Time Cost per HC Worker (2013)

- Ambulatory: $356
- Hospitals: $1,001
- Nursing Care: $1,409
Profile of the Injured HC Worker

45-54 year old female
1-5 years on the job
5+ for Hospitals
On duty 2-4 hours before injured
Sprains/strains to backs
Overexertion
Patients, floors

Ambulatory Health
22% out for 31+ days
Hospitals
24% out for 31+ days
Nursing Care
21% out for 31+ days

Whistleblower Program

Line-item budget
Full-time Director
Budget increases
New staff
Higher visibility
Web pages / posters
10 / 30-hour courses
Online complaint form
Penalties much higher

Cases

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1500</td>
</tr>
<tr>
<td>2012</td>
<td>2500</td>
</tr>
<tr>
<td>2014</td>
<td>3500</td>
</tr>
</tbody>
</table>
Not a Joint Commission Issue

TJC standards overlap some OSHA requirements

Monitor “levels of hazardous gases…” (EC.02.02.01-10)

Safety Data Sheets (EC.02.02.01-11)

Label hazardous materials (EC.02.02.01-12)

Fire, exits, life safety (i.e., UL / NFPA)

A process to monitor, report, investigate injuries / illnesses (EC.04.01.01)

But not the most common hospital 2013 fed-OSHA violations

Bloodborne Pathogens

Electrical

Hazard Communication

LOTO
Recent OSHA Scrutiny

Site-Specific Targeting 2014 (SST-14) Inspection Plan
For FY2014
Based on 2011 DART rates (2012 survey)
Non-manufacturing (15+)
Includes healthcare (except Nursing & Residential Care)

2012 NEP
Nursing and Residential Care facilities
1,000 inspections (over 3 years)
DART > 5.3
Back injuries / BBP / workplace violence / slips, trips & falls

Recent OSHA Scrutiny

9,413 “outreach” letters
March 2013
13% (1,218) to healthcare
97.5% of those (1,187) to Nursing & Residential Care

If DART > your industry average
Previously if > U.S. avg

Message?
Your rate is too high
Get help
You may get inspected

Posted at OSHA.gov
Nursing Care DARTs

Worst Performers (2011)

<table>
<thead>
<tr>
<th>Location</th>
<th>Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tucker, GA (2,970)</td>
<td>State homes = 7.4</td>
</tr>
<tr>
<td>Atlanta, GA (143)</td>
<td>Local gov homes = 7.1</td>
</tr>
<tr>
<td>Kinsley, KS (41.5)</td>
<td>Private homes = 5.3</td>
</tr>
<tr>
<td>Lancaster, OH (41.4)</td>
<td>U.S. average = 1.9</td>
</tr>
<tr>
<td>Billings, MT (38.6)</td>
<td>Best 100 performers at 4.5 - 6</td>
</tr>
<tr>
<td>Grand Junction, CO (33.4)</td>
<td></td>
</tr>
<tr>
<td>Norwich, CT (33.12)</td>
<td></td>
</tr>
<tr>
<td>Boise, ID (32.1)</td>
<td></td>
</tr>
<tr>
<td>Farmington, CT (31)</td>
<td></td>
</tr>
<tr>
<td>Hamilton, TX (29.6)</td>
<td></td>
</tr>
</tbody>
</table>

Recent OSHA Scrutiny

Region 4 REP (to 9/30/12)
| ASCs / Emergency Care Clinics / Primary Care Medical Clinics |
| BBP / Sharps |
| NS injuries / patient Hep/HIV notifications |

OSHA Healthcare RFI (May 2010)

Workplace-acquired infections are a “persistent problem”

"Lack of effort by healthcare employers” in tracking them

“A weak culture of worker safety in this sector…”

Seeking best practices on infection control

“…what action, if any, the Agency may take to further limit…”
**HAIs / Nosocomials (RFI)**

Infectious agents are “also transmitted from healthcare workers to patients”

“Preventing infectious disease among workers also will reduce exposure to their family members and to patients.”

“…among the leading causes of death in the United States.”

“…accounted for an estimated 1.7 million infections and 99,000 associated deaths in 2002.”

Revised to 722,000 / 75,000 (hospitals, 2011 CDC / NEJoM)

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**Polling Question #5**

Healthcare-Associated Infections (HAIs) kill more people in the U.S. each year than

Motor vehicles and firearms

Melanoma, AIDS, workplace fatalities and foodborne illness

All of the above
75,000 HAI fatalities per year in acute care hospitals (only)

Compare U.S. fatalities from other high-profile causes

- 33,561 from motor vehicles
- 13,834 with AIDS diagnosis
- 11,208 firearm homicides
- 9,710 from melanomas of the skin
- 4,405 fatal workplace injuries
- 3,000 from foodborne illness

= 75,718

Real Safety Culture

Organization-wide commitment to safety — period

Continuous improvement / visibility

“Measure what matters”
- Focus on leading indicators
- Early reporting of risks
  - Prevention

Eliminate fear of reprisal for reporting

Ongoing learning as a key prevention tool
Healthcare Safety Culture does what?

- Links worker / patient safety
- Lowers injury / illness rates, HAIs
- Increases Productivity / Morale
- Increases Situational Awareness
- Reduces Risk / Lower Costs
- Improves Processes / Patient Care

What Safety Culture is *not*...

A policy / program / procedure

Distinct from organizational culture

Implemented overnight

A punishable mandate

*Beatings will continue until morale improves*
*Fire the “unhappy people”*
*“Injuries are a violation of our safety policy”*
*“What was the employee doing wrong when injured?”*
The Case for Safety Culture

OSHA sees healthcare as poor safety performers

Lack of visibility marginalizes OSHA within HC
  Emphasis programs / targeted inspections
  OSHA "still reviewing" 502 RFI comments

Numbers make the case
  16.1 million employees / thousands of worksites
  High incidence / HAI rates
  $13 billion on injuries in 2013 (2+ million lost work days)
  Little or no relation to OSHA citations

Not a Joint Commission issue

This is about building a sustainable culture of health and safety

Discussion?

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UL Workplace Health and Safety

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Describe the scope, magnitude and cost of healthcare worker injuries and illnesses in 2013

Identify conditions within healthcare that have led to specific recent OSHA scrutiny

Clearly articulate the case for safety culture in healthcare