

Agenda

To: Members, UOSH Advisory Council
From: Chris Hill, UOSH Director
Re: UOSH Advisory Council Meeting

Date: Tuesday, January 10, 2017
Time: 12:30 p.m. – 2:00 p.m.
Place: Utah Labor Commission, Room 319A
Third Floor, Heber Wells Building
160 East 300 South, Salt Lake City, Utah

1. Welcome
 2. Legislative/legal issues
 3. Update on UOSH
 - a. Recent accidents
 - b. FY 2016 Statistics
 - c. Amputation/Construction LEP evaluations
 4. Accident Statistics
 5. Member issues/comments
 6. Public comment
 7. Future meeting schedule/adjourn
-

Council Members

Chris Hill, Chair, Division Director, Utah Occupational Safety and Health (UOSH)
AGC – Joey Gilbert/Dan Fegel
ABC – Chris DeHerrera
UMA – Todd Bingham
UPA – Lee Peacock
Utah Safety Council – Rod Hamson/Brooke Wahlquist
AFL-CIO – Dale Cox
Utah Home Builders Association – Ross Ford

Accident Totals FFY 2017

Classification	Construction	General Industry	Public Sector	Total
Fatality	3	2	1	6
Fatality (Non-UOSH)	0	2	2	4
Catastrophe	0	0	0	0
Non-Fatal	30	69	3	102
Totals	33	73	6	112

Accidents by Type of Investigation

Type of Investigation	Construction	General Industry	Public Sector	Total
UOSH	27	22	1	50
Internally By Company	5	46	3	54
N/A (Non-UOSH)	1	5	2	8
Totals	33	73	6	112

Accidents by Month

Accidents by Month	Construction	General Industry	Public Sector	Total
October	16	28	1	45
November	11	22	2	35
December	6	23	3	32
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
Totals	33	73	6	112

Accidents by Injury Type

Type of Injury	Construction	General Industry	Public Sector	Total
Amputation(s)	2	5	0	7
Asphyxiation	1	0	0	1
Burn(s) (Chemical)	0	0	0	0
Burn(s) Electrical	0	0	0	0
Burn(s) or Scald (Heat)	0	0	0	0
Cardiac Arrest	0	2	1	3
Concussion	1	15	1	17
Crushing	5	1	0	6
Cut(s) or Laceration(s)	2	11	1	14
Electrocution	0	0	0	0
Foreign Body in Eye(s)	0	0	0	0
Fracture(s)	13	35	1	49
Heat Stress/Exhaustion	0	0	0	0
Multiple	6	0	2	8
N/A	1	2	0	3
Poisoning (Systematic)	0	0	0	0
Puncture(s)	2	0	0	2
Other	0	2	0	2

Accidents by Event Type

Event Type	Construction	General Industry	Public Sector	Total
Absorption	0	0	0	0
Cardiac Arrest	0	2	1	3
Caught in or Between	5	13	0	18
Contact With Chemical	0	0	0	0
Contact With Other	0	0	0	0
Drowning	0	0	0	0
Electrical Shock	0	0	0	0
Engulfment	0	0	0	0
Explosion	0	0	0	0
Fall (From Elevation)	15	4	0	19
Fire	0	0	0	0
Heat	0	0	0	0
Ingestion	0	0	0	0
Inhalation	0	0	0	0
Multiple	0	0	0	0
N/A	0	1	0	1
Other	0	3	0	3
Respiratory System	0	0	0	0
Slip/Trip/Fall	2	21	1	24
Struck Against	3	11	1	15
Struck By	8	18	3	29

Accidents by Body Part

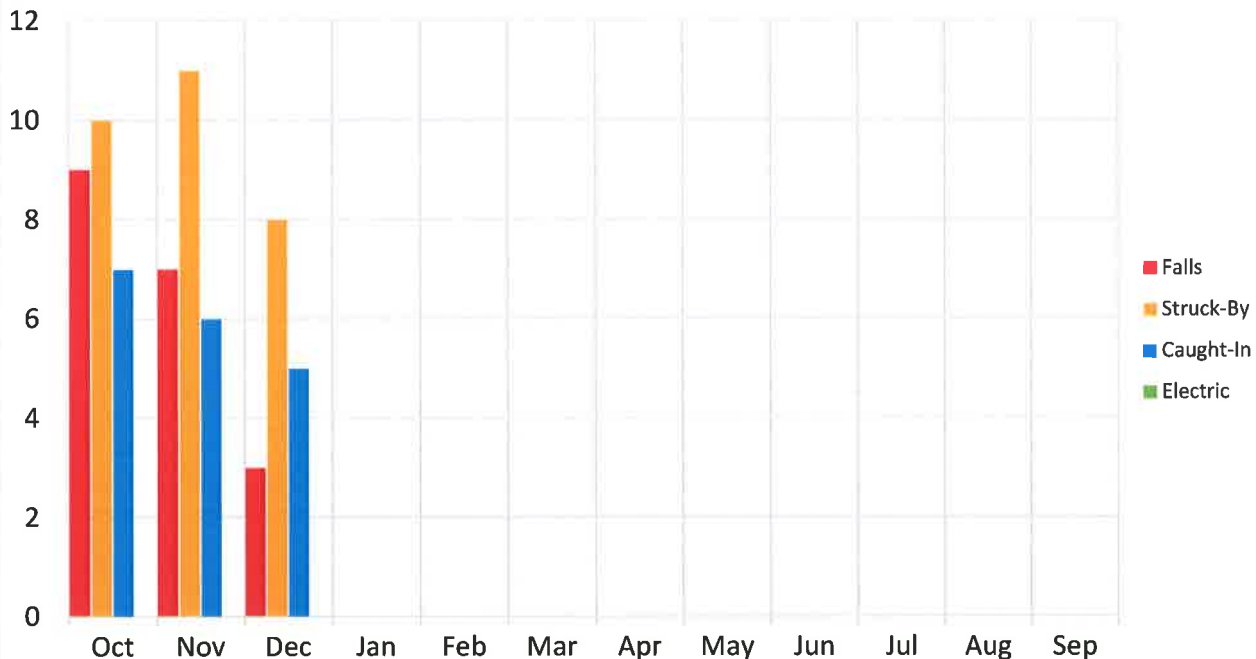
Part of Body	Construction	General Industry	Public Sector	Total
Abdomen	0	0	0	0
Ankle(s)	0	2	0	2
Arm(s)	2	3	0	5
Back	1	0	1	2
Blood	0	0	0	0
Body System	0	2	0	2
Chest	3	0	0	3
Collar Bone	0	0	0	0
Ear(s)	0	0	0	0
Elbow(s)	0	2	0	2
Eye(s)	1	0	0	1
Face	0	2	0	2
Finger(s)	2	13	0	15
Foot/Feet	1	6	0	7
Hand(s)	0	2	0	2
Head	3	17	1	21
Heart	0	2	1	3
Hip(s)	2	2	0	4
Kidney(s)	0	1	0	1
Knee(s)	1	3	0	4
Leg(s)	4	5	1	10
Liver	0	0	0	0
Lung(s)	0	0	0	0
Multiple	10	2	2	14
N/A	1	0	0	1
Neck	1	0	0	1
Nervous System	0	0	0	0
Nose	0	2	0	2
Other	1	1	0	2
Reproductive System	0	0	0	0
Rib(s)	0	2	0	2
Shoulder(s)	0	2	0	2
Toe(s)	0	0	0	0
Wrist(s)	0	2	0	2

Accidents by NAICs Codes

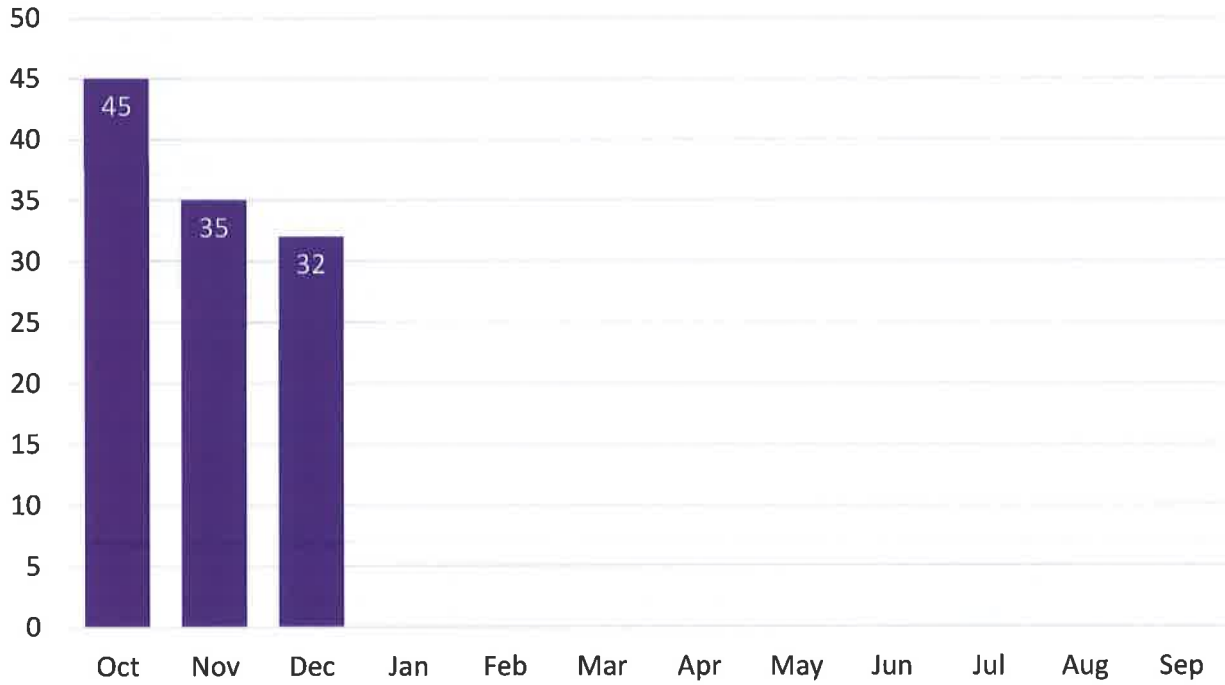
NAICs Description	NAICs Code	Totals
Agriculture, Forestry, Fishing & Hunting	11	0
Mining	21	1
Utilities	22	0
Construction	23	33
Manufacturing (31-33)	31-33	11
Wholesale Trade	42	6
Retail Trade (44 & 45)	44-45	6
Transportation & Warehousing (48 & 49)	48-49	7
Information	51	1
Finance and Insurance	52	0
Real Estate	53	0
Professional, Scientific & Technical Services	54	1
Management of Companies and Enterprises	55	0
Admin, Support, Waste Management Remediation	56	1
Education Services	61	5
Health Care and Social Assistance	62	29
Arts, Entertainment, and Recreation	71	2
Accommodation and Food Service	72	3
Other Services	81	2
Public Sector	92	4

Accident Totals FY2017

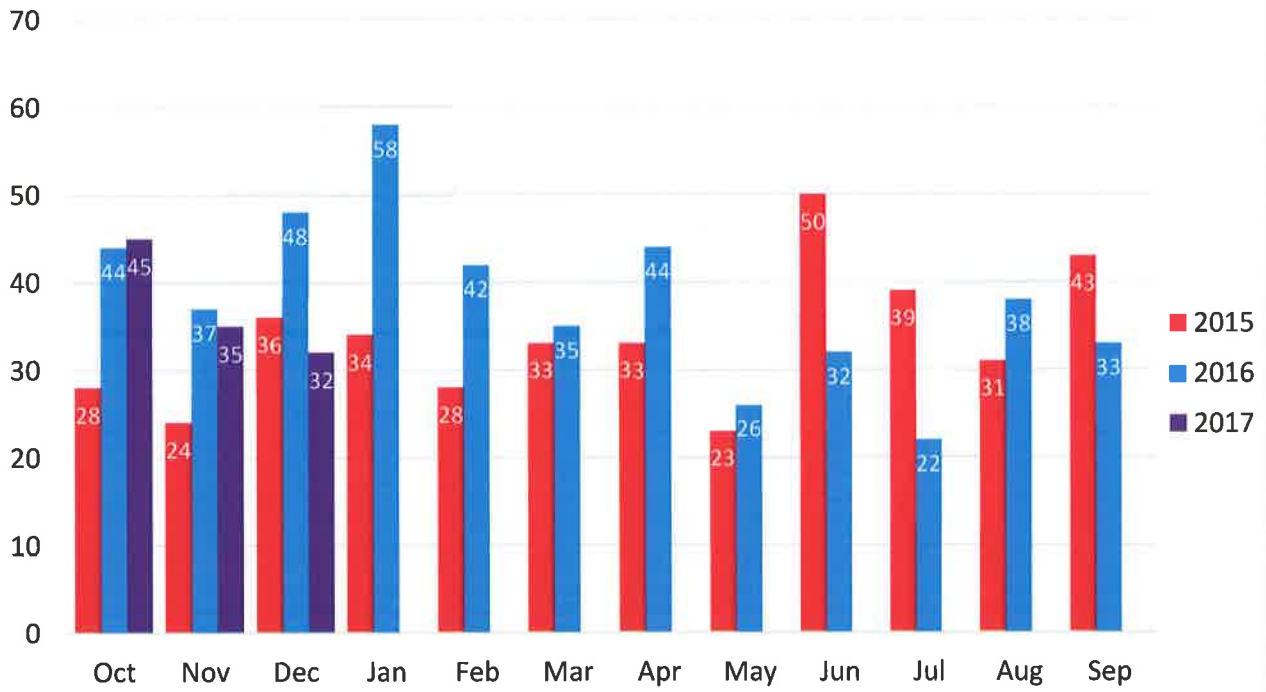
Falls, Struck-By, Caught-in/Between, Electric Shock



Accident Totals FY 2017



Accident Totals FY 2015, 2016 & 2017



Construction Accidents by NAICs Codes

NAICs Description	NAICs Code	Totals
New Single-Family Housing Construction (except For-Sale Builders)	236115	3
New Multifamily Housing Construction (except For-Sale Builders)	236116	0
New Housing For-Sale Builders	236117	0
Residential Remodelers	236118	0
Industrial Building Construction	236210	1
Commercial and Institutional Building Construction	236220	2
Water and Sewer Line and Related Structures Construction	237110	1
Oil and Gas Pipeline and Related Structures Construction	237120	0
Power & Communication Line & Related Structures Construction	237130	0
Land Subdivision	237210	0
Highway, Street, and Bridge Construction	237310	2
Other Heavy and Civil Engineering Construction	237990	1
Poured Concrete Foundation and Structure Contractors	238110	2
Structural Steel and Precast Concrete Contractors	238120	4
Framing Contractors	238130	2
Masonry Contractors	238140	0
Glass and Glazing Contractors	238150	0
Roofing Contractors	238160	2
Siding Contractors	238170	0
Other Foundation, Structure, and Building Exterior Contractors	238190	0
Electrical Contractors and Other Wiring Installation Contractors	238210	3
Plumbing, Heating, and Air-Conditioning Contractors	238220	1
Other Building Equipment Contractors	238290	0
Drywall and Insulation Contractors	238310	1
Painting and Wall Covering Contractors	238320	2
Flooring Contractors	238330	0
Tile and Terrazzo Contractors	238340	0
Finish Carpentry Contractors	238350	1
Other Building Finishing Contractors	238390	0
Site Preparation Contractors	238910	4
All Other Specialty Trade Contractors	238990	1



OCTOBER 2016 INVESTIGATION CLASSIFICATION TOTALS

Investigation Classification	Construction	General Industry	Public Sector	Totals
Fatality	2	1	0	3
Fatality (Non-UOSH)	0	0	0	0
Catastrophe	0	0	0	0
Non-Fatal Accident	14	27	1	42
Totals	16	28	1	45



Today's Date: 1/6/2017

OCTOBER 2016 EVENT TYPE TOTALS

Event Type	Construction	General Industry	Public Sector	Totals
Absorption	0	0	0	0
Cardiac Arrest	0	0	0	0
Caught in or Between	3	4	0	7
Contact With Chemical	0	0	0	0
Contact With Other Agent	0	0	0	0
Drowning	0	0	0	0
Electrical Shock	0	0	0	0
Engulfment	0	0	0	0
Explosion	0	0	0	0
Fall (From Elevation)	7	2	0	9
Fire	0	0	0	0
Heat	0	0	0	0
Ingestion	0	0	0	0
Inhalation	0	0	0	0
Multiple	0	0	0	0
N/A	0	0	0	0
Other	0	2	0	2
Respiratory System Failure	0	0	0	0
Slip/Trip/Fall	2	8	0	10
Struck Against	1	5	1	7
Struck By	3	7	0	10



NOVEMBER 2016 INVESTIGATION CLASSIFICATION TOTALS

Investigation Classification	Construction	General Industry	Public Sector	Totals
Fatality	1	0	1	2
Fatality (Non-UOSH)	0	1	1	2
Catastrophe	0	0	0	0
Non-Fatal Accident	10	21	0	31
Totals	11	22	2	35



Today's Date: 1/6/2017

NOVEMBER 2016 EVENT TYPE TOTALS

Event Type	Construction	General Industry	Public Sector	Totals
Absorption	0	0	0	0
Cardiac Arrest	0	1	0	1
Caught in or Between	1	5	0	6
Contact With Chemical	0	0	0	0
Contact With Other Agent	0	0	0	0
Drowning	0	0	0	0
Electrical Shock	0	0	0	0
Engulfment	0	0	0	0
Explosion	0	0	0	0
Fall (From Elevation)	5	2	0	7
Fire	0	0	0	0
Heat	0	0	0	0
Ingestion	0	0	0	0
Inhalation	0	0	0	0
Multiple	0	0	0	0
N/A	0	0	0	0
Other	0	0	0	0
Respiratory System Failure	0	0	0	0
Slip/Trip/Fall	0	4	0	4
Struck Against	1	5	0	6
Struck By	4	5	2	11



**DECEMBER 2016
INVESTIGATION CLASSIFICATION TOTALS**

Investigation Classification	Construction	General Industry	Public Sector	Totals
Fatality	0	1	0	1
Fatality (Non-UOSH)	0	1	1	2
Catastrophe	0	0	0	0
Non-Fatal Accident	6	21	2	29
Totals	6	23	3	32



Today's Date: 1/6/2017

DECEMBER 2016 EVENT TYPE TOTALS

Event Type	Construction	General Industry	Public Sector	Totals
Absorption	0	0	0	0
Cardiac Arrest	0	1	1	2
Caught in or Between	1	4	0	5
Contact With Chemical	0	0	0	0
Contact With Other Agent	0	0	0	0
Drowning	0	0	0	0
Electrical Shock	0	0	0	0
Engulfment	0	0	0	0
Explosion	0	0	0	0
Fall (From Elevation)	3	0	0	3
Fire	0	0	0	0
Heat	0	0	0	0
Ingestion	0	0	0	0
Inhalation	0	0	0	0
Multiple	0	0	0	0
N/A	0	1	0	1
Other	0	1	0	1
Respiratory System Failure	0	0	0	0
Slip/Trip/Fall	0	9	1	10
Struck Against	1	1	0	2
Struck By	1	6	1	8

Evaluation of Local Emphasis Program for Construction Industry

Evaluation Period: October 1, 2015 – September 30, 2016

The Utah Occupational Safety and Health Division (UOSH) has focused on these high-hazard worksites by developing and implementing a Local Emphasis Program (LEP) for Construction Industry, Directive number 2014-001, which was effective August 1, 2014. The Directive was established to reduce the incidents of injury, illness and fatality among workers in the construction industry by focusing on the "Big 4" construction hazards: falls from elevations, caught-in or between, struck-by and electrocution and to work in cooperation with the construction industry to help them achieve effective safety and health management systems. For more information regarding the establishment and implementation of UOSH's Construction LEP, go to

<http://laborcommission.utah.gov/media/pdfs/uosha/pubs/Utah%20OSHA%20Construction%20LEP%207-28-2014.pdf>.

LEP effectiveness: The Construction LEP has been in effect for two years and two months as of September 30, 2016. Some of the tools that UOSH used to evaluate the effectiveness of the Construction LEP were the number of inspections and compliance assistance conducted by UOSH, the number and types of violations cited as a result of the LEP, the number of employees removed from the hazards, the number of injuries sustained within the construction industry as compared to the previous federal fiscal year, and the amount of penalties as a result of the LEP inspections. By evaluating the information gathered, the effectiveness of the program can be determined as a result of compliance activity at construction sites throughout the state of Utah that is covered by the LEP.

Number of Construction LEP inspections and violations: Using Local Emphasis Program inspection criteria, data was gathered for the Construction LEP inspections conducted from October 1, 2015 through September 30, 2016. There were 181 inspections conducted (affecting 795 employees) during this time frame with 397 hazards identified and eliminated, which is approximately 2.2 violations per an inspection. There were 14 repeat violations, 7 failure-to-abate violations, 351 serious violations and 25 other-than-serious violations. There were four violations that were contested.

The data gathered from the OSHA Information System (OIS) indicate that of the 397 violations, the most frequently cited standards were those related to fall protection (Subpart M of 29 CFR) at 147 violations and scaffolds at 114 violations.

The following are the standards cited as a result of the Construction LEP inspections of worksites by UOSH:

1. Fall Protection (147 violations)
2. Scaffold (116 violations)
3. Electrical (39 violations)
4. Ladders (25 violations)
5. Excavation (20 violations)
6. Recordkeeping (15 violations)
7. Head protection (6 violations)
8. Industrial Trucks (5 violations)
9. Unprotected rebar (4 violations)
10. Injury/Illness reporting requirements (4 violations)
11. Gas welding and cutting (4 violations)
12. Rigging (4 violations)
13. Stairways (3 violations)
14. Cranes and derricks (2 violations)
15. Circular hand-fed rip saw (2 violations)

16. Frequent inspections and correction of unsafe conditions (1 violation)

The standards cited by UOSH are directly related to the hazards that were observed during LEP inspection activity and it shows that the top hazards to which employees were exposed (fall protection, scaffold, electrical, ladders, excavation) fall within the category of the “Big 4” hazards that the Construction LEP is designed to target.

The total number of inspections conducted by UOSH during this period was 815 which means that Construction LEP inspections accounted for 22.2 percent of the inspections that were conducted. The total number of violations cited by UOSH during this time frame was 1,452 which means that the violations cited as a result of the Construction LEP accounted for 27.3 percent of the violations. The total initial penalty and current penalty for the Construction LEP violations were \$468,840.00 and \$394,625.00, respectively, and the total initial penalty and current penalty for all UOSH violations were \$1,477,236.00 and \$1,132,961.00, respectively. Construction LEP penalties accounted for 31.7 percent of the initial and 34.8 percent of the current penalties.

CSHOs conducted 134 Compliance Assistance activities under the Construction LEP which affected 1,511 employees in Utah.

The total number of employers reached under the Construction LEP was 315 whereby 2306 employees were affected by UOSH’s Compliance and outreach efforts.

The total number of workplace injuries was gathered using the Utah Labor Commission Industrial Accidents Division’s database and it was found that there was a decrease in the number of injuries in the construction injury. From October 1, 2014 through September 30, 2015, there was a total of 2,328 injuries reported to the Industrial Accident’s Division as compared to 2096 injuries from October 1, 2015 through September 30, 2016. The average number of employees within this sector for FY15 and FY16 (data available for first two quarters) was 84,267 and 88,302.5, respectively. This shows that although the number of employees has increased in the construction sector, there was a decline in work-related accidents that resulted in injuries.

The number of accidents in the construction industry reported to UOSH during FY15 and FY16 was 53 and 104, respectively. The difference in numbers, from those in the Industrial Accident’s database, are understandably less due to the reporting requirements of UOSH; however, the difference could be due to the under-reporting by employers to UOSH.

Results gathered from inspections conducted during FY16 was compared to the results from the analysis conducted for FY15. Analysis between the two fiscal years shows that the number of inspections conducted increased resulting in an increase in the number of hazards removed from the workplace thereby creating a safer working environment for employees. See the table below for a comparison of some of the data gathered from FY15 and FY16.

Construction Industry (LEP)	FFY15	FF16	Diff.
Inspections Conducted	113	181	68
Hazards Identified	211	397	186
Violations per Inspection	1.9	2.2	0.3
Compliance Activities	160	134	(26)
Employees Affected	3,161	2,306	(855)

Construction Industry (Total)	FFY15	FFY16	Diff.
Injuries reported to Industrial Accidents	2,328	2,096	(232)
Average Number of Employees in Construction NAICS	84,267	88,302.5	4,035.5
Injury and Illness Rate	2.8	2.4	0.4

Based on the above information, it appears that the Construction LEP had a positive impact on the construction industry, mainly the decrease in the number of injuries sustained by employees. UOSH will continue to provide education and compliance assistance to employers, as well as enforce regulations where hazards are observed, to ensure that contractors in the construction industry are aware of the hazards and take appropriate steps to eliminate employee exposure to those hazards. With the continuance of the Construction LEP and targeting the “Big 4” hazards, UOSH believes that the incidents of injury, illness and fatality among workers in the construction industry will be further reduced.

Holly D Lawrence
Compliance Program Manager

Evaluation of Local Emphasis Program for Amputations

Evaluation Period: October 1, 2015 – September 30, 2016

Utah Occupational Safety and Health Division's (UOSH) inspection history and employers' accident reporting trends indicate that employee exposures to unguarded or inadequately guarded machinery and equipment, together with associated hazardous energy exposures during servicing and maintenance activities, occur in many workplaces. Based on this information, UOSH recognized the need to develop a local emphasis program (LEP), implemented on November 1, 2014, designed to identify and reduce workplace hazards due to machinery and equipment which are causing or are likely to cause amputations in general industry. For more information regarding the establishment and implementation of UOSH's Amputation LEP, go to <http://laborcommission.utah.gov/media/pdfs/uosha/pubs/2014utoshalepamputations.pdf>.

LEP effectiveness: The Amputation LEP will have been in effect for two years as of October 31, 2016. Some of the tools that UOSH used to evaluate the effectiveness of the Amputation LEP were the number of inspections and compliance assistance conducted by UOSH, the number and types of violations cited as a result of the LEP, the number of employees removed from the hazards, the number of injuries classified as amputations where machines are present that could likely cause such injury as compared to the previous federal fiscal year, and the amount of penalties as a result of the LEP inspections. By evaluating the information gathered, the effectiveness of the program can be determined as a result of compliance activity throughout the state of Utah that is covered by the LEP.

Number of Amputation LEP inspections and violations: Using LEP inspection criteria, data was gathered for the Amputation LEP inspections conducted from October 1, 2015 through September 30, 2016. During this time frame, Compliance Safety and Health Officers (CSHOs) conducted 118 inspections under the Amputation LEP (affecting 4,112 employees) with 297 hazards identified and eliminated, which is approximately 2.5 violations per an inspection. There were 286 serious violations and 9 other-than-serious violations. The number of no inspections conducted due to the employer no longer being in business or moving to a different location was 42. This number has been reduced from federal fiscal year (FY) 2015 whereby the number was at 74. The reduction in "no inspection" activity is the result of management and CSHOs conducting research, to determine if the establishments were currently in business, prior to driving to the site to open an LEP inspection. UOSH will continue to conduct such research in order to save resources.

The data gathered from the OSHA Information System (OIS) indicate that of the 297 violations, the most frequently cited standards were those related to machine guarding at 158 violations and lockout/tagout at 60 violations.

The following are the standards cited as a result of the Amputation LEP inspections of worksites by UOSH:

1. Machine guarding (158 violations)
2. Lockout/Tagout (60 violations)
3. Electrical (20 violations)
4. Powered industrial trucks (11 violations)
5. Hazard communication (9 violations)
6. Removing tools/equipment/materials without authorization (9 violations)

7. Respiratory protection (6 violations)
8. Walking-working surfaces (4 violations)
9. Recordkeeping (4 violations)
10. Not reporting injury within 8 hours (2 violation)
11. Welding (2 violations)
12. Hazard assessment certification (2 violation)
13. Guarding portable power tools (2 violations)
14. Overhead and gantry cranes (2 violations)
15. Frequent inspections and correction of unsafe conditions (2 violations)
16. Ventilation (1 violation)
17. Flammable liquids (1 violation)
18. Spray finishing (1 violation)
19. Food processor operator training (1 violation)

The standards cited by UOSH are directly related to the hazards that were observed during LEP inspection activity and it shows that the top hazards to which employees were exposed (machine guarding and lockout/tagout) fall within the scope of the Amputation LEP which is designed to target hazards that employees may be exposed to that could result in amputation or death.

The total number of inspections conducted by UOSH during this period was 815 which means that Amputation LEP inspections accounted for 14.5 percent of the inspections that were conducted. The total number of violations cited by UOSH during this time frame was 1,452 which means that the violations cited as a result of the Amputation LEP accounted for 20.5 percent of the violations.

The total initial and current penalty for the Amputation LEP violations were \$252,994.00 and \$169,981.50, respectively, and the total initial and current penalty for all UOSH violations were \$1,477,236.00 and \$1,132,961.00, respectively. Amputation LEP penalties accounted for 17.1 percent of the initial and 15.0 percent of the current penalties.

The number of injuries classified as amputations in the manufacturing sector (the main focus of the Amputation LEP) for FY16 was gathered using the Utah Labor Commission Industrial Accidents Division's (Industrial Accidents) database and it was found that there were 8 such injuries. The number of accidents resulting in amputations in the manufacturing sector that were reported to UOSH during that time frame was nineteen (19) which was higher than that shown in the Industrial Accidents database. There were fourteen (14) injuries classified as amputations in the Industrial Accident's database for the manufacturing sector in FY15. The number of accidents resulting in amputations in the manufacturing sector that were reported to UOSH during that time frame was twenty-two (22). The difference in the number of accidents resulting in amputations reported to UOSH and those shown by Industrial Accidents may be due to how injuries are coded in the Industrial Accident's database. Evaluation of the data shows that the number of work-related amputations in the manufacturing sector decreased from twenty-two (22) in FY15 to nineteen (19) in FY16. The average number of employees within this sector for FY15 and FY16 (data available for first two quarters) was 122,848.5 and 124,887.5, respectively. This shows that although the number of employees has increased in the manufacturing sector, there was a decline in work-related accidents that resulted in amputation.

Results gathered from inspections conducted during FY16 was compared to the results from the analysis conducted for FY15. Analysis between the two fiscal years shows that the number of inspections conducted increased resulting in an increase in the number of hazards removed from the workplace

thereby creating a safer working environment for employees. See the table below for a comparison of some of the data gathered from FY15 and FY16.

Table 1. Amputation LEP Analysis between FY15 and FY16

Amputation LEP Inspections	FY15	FF16	Diff.
Inspections Conducted	73	118	45
Hazards Identified	176	297	121
Violations per Inspection	2.4	2.5	0.1
Employees Affected	5,735	4,112	(1,623)
Amputation Injuries (Manufacturing) reported	22	19	(3)
Average Number of Employees (Manufacturing)	122,848.5	124,887.5	2,039

Based on the above information, it appears that the Amputation LEP had a positive impact on places of employment where amputation hazards exist. UOSH will continue to provide education and compliance assistance to employers, as well as enforce regulations where hazards are observed, to ensure that employers who have equipment and/or machinery that are known to cause serious injury, including amputations, are aware of the hazards and that they take appropriate steps to eliminate employee exposure to those hazards.

With the continuance of the Amputation LEP, UOSH believes that the incidents of amputations and fatalities will continue to be reduced among workers who work in industries where machines are present that would likely cause such occurrences.

Holly D. Lawrence
Compliance Program Manager