

Occupational Fatalities in Oregon Annual Report 2009

**Oregon Fatality Assessment
& Control Evaluation
(OR-FACE)**

Annual Report 2009

Fatality Assessment and Control Evaluation

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Contact Information:

**OR-FACE Program
CROET, OHSU
3181 SW Sam Jackson Park Rd, L606
Portland, OR 97239-3098**

**phone: 503.494.2281
e-mail: orface@ohsu.edu
website: www.ohsu.edu/croet/face**

This report is dedicated to the men and women in Oregon who have lost their lives as the result of traumatic workplace injuries, in the hope that better understanding of these fatal incidents may help to save the lives of other workers in similar situations.

Oregon FACE Program

Center for Research on Occupational and Environmental Toxicology – Oregon Health & Science University

FACE Staff (Publication Year)

- Ryan Olson PhD
- Jamie Jones MPH

Emeritus FACE Staff (Reporting Year)

- Gary Rischitelli MD JD MPH
- Erika Zoller MPH
- Terry Hammond PhD MPH

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(Jae Douglas, PhD MSW, Principal Investigator).*

FACE Definitions

The Oregon Fatality Assessment and Control Evaluation program investigates work-related fatalities that are caused by a traumatic injury when the injury occurs within Oregon.

A location *within Oregon* means the incident, or some portion of the incident, occurs within the geographical boundaries of the state of Oregon, including the coastal waters, airspace, and subterranean portions of the state.

A *work relationship* exists if an incident occurs (a) on the employer's premises and the person was there to work, or (b) off the employer's premises and the person was there to work, or the event or exposure was related to the person's work or status as an employee.

Work is defined as duties, activities, or tasks that produce a product or result, are done in exchange for money, goods, services, profit, or benefit, and are legal activities.

In Scope

- Self-employed, family, or volunteer workers, exposed to the same work hazards and perform the same duties or functions as paid employees and that meet the work-relationship criteria.
- Suicides and homicides that meet the work-relationship criteria.
- Fatal events or exposures that occur when a person is in travel status, if the travel is for work purposes or is a condition of employment (excluding commute).

Out of Scope

- Institutionalized persons, including inmates of penal and mental institutions, sanitariums, and homes for the aged, infirm and needy, unless employed off the premises of their institutions.
- Fatal heart attacks and strokes, unless causally related to a traumatic injury or exposure.
- Fatal events or exposures that occur during a person's recreational activities that are not required by the employer.
- Fatal events or exposures that occur during a person's commute to or from work.

Adapted from Bureau of Labor Statistics (2001), *Census of Fatal Occupational Injuries: Definitions*. U.S. Department of Labor. Available online (March 11, 2004); <http://stats.bls.gov/iif/oshcdef.htm>

Acronyms

CDC	Centers for Disease Control and Prevention
CFOI	U.S. Census of Fatal Occupational Injuries
NVDRS	National Violent Death Reporting System
OIICS	Occupational Injury and Illness Classification System
Oregon OSHA	Oregon Occupational Safety and Health Division

Population Data Sources

US CENSUS: www.census.gov (American Factfinder, Data Sets, Summary File 3)

US BUREAU OF LABOR STATISTICS: <http://stats.bls.gov/ces>

LOCAL AREA UNEMPLOYMENT STATISTICS (LAUS): www.bls.gov/lau

OLMIS (OREGON LABOR MARKET INFORMATION SYSTEM):
http://olmis.emp.state.or.us/olmisj/CES?x=1&y=1&p_action=

Summary

REPORT HIGHLIGHTS

- OR-FACE conducts surveillance, investigation, assessment, and outreach related to traumatic occupational fatalities in Oregon (see pp. 5, 6).
- OR-FACE produces the second edition of a safety brochure related to younger workers in Oregon (see p. 7).
- Recent publications include three investigation reports and a poster on commercial fishing in Oregon (see p. 7).
- Basic characteristics of fatal events and the workers involved are quantified in charts (see pp. 8-12).
- An abstract for each incident provides a brief description of each event and contributing factors (see p. 13).
- Contact OR-FACE for more information or access our website survey to offer feedback (see back cover).

INTRODUCTION

In 2009, Oregon Fatality Assessment and Control Evaluation recorded 58 fatal occupational incidents, with 64 worker deaths. The number represents a rate of 3.5 fatalities per 100,000 employed workers in the civilian labor force in Oregon. The national worker fatality rate in 2009 was 3.5 per 100,000 full-time equivalent workers, down from 3.7 in 2008 (CFOI).

The following notable trends occurred in 2009.

- Overall, the annual number of fatalities was relatively stable compared to the past two years. In 2008, there were 61 worker deaths and 68 worker deaths in 2007.
- Transportation was the most common event and occupation for fatalities among workers in Oregon. The second most frequent cause of death was contact with objects or equipment. Agricultural occupations within agriculture (farming and ranching) had the second highest occupational death count.
- There were three delayed deaths in 2006, compared to five in 2008. Cases of delayed death (over 2 days following the date of injury) spanned from 10 days to 111 days.
- Compared to 2007 and 2008 data, a higher proportion of incidents involved women in 2009 (8%, compared to 4% and 5%, respectively). Violence accounted for three of five female fatalities in 2009.

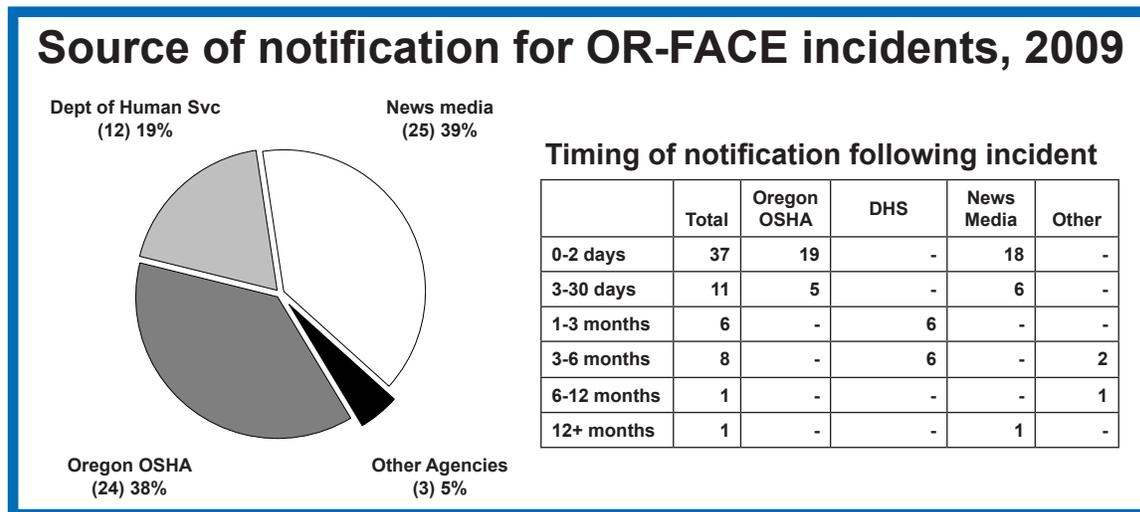
Core Activities

SURVEILLANCE

In 2009, earliest first notification for work-related fatalities originated mostly from news reports and Oregon OSHA. Primary data sources included death certificates, Oregon OSHA notifications, medical examiner reports, police reports, news reports, and Workers' Compensation records. Additional sources include photo disks, business profiles, hospital or emergency response records, and investigation reports from other sources.

ASSESSMENT

When a fatality is determined to be a FACE case, the incident is assessed sufficiently to produce an abstract. Case data are summarized and grouped by coded industry (NAICS), occupation (SOC), and event (OICS), as well as other variables such as age, race/ethnicity, and the specific source or setting of the injury as identified in the abstract. The data are then analyzed for trends and priority areas of concern are highlighted.



Core Activities

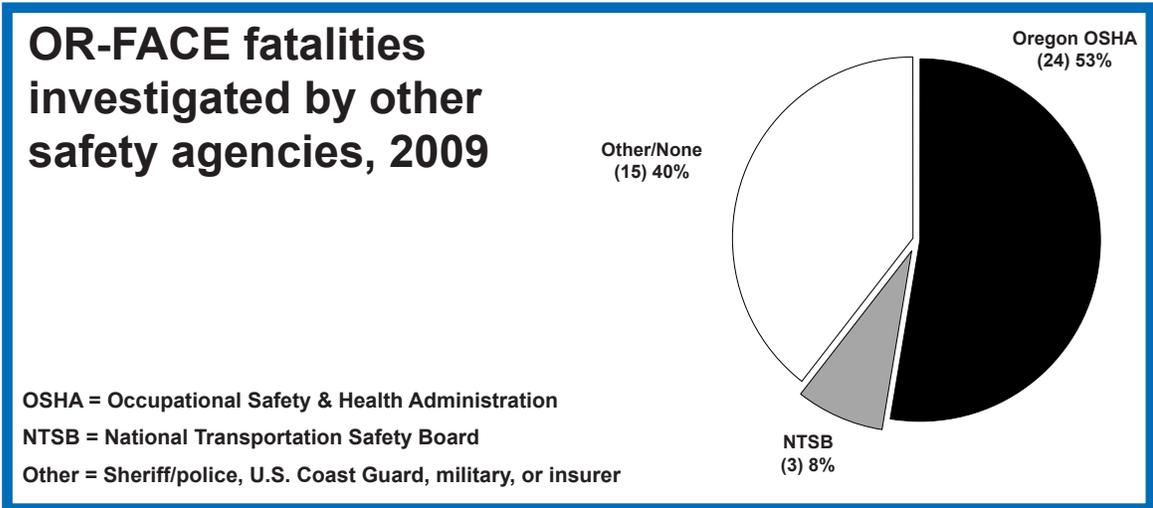
INVESTIGATION

OR-FACE investigation reports continue to be produced by independent investigators, in collaboration with FACE staff. Investigation reports seek to produce in-depth information and draw attention to fatality prevention priorities. The first 2009 investigation was about the death of a construction worker crushed in a pinch point on a backhoe between the rear boom arm and the raised stabilizer. The second investigation was about the death of a logger, working as a chaser, who was killed when a yarder machine tipped over and crushed him. A third report published in 2009 investigated the death of a salesperson crushed when the forklift he was driving fell off the dock plate between a flatbed truck and a loading dock. Full investigation reports can be found at the OR-FACE website.



OUTREACH

OR-FACE staff engaged in a variety of outreach efforts in 2009. Publications for 2009 can be found on page 6. In March, OR-FACE presented findings at the Governor’s Occupational Safety and Health Conference. OR-FACE produced a video and facilitated a discussion session on occupational hazards and safety specific to young workers for the Health Careers Panel for Tomorrow’s Health Professionals in April. In May, OR-FACE hosted the Annual National FACE Program meeting, bringing together federal and state public health workers and academic researchers from across the country. Conference participants presented updates on research activities, discussed regional trends and factors affecting worker fatalities, and shared outreach and education methods. In September, OR-FACE attended the Pacific Commercial Fisherman’s Festival in Astoria, Oregon, where the program highlighted personal flotation device use for the prevention of water-related fatalities at the OR-FACE booth.



Recent OR-FACE Publications

Investigation Reports

- Highway worker crushed by swinging backhoe boom
- Young logger killed when yarder topples during setup
- Salesman killed when forklift falls off truck loading ramp

Posters

- Commercial Crab Fishing in Oregon

Safety Booklet

- Young Workers: Stay Alive on the Job! (HA4 – 2nd edition)

Find published safety booklets, reports, and other information at the OR-FACE website (www.ohsu.edu/croet/face). New investigation reports are published regularly.

Oregon Fatality Assessment and Control Evaluation reports are for information, research, or occupational injury control only. OR-FACE is a research program, and has no legal authority to enforce state or federal occupational safety and health standards. The identity of the decedent, employer, and witnesses are not included in reports or alerts. FACE data are protected from disclosure under Oregon law (ORS 432.060).

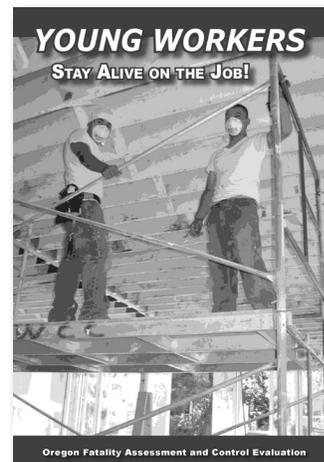
YOUNG WORKERS: Stay Alive on the Job!

In 2009, the OR-FACE team produced the second edition of *Young Workers: Stay Alive on the Job!* The first edition was published in October 2007. The new edition booklet provides an updated guide for young workers in Oregon, and tells some of the stories of young workers (age 12-24), killed on the job from 2003 to 2007 in Oregon. Of the 352 worker deaths in those five years, 45 were young workers.

The booklet contents include narratives of fatal injuries, highlights hazards, and

offers general safety tips and recommendations to help young workers stay alive on the job. Copies are available by request or at the OR-FACE website (www.ohsu.edu/croet/face).

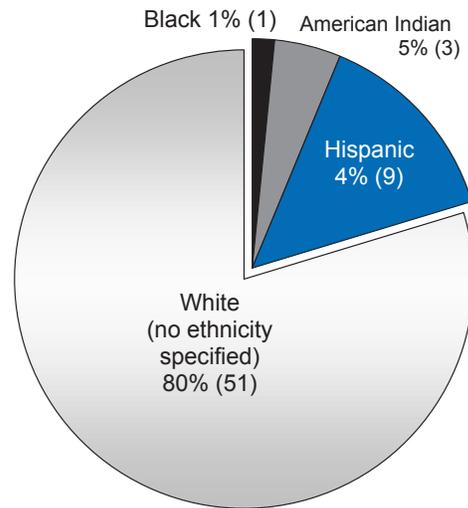
Traumatic injury is the leading cause of death for youth and young adults in the United States. Nationally, over 84,000 teenaged workers are injured on the job; that is approximately one teen injured every six minutes on the job. In Oregon, about 10 young workers die on the job each year.



Charts

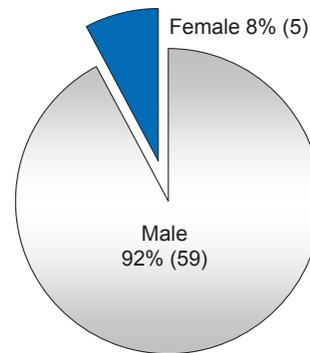
In 2009, there was a dramatic increase in Hispanic worker deaths (14% compared to 2% in 2008). Historically (2003-2008), work-related deaths among Hispanic workers averaged 7.4% of total cases. A spike in incidents occurred for women in 2009, almost doubling since 2008. The 2003-2008 average for female worker deaths was 6.7% of total cases (range = 4%-16%), west in 2003 and 2007 at 4% and the highest in 2004 at 16%. By industry, the combination of religious organizations, general automotive repair, and personal care services (defined by NAICS as “other services”) had the most fatalities. By event, contact fatalities rose to the second most frequent category, and only two falls occurred in 2009.

Worker Fatalities by Race/Ethnicity, 2009

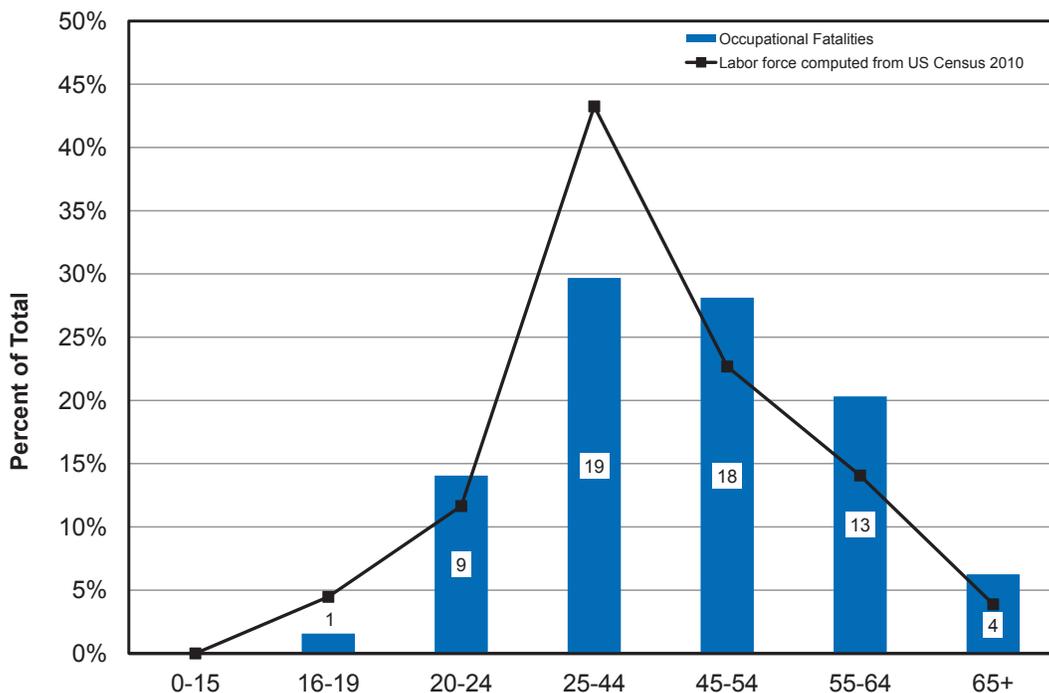


NOTE: In charts and abstracts, OR-FACE highlights independent risk factors by splitting combinations in a few of the original two-digit occupational codes: for industry (NAICS), Agriculture/Fishing/Forestry/Hunting; for occupation (SOC), Farming/Fishing/Forestry, Construction/Extraction, and Transportation/Material Moving. For event (OIICS), Transportation is divided into types: Motor Vehicles, Mobile Machinery, Air, and Water.

Worker Fatalities by Gender, 2009

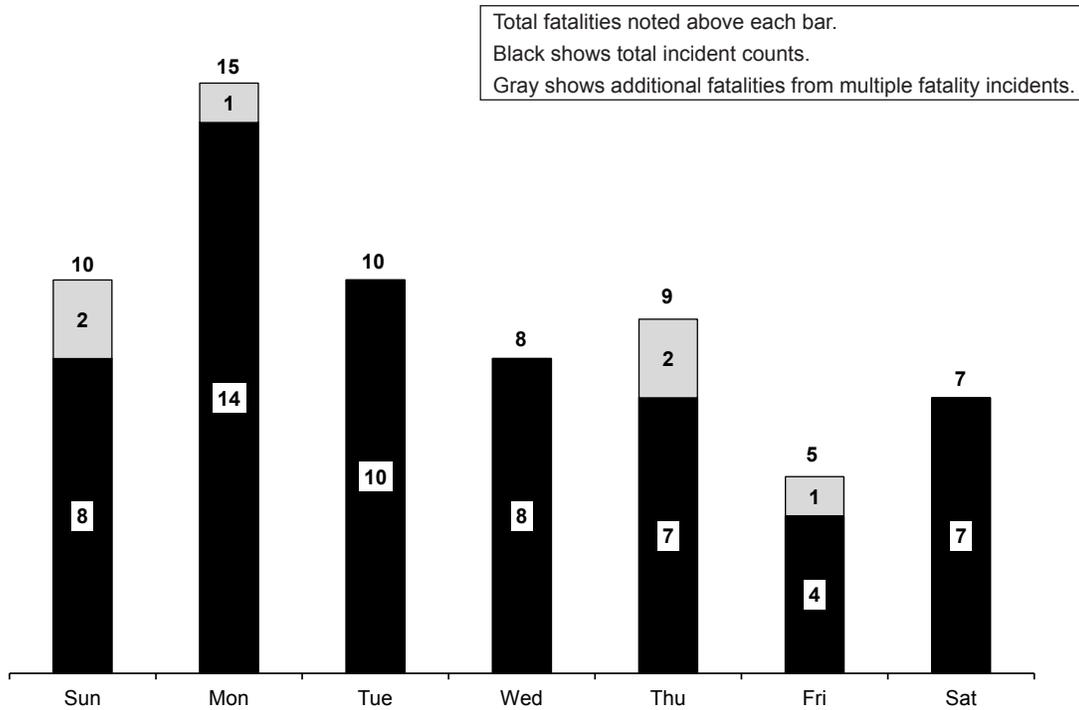


Occupational Fatalities in Oregon by Age, Compared to Age Distribution of Civilian Labor Force in Oregon, 2009

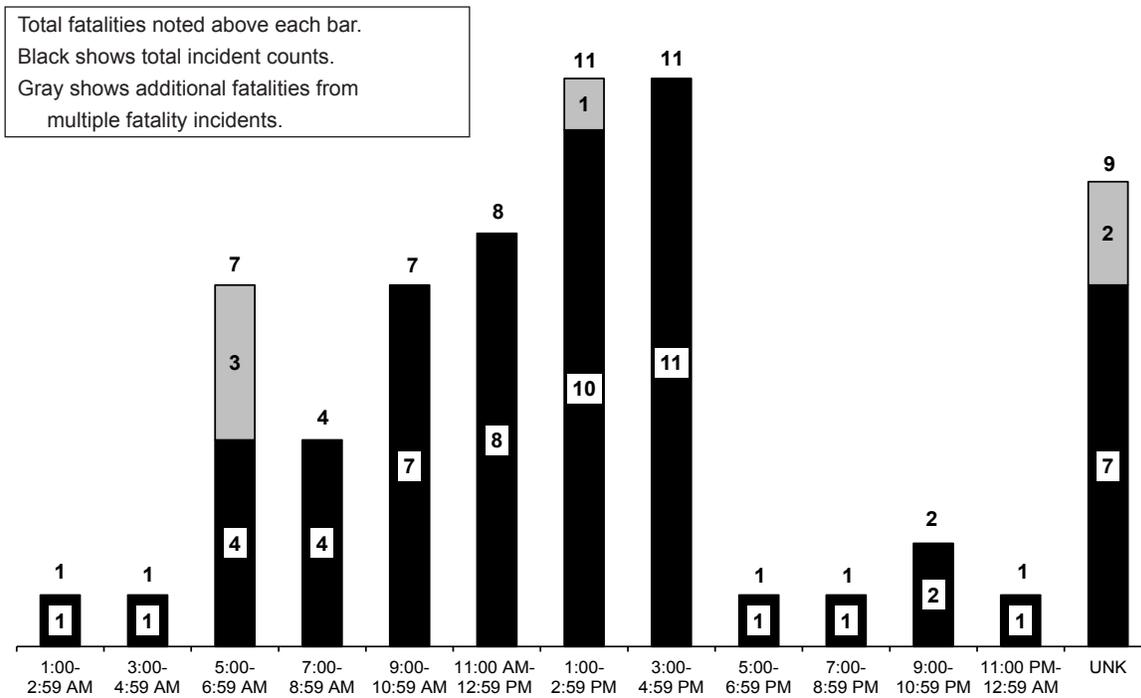


Charts

Worker Fatal Incidents and Total Fatalities by Day of Week, 2009



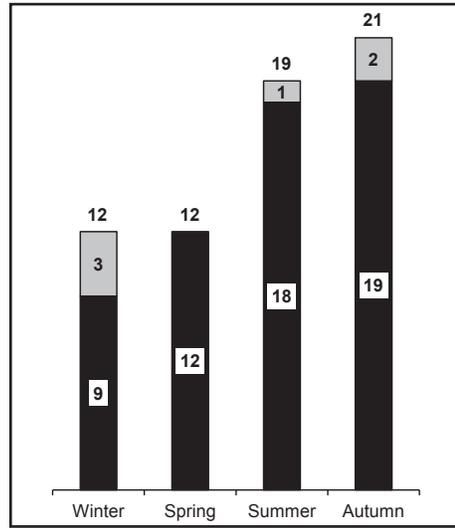
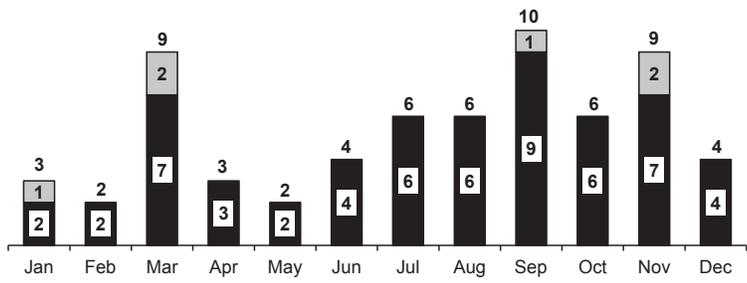
Worker Fatal Incidents and Total Fatalities by Time of Incident, 2009



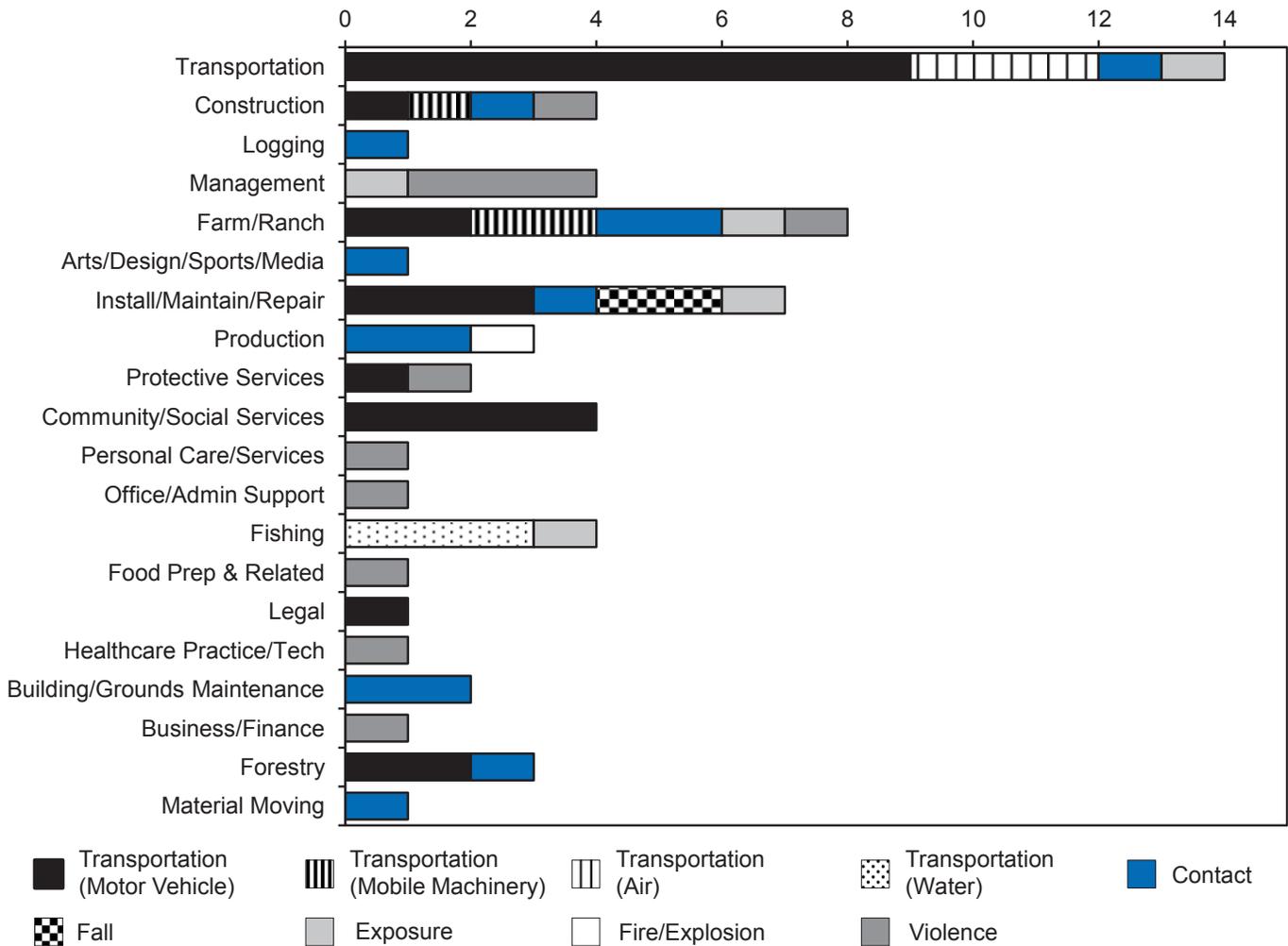
Charts

Worker Fatal Incidents and Total Fatalities by Month and Season, 2009

Total fatalities noted above each bar.
 Black shows total incident counts.
 Gray shows additional fatalities from multiple fatality incidents.

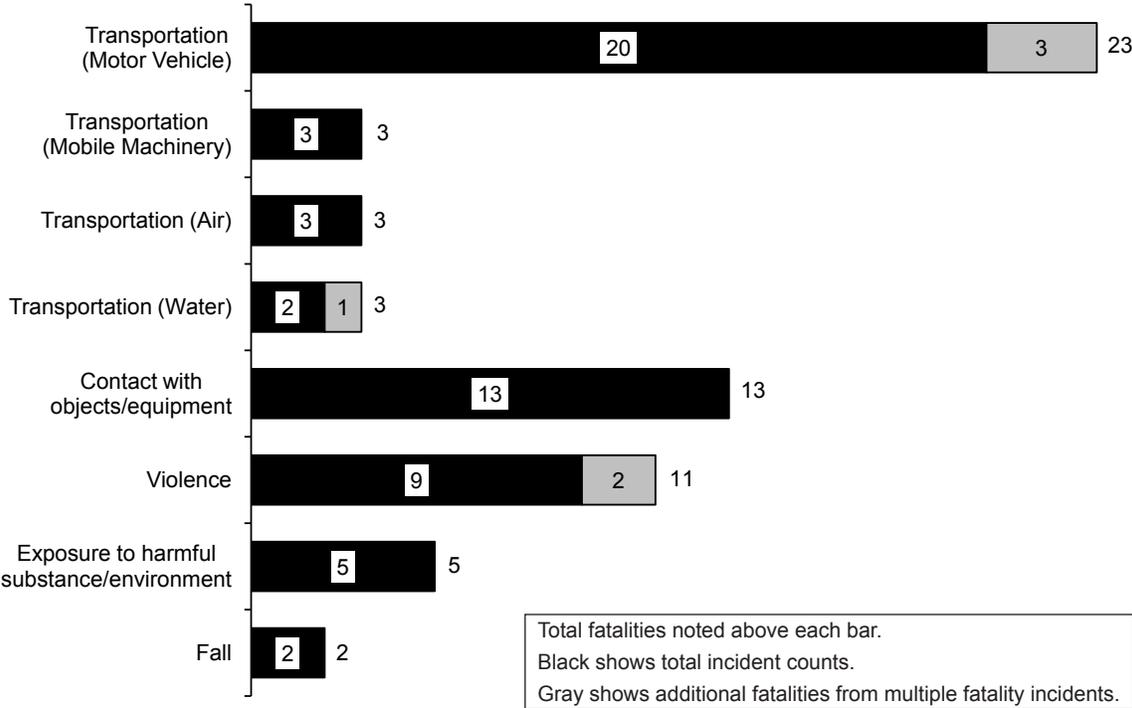


Worker Fatalities in Oregon by Occupation and Event, 2009

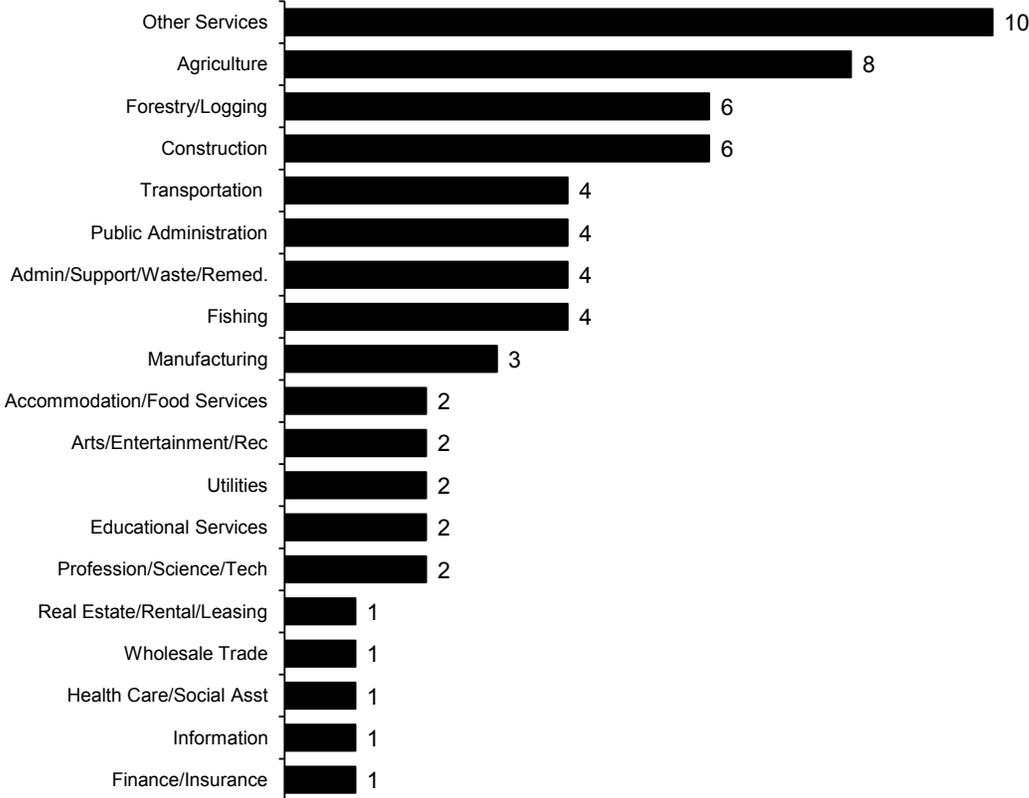


Charts

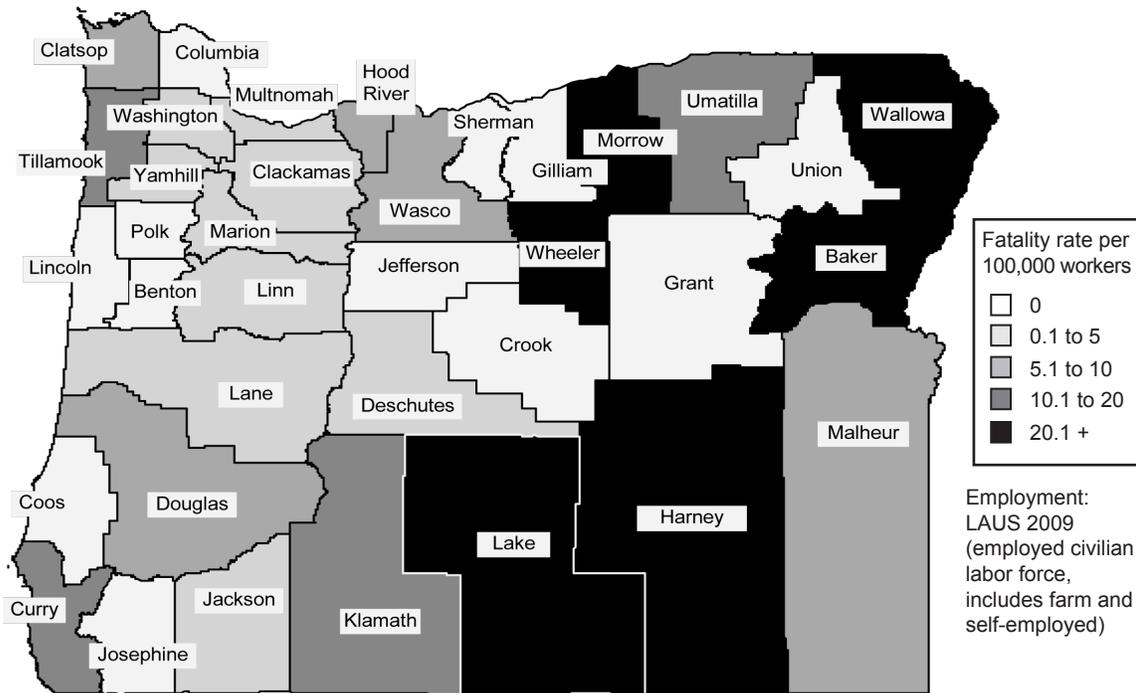
Worker Fatal Incidents and Total Fatalities by Type of Event, 2009



Worker Fatalities in Oregon by Industry, 2009



Oregon Counties



Oregon Population, Employed Labor Force, and Fatalities by County, 2009

County	Total population	Employed labor force	Worker fatalities
STATE	3,815,775	1,828,477	64
BAKER	16,152	6,914	6
BENTON	85,420	41,102	0
CLACKAMAS	374,729	188,867	3
CLATSOP	37,053	19,314	1
COLUMBIA	49,166	22,494	0
COOS	63,142	25,787	0
CROOK	21,126	8,831	0
CURRY	22,458	8,751	1
DESCHUTES	157,211	75,106	3
DOUGLAS	107,700	41,961	3
GILLIAM	1,871	1,148	0
GRANT	7,459	3,023	0
HARNEY	7,429	3,033	1
HOOD RIVER	22,234	12,642	1
JACKSON	202,807	93,882	3
JEFFERSON	21,646	8,417	0
JOSEPHINE	82,794	31,788	0
KLAMATH	66,289	28,052	3
LAKE	7,906	3,277	1
LANE	350,952	171,604	6
LINCOLN	46,045	21,352	0
LINN	116,114	50,968	1
MALHEUR	31,222	11,807	1
MARION	313,643	145,159	6
MORROW	11,181	5,103	2
MULTNOMAH	731,001	365,748	5
POLK	74,911	37,488	0
SHERMAN	1,771	917	0
TILLAMOOK	25,252	11,917	2
UMATILLA	75,558	35,185	4
UNION	25,720	11,329	0
WALLOWA	7,022	3,395	1
WASCO	25,142	12,534	1
WASHINGTON	525,641	274,188	7
WHEELER	1,442	580	1
YAMHILL	98,566	44,814	1

Source: Portland State University Population Research Center and LAUS employment data
 Retrieved: May 20, 2011

INFORMATION KEY

Description

Industry
Occupation

Date of Incident
County of Incident
OR-FACE Number

Abstracts

of fatal occupational incidents in Oregon by type of event

2009

Transportation – Contact – Violence – Exposure

Falls – Fire/Explosion

Transportation (Motor Vehicle)

<i>Speeding head on</i>	A 43-year-old natural gas service technician was killed after a car collided head-on with his work van. The technician was responding to a service call, when another driver, who was traveling at approximately 85 MPH through a curve in the road, crossed their car over the center lane and crashed head-on into the worker's vehicle. The technician was wearing a safety belt and both the driver and passenger-side airbags deployed. The worker died from head and chest injuries an hour later. The driver of the second car was pronounced dead at the scene.
Utilities Install/Maintain/Repair	
February 16 Marion OR 2009-02-1	
<i>Crushed by truck</i>	A 44-year-old truck driver was killed after he was run over in a parking lot by the rear wheels of a passing semi-truck. The truck driver had just completed a delivery to a restaurant and was standing on the rear lift gate of the truck, securing the rear door for departure. While he was on the lift gate, two semi-trucks hauling double trailers passed slowly by the worker. Shortly after the trucks passed, the truck driver was discovered lying on the pavement beside his truck by a passing motorist. He was gravely injured and reported that he had been run over. It is not known if he fell or jumped off the rear lift gate of his parked truck. He died on the scene from crushing injuries to his chest. A toxicology screen tested positive for methadone, however, it is not possible to determine whether drug use contributed to the incident.
Wholesale Trade Transportation	
March 24 Clackamas OR 2009-05-1	
<i>Youth pastor</i>	A 38-year-old pastor from Wyoming was killed after the pick-up he was driving rolled down a steep embankment. The pastor was returning home after a camping trip in Oregon with a youth group and was driving out of a ravine with seven passengers. He took a short cut up an unmarked road and was unable to negotiate the muddy, steep terrain. He tried to turn the pick-up around but one of the pick-up's rear tires went over the edge of the roadway. This caused the truck to roll off the roadway and continue rolling downhill. None of the occupants were wearing safety belts at the time of the crash. The pastor was ejected from the vehicle and died on site from chest trauma. All of the passengers survived the crash.
Other Services Community/Social Services	
March 31 Wallowa OR 2009-07-1	

Worker Fatalities – Transportation

<i>Work zone collision</i>	A 57-year-old owner of a residential construction business was killed after the van he was operating rear-ended a road maintenance truck parked in a highway work zone and then ran into a guardrail. The owner was traveling between jobs sites and was following a convoy of coworkers on the highway. He was driving between 60-65 MPH, and for an unknown reason, drove his van through the lane of traffic closed for construction where he struck the rear of the road maintenance vehicle. The work zone was well marked with warning signs beginning two miles before the construction area. The road maintenance vehicle was also equipped with a warning sign and flashing, bright lights. He was not wearing a safety belt at the time of the crash and his chest struck his vehicle's steering wheel and his head hit the windshield. He died at the scene from his injuries.
Construction Construction	
May 11 Hood River OR 2009-08-1	
<i>School van crash</i>	A 61-year-old school bus driver was killed after his vehicle crashed into a cement overpass pillar. The bus driver was transporting a student in an 8-passenger van and briefly fell asleep. The van left the roadway onto a grassy shoulder, awaking the driver. He then overcorrected his course, which caused the van to roll and flip into an overpass pillar. The van's roof collapsed on the victim's head and chest. The passenger was unharmed. Toxicology reports indicate a higher than usual dose of a common antidepressant, however, it is not possible to determine whether drug use contributed to the incident.
Educational services Transportation	
June 11 Linn OR 2009-11-1	
<i>Three-truck crash</i>	A 66-year-old semi-truck driver was killed in a three-truck collision on an interstate highway. Due to construction delays, traffic had slowed, and two semi-trucks traveling ahead of the victim were working their way through traffic. Both trucks ahead of the victim had their hazard lights on and were traveling below 5 MPH. For an unknown reason, the victim failed to slow and rear-ended the semi-truck immediately in front of him, which was then pushed forward striking a third semi-truck. The impact of the first crash into the trailer caused intrusion into the victim's cab that crushed his abdomen. All drivers were wearing safety belts, and the drivers of the two trucks ahead of the victim reported soreness but had no visible injuries. A witness to the crash did not observe the victim use his brakes and estimated that his truck was traveling at 45 MPH. The victim died from abdominal trauma shortly after the collision.
Transportation Transportation	
June 14 Lane OR 2009-12-1	
<i>Water truck rollover</i>	A 20-year-old water tank truck driver was killed after the truck he was driving rolled and crushed him inside the cab. The victim was hauling a half-full 2,000-gallon water tank to a new logging site. He was driving on a steep logging road and lost control as he was making a turn toward a highway intersection. The truck rolled onto its side and the force of the crash collapsed the cab. Witnesses observed smoke emitting from the tires after the driver applied the brakes and heard the victim use the horn. Coworkers noted the truck was old and often difficult to drive. It was a 1959 truck with a twin stick transmission. The victim obtained his CDL less than 2 months before the crash. The driver died from multiple blunt force injuries.
Forestry/Logging Transportation	
August 3 Jackson OR 2009-19-1	

Worker Fatalities – Transportation

<i>Log truck off road</i> Forestry/Logging Transportation August 7 Lane OR 2009-20-1	A 59-year-old driver of a loaded log truck was killed after he lost control and crashed. The victim was driving on a gravel logging road with an 8% downgrade when he lost control and ran off the road. His truck overturned and impacted an embankment above the roadway. The truck and victim were found fully engulfed in flames by another log truck 30 minutes after the crash. Investigators did not find signs of abrupt wheel movement or braking. The victim died from chest trauma.
<i>Truck on grade</i> Construction Transportation August 19 Jackson OR 2009-21-1	A 46-year-old dump truck driver was killed after a high impact crash. The dump truck driver was hauling cinders in two dump trailers attached to a semi tractor on a 2-lane highway. The driver lost control while making a turn on a downhill slope, left the roadway, and rolled backward off an embankment. Before his death, the victim told a witness at the scene he had lost control of his truck due to brake failure. This was the victim's second day on the job and he did not hold the proper endorsement to drive this specific truck-trailer combination. The victim was extricated from inside the cab but died at the scene from blunt force injuries.
<i>Asleep at the wheel</i> Forestry/Logging Transportation August 26 Klamath OR 2009-23-1	A 53-year-old log truck driver was killed after he likely fell asleep, drifted off the shoulder, and collided with a large tree. During the crash the log truck, including a loaded trailer, overturned onto its side, which caused some of the load to shift forward into the cab. The driver's chest and abdomen were crushed upon contact with the load. Prior to the event, the victim's logbook indicated he had exceeded maximum driving and duty hours twice during the previous eight days.
<i>Drowsy driving</i> Transportation Transportation April 3 Deschutes OR 2009-25-1	A 46-year-old courier was killed after his car veered off the highway, ran into a power pole, and erupted into flames. The victim delivered medical supplies on a daily route of approximately 400 miles, 4 days per week. He was returning home after completing a delivery and was about 20 miles from his home, when, apparently, he fell asleep and crashed his car into the power pole. He died from blunt force trauma. His blood alcohol content was 0.04; however, it is not possible to determine whether drug use contributed to the incident.
<i>Backing dump truck</i> Admin/Support/Waste/ Remed. Protective Services September 26 Washington OR 2009-30-1	A 50-year-old flagger at a construction site was killed after he was run over by a dump truck backing into position to offload asphalt. The victim walked into the path of the oncoming truck in order to direct traffic. Both the dump truck operator and flagger were not aware of one another's positions and the dump truck backed over the flagger. The flagger was not carrying a sign paddle, a CB radio, a whistle, or air horn and was not working in an established flagger station at the time of the incident.

Worker Fatalities – Transportation

<p><i>Head-on collision</i></p> <p>Profession/Science/ Tech Legal</p> <p>September 30 Harney OR 2009-32-1</p>	<p>A 32-year-old attorney was killed after his vehicle crossed the centerline of a highway and collided head-on with a pick-up pulling an empty livestock trailer. The victim was driving to a hearing in a neighboring county. The decedent's vehicle sustained extensive front-end damage during the crash. Witnesses to the crash noted the victim was driving with excessive speed and inattention.</p>
<p><i>Raised bridge</i></p> <p>Public Administration Install/Maintain/Repair</p> <p>April 25 Multnomah OR 2009-35-1</p>	<p>A 44-year-old vacuum truck driver was killed after he crashed his truck into a raised bridge and sustained facial fractures. The victim was preparing to clean the northbound section of a bridge roadway and was given the "all clear" to proceed. He was the lead for the crew and accelerated to 20-25 MPH, however, it was still dark outside and the subject did not see that the bridge was still slightly lifted and drove head-on into the lift section of the bridge. He sustained multiple facial fractures during the accident. Approximately 4 months later, he underwent a second reconstructive surgery and died from complications of his multiple facial fractures.</p>
<p><i>Onion trailer fall</i></p> <p>Agriculture Farm/Ranch</p> <p>October 17 Klamath OR 2009-39-1</p>	<p>A 46-year-old farm laborer was killed after he was run over by the front tires on a loaded onion trailer. The victim had just started his workday and approached the tractor to climb onto the attached onion-harvesting platform. As the tractor was still in motion, the victim either climbed onto or tried to jump over the trailer dolly, fell, and was crushed by the trailer's tires. The victim's blood alcohol was 0.23 and he tested positive for methamphetamine.</p>
<p><i>Low visibility crash</i></p> <p>Forestry/Logging Forestry</p> <p>January 30 Marion OR 2009-41-2</p>	<p>Two Hispanic agricultural harvesters, ages 17 and 23, were killed when the pick-up they were riding in crashed into a jack-knifed semi that was blocking traffic on the highway. At the time of the crash, the pick-up had six occupants and the driving conditions were dark with heavy fog. The victims were hired by the driver of the pick-up to gather foliage in the forest to be used for flower arrangements. Both victims were in the cab; the driver-victim was not wearing a safety belt, the passenger-victim was belted. The cab was not equipped with an airbag. Of the four surviving occupants, two were in the rear jump seats (most likely unbelted) and two were riding in the truck bed.</p>
<p><i>Van on black ice</i></p> <p>Other Services Community/Social Services</p> <p>November 12 Baker OR 2009-43-3</p>	<p>Three victims, ages 20, 23, and 24, were among sixteen passengers in van involved a highway crash. All of the occupants in the vehicle were under 26 years old. The passengers were from a church group from Colorado traveling to Portland to raise funds for their ministry. Their van was traveling at approximately 80 MPH and hit a patch of ice on the roadway. The van skidded off the road and overturned in a ditch. The victims were not wearing safety belts and died from crash-related injuries.</p>

Worker Fatalities – Transportation

<i>Trucks in heavy snow</i>	A 49-year-old commercial truck driver was struck and killed by a passing truck while he was putting chains on a vehicle during a heavy snowstorm. The victim was driving in a multi-truck convoy on an interstate highway, when all the trucks stopped to chain their tires. The victim pulled off onto a cloverleaf off-ramp to assist another truck driver in chaining up his vehicle. The victim and another trucker who worked for the same company were wearing reflective jackets while applying chains to their rigs, but visibility was poor due to falling snow. A third truck from another company exited onto the off-ramp and its trailer slid, hitting both men. The victim was pinned under the passing truck's wheels and was dragged. The other truck driver survived his injuries.
Transportation Transportation	
December 15 Malheur OR 2009-49-1	

<i>Hay trailer fall</i>	A 54-year-old cattle rancher was killed after she was run over by a heavy hay trailer. The victim was operating a pick-up, with an attached hay trailer, to feed and track cattle into a field to prepare for a cattle shipment the following morning. While performing this task, she apparently fell from the moving hay trailer and was struck by the vehicle, fatally crushing her back and pelvis. Her blood alcohol level was 0.28.
Agriculture Farm/Ranch	
October 11 Lake OR 2009-54-1	

<i>Pick-up collision</i>	A 42-year-old diesel mechanic was killed after his truck was struck by another car on the highway. The victim was returning home in a company pick-up from a work assignment when another vehicle crossed the centerline and struck the victim's truck head-on. Prior to the incident, witnesses noted the offending vehicle speeding and passing "poorly." The decedent died from injuries sustained during the crash. His wife and daughter, who were passengers, survived the collision.
Other Services Install/Maintain/Repair	
October 11 Umatilla OR 2009-55-1	

Worker Fatalities – Transportation

Transportation (Mobile Machinery)

<i>Crushed by road grader</i>	A 51-year-old construction foreman was killed after he was crushed by the road grader he was operating. The foreman was in the process of grading a section of a steep forest road when, for an unknown reason, the grader began to roll backward down the road, and the worker either jumped from or was ejected by the grader. The foreman's chest was crushed by the grader's left front tire. The foreman was found deceased by a coworker several hours later. Six days before the incident, an equipment inspection demonstrated the grader had a working safety belt, roll-over protective structure (ROPS), and functional brakes.
Construction Construction	
May 9 Tillamook OR 2009-09-1	

<i>Orchard ATV</i>	A 49-year-old orchard foreman was killed after the ATV he was operating rolled over and crushed his head and neck. The foreman was returning to a barn after he finished nightly irrigation duties when he apparently lost control of the ATV and over-corrected the steering. This caused the ATV to roll and land on top of the victim. He died immediately from trauma to his head and neck. At the time of the crash, the victim was not wearing a helmet and a toxicology report indicated his blood alcohol content was 0.22.
Agriculture Farm/Ranch	
July 22 Wasco OR 2009-17-1	

<i>Tractor rollover</i>	A 25-year-old ranch hand at a cattle ranch was killed after he was pinned by a tractor. The decedent was driving a tractor transporting rock from a quarry to patch holes in a dirt road on a rural farm. During his second trip of the day, he was driving down a steep, rough, washed-out section of the road hauling 4,600-5,000 pounds of shale in an attached flatbed trailer. It appears from tire marks that he braked and sharply turned to the right, causing the tractor to roll and crush his chest and lower body. Reports indicate there was no tractor-training program or safety belt policy in place, and that the tractor in the incident did not have rollover protection.
Agriculture Farm/Ranch	
September 28 Jackson OR 2009-31-1	

Transportation (Air)

<i>Maneuver malfunction</i>	A 34-year-old certified flight instructor was killed after a helicopter piloted by his student crashed into terrain. The flight instructor was rating a student pilot, who had planned to practice autorotations with power recoveries, when the crash occurred. A post-crash inspection found that the helicopter was not mechanically capable of this maneuver because the main rotor could not reach the required RPM. This mechanical limitation likely resulted in a stall and immediate, uncontrolled descent of the helicopter. Both the instructor and student sustained fatal injuries from the impact and post-crash fire.
Educational Services Transportation	
September 20 Washington OR 2009-29-1	

Worker Fatalities – Transportation

<i>Plane towing glider</i>	A 41-year-old commercial pilot was killed during a glider towing operation. The victim was in the process of testing landing and takeoff procedures and refining a safety plan in preparation for starting a sailplane and banner-towing business. Witnesses reported that shortly after takeoff, it appeared that the glider overtook and moved ahead of the tow airplane as the tow plane descended. Witnesses also reported that the tow plane appeared to be slow, and approximately 20-feet above the ground, when it abruptly nosed over and impacted terrain. The tow plane then burst into flames and caused a grass fire in a large field. The glider pilot returned to the airport and landed without further incident. The victim's toxicology screen tested positive for marijuana, cough suppressants, and allergy medication.
Profession/Science/ Tech Transportation	
August 23 Lane OR 2009-36-1	

<i>Pole collision</i>	A 37-year-old commercial helicopter pilot was killed when the helicopter he was operating collided with a wooden power pole. Earlier in the day, the pilot had assisted in the placement of several pulleys onto power poles. The plan was that once all the pulleys were installed, the helicopter would place ropes in the pulleys, which the ground crew would use to pull power lines into position on the poles. At the time of the incident, the helicopter was operating in a 32.4-foot space between the top of the power pole and the mounted pulley. The pilot had just finished placing a rope in the second mounted pulley when the five main rotor blades came into contact with the power pole. Each of the blades separated from the hub. The impact caused the helicopter to crash to the ground and roll 30-feet down a 30-degree slope. The victim died immediately from head and neck injuries.
Construction Transportation	
October 12 Wheeler OR 2009-33-1	

Transportation (Water)

<i>Fishing boat capsize</i>	Two fishermen, ages 22 and 46, were among a five-person tribal fishing crew setting nets in a river for salmon when they drowned. The fishermen, who were fishing in a 16-foot long open boat, had just moved upriver due to rough water conditions. The vessel was hit by two 6-to-8-foot waves in a 25 MPH wind and capsized roughly 240 feet from the shore. The two victims were discovered separately three days later. No personal flotation devices were onboard the vessel. Both victims' toxicology screens tested positive for alcohol at levels less than 0.08.
Fishing Fishing	
September 14 Morrow OR 2009-37-2	

<i>Crab vessel overboard</i>	A 33-year-old crab fisherman was killed after he was pulled off of a 75-foot crab boat in the Pacific Ocean about 6.5 miles NW of the mouth of the Columbia river. He was found underneath the vessel entangled in the propeller shaft. He was wearing rain gear and a jacket, but no personal flotation device, at the time of the incident.
Fishing Fishing	
December 3 Clatsop OR 2009-48-1	

Worker Fatalities – Contact

Contact with objects/equipment

Waste compactor A 61-year-old sanitation worker was killed after he was crushed between a compactor blade and front wall inside the compactor box of a waste truck. He was working alone, operating a truck with an arm that grabbed curbside totes and dumped their contents into the compactor box. A witness saw the worker exit the truck cab while the truck was still running, climb up the side of the truck, and look down inside the compactor box, likely to see if the compactor was jammed. After the worker climbed down, he opened the compactor access door and entered the compactor box to remove the obstruction. As he cleared the jammed material, the hydraulic mechanism designed to push trash to the rear of the compactor box recovered to its original forward position. The worker was crushed and died immediately from chest trauma. A post-incident investigation found that the compactor box access door interlock switch, which shuts down the power to the compactor crushing mechanism, was broken. Additionally, the power take off unit that controls the movement of the compactor blade was not turned off before the worker entered the truck bed.

Admin/Support/Waste/
Remed.
Material Moving

March 9
Lane
OR 2009-03-1

Caught by lathe bolt A 63-year-old journeyman machinist was killed after he was entangled in the rotating shaft of a 40-foot lathe that resurfaced rollers for the pulp and paper industry. The machinist was assigned to tool and polish a damaged roller. The rollers were joined with the lathe by numerous hex bolts, about 1 inch in diameter, which protruded 2-3 inches around the circumference of the cat head attachment. The machinist used a hand grinder to do his work and reached over the flare ends of the rotating shaft. At some point, his coveralls caught on the unprotected, rotating bolts of the cat head. The moving roller rapidly twisted his clothing and body up and around the machine, causing multiple traumatic injuries. He died immediately.

Manufacturing
Production

June 14
Multnomah
OR 2009-13-1

Tree removal A 49-year-old free-lance arborist was killed after he was struck by a falling tree. The arborist was hired by a homeowner to remove seven trees from their residential property. The victim had been cutting trees with a coworker for four days. The victim and his coworker were making the final cut to a 30-to-35-foot tall fir tree. When the tree began to fall, it hit the top of an adjacent tree stump that was roughly 10-15 feet tall. The felled tree ricocheted off the stump and struck the victim in his chest. He died immediately from the impact. The victim's toxicology screen was positive for amphetamines, however, it is not possible to determine whether drug use contributed to the incident.

Admin/Support/Waste/
Remed.
Building/Grounds
Maintenance

June 14
Clackamas
OR 2009-14-1

Worker Fatalities – Contact

Chainsaw sculptor A 58-year-old wood sculptor was killed after his throat was struck by a chainsaw. The artist was using a 23-inch long chainsaw to carve a wooden sculpture in a studio located at his residence. At some point, the chainsaw blade made contact with the artist's neck and severed both his carotid and jugular arteries. The victim died quickly from rapid blood loss.

Arts/Entertainment/Rec
Arts/Design/Sports/
Media

March 24
Curry
OR 2009-15-1

Crushed by boulder A 40-year-old logger was killed after a large rock rolled downhill and struck his torso. The logger was working in a ravine at a very steep and rocky logging site. He was operating a power saw in order to notch a stump. Apparently, the noise from the power saw prevented the victim from hearing the rolling boulder, which had been knocked loose by a log pulled up by a yarder. The victim's nearby coworkers shouted warnings but the noise from the saw overwhelmed their calls. The boulder struck the victim in the back, causing severe trauma that killed him.

Forestry/Logging
Logging

July 20
Douglas
OR 2009-16-1

Pole falls off trailer A 48-year-old journeyman lineman was struck in the head and chest by a 55-foot long, 1,500 lb. utility pole, that fell off of a trailer, and died 10 days later. The lineman was working with three other crewmembers replacing telephone poles that were burned in a fire. The crew was in the process of loading the replacement utility poles onto a trailer. After loading the fourth pole, the victim helped to get the rigging chain free of the pole then reattached the chain eye to the load hook. He gave the signal for the line truck operator to come up on the load line. As the line was being pulled, it caught the newly loaded pole, which came free and rolled off the trailer. The pole bounced off another pole that was on the ground and struck the victim from behind. The pole hit the lineman's head and came to rest on his torso. He was transported to the hospital and died from head injuries 10 days later. The trailer frame had one cradle for holding a single pole, with no chocks on the frame. The victim was newly hired and had worked for his employer for five or six days before the incident.

Utilities
Install/Maintain/Repair

July 14
Umatilla
OR 2009-18-1

Dead treetop A 52-year-old forest service worker was killed after he was struck in the head by a falling tree. The victim was working with law enforcement to remove a marijuana growing operation in a forest. As the victim was standing and talking to other workers in a field where a helicopter was being used to receive and lift bales of marijuana away, a dead tree broke off at its base and struck him in the head. The victim was wearing a helmet, but died immediately from head trauma.

Public Administration
Forestry

August 20
Baker
OR 2009-22-1

Hazelnut harvester bin A 59-year-old orchard worker was working alone as a harvester in a hazelnut orchard and died after he was caught in an unguarded auger of a hazelnut harvester bin. The victim tried to clear the device to make room for more nuts when the auger caught the lower part of his coat. The auger entangled the coat and suffocated him. The victim's toxicology screen was positive for methamphetamine, however, it is not possible to determine whether the drug adversely impacted the victim.

Agriculture
Farm/Ranch

October 13
Lane
OR 2009-38-1

Worker Fatalities – Contact

<i>Nail ricochet</i>	A 39-year-old framing carpenter was killed after a nail penetrated his head. The victim was working on a ladder using a nail gun to install a metal strip to join wall and roof construction. The victim reached up at head-height to attempt to nail through pre-drilled holes in the strip. Instead of hitting a pre-drilled hole, a nail hit metal and ricocheted into the victim's head. He died two days later. Reports indicate that the task was usually accomplished with a hammer, not a nail gun. The victim was not wearing safety glasses with side guards, but based on the point of penetration of the nail, it is not clear that such glasses would have prevented the incident.
Construction Construction	
November 30 Yamhill OR 2009-46-1	
<i>Sawmill un-scrambler</i>	A 39-year-old sawmill stacker operator was killed after he became entangled in running machinery. There were no witnesses to the incident, but evidence suggests the victim was operating a lumber un-scrambler and crawled under the machine either to reattach a loose conveyor track chain or to remove wood debris. While the victim was under the machine, the machine cycled and drug him up through an opening about 10 inches wide. Post-incident reports indicate the system had not been locked/tagged out, and that the only way the victim could have been cycled through the machine was if someone had stepped on the treadle that moves the chain. The victim did not have authorization to perform repairs, as company policy required that when un-scrambling chains went off track, two-person teams of millwrights were the only authorized personnel to perform this type of repair.
Manufacturing Production	
December 28 Douglas OR 2009-50-1	
<i>Wire fragment</i>	A 49-year-old owner and operator of a lawn care business was killed after a wire fragment penetrated his chest. At the time of the incident, the subject was operating a Bobcat skid steer mower, mowing brush around trees, when the machine unearthed and shredded an electrical wire. The piece of the wire then flew and struck the victim in the upper right chest, causing his lung to hemorrhage.
Admin/Support/Waste/ Remed. Building/Grounds Maintenance	
October 14 Lane OR 2009-51-1	
<i>Snowplow jam</i>	A 60-year-old highway snowplow driver was killed from a head injury. The employee was attempting to adjust jammed springs on a snowplow blade with a 6-foot pry bar. The plow blade abruptly sprung back, causing the pry bar to strike the victim in the head. Reports indicate that the same plow had jammed (cammed over) previously. There were no manuals, written procedures, or any training specific to adjusting springs available or provided to the worker describing hazards or procedures to follow when a snowplow was cammed over.
Public Administration Transportation	
November 30 Deschutes OR 2009-52-1	
<i>Chainsaw kickback</i>	A 72-year-old self-employed tree cutter was killed as a result of a severe wound caused by a chainsaw. On the day of the incident, the victim was using a chainsaw to cut firewood on a ranch to prepare it for sale. He lost control of the chainsaw causing it to pierce his leg and consequently died of rapid blood loss. He was working alone.
Agriculture Farm/Ranch	
November 28 Baker OR 2009-53-1	

Worker Fatalities – Violence

Violence

<i>Auto shop homicide</i>	An owner and his 2 business associates, aged 70, 56, and 58, respectively, were killed after an assailant shot them multiple times and set fire to the custom hot rod car shop where they all worked. The assailant robbed the business before leaving the scene.
Other Services Management	
March 15 Marion OR 2009-06-3	
<i>Ladder suicide</i>	A 49-year-old construction worker was killed after he hung himself with a bungee cord from a rafter inside a workshop at a residential worksite. The worker called a friend to talk about his suicidal intentions and told him he was on a ladder preparing to kill himself. The worker said he was experiencing financial, legal, and marital distress and had attempted suicide several times within the last year. He spoke to his friend for about 30 minutes and told him he was coming down from the ladder and needed to end their conversation to do this. At this point, he hung himself, rather than come off the ladder. Approximately five minutes after the call ended, his friend was the first to arrive at the worksite and discovered the suicide.
Construction Construction	
March 10 Deschutes OR 2009-10-01	
<i>Bartender homicide</i>	A 31-year-old bartender was killed after he was shot in the chest during a robbery that occurred shortly before the bar closed for the night. Although there was an alarm box with a police button for employees to use in case of a robbery (if employees felt it was safe to do so), reports indicate this button was not attempted to be used during or after the incident. The victim died immediately from the gunshot wound.
Accommodation/Food Services Food Prep & Related	
September 3 Klamath OR 2009-26-1	
<i>Motel homicide</i>	A 54-year-old owner and operator of a motel was killed after he was shot in the chest during a robbery. Three assailants, who were later arrested, entered the residence attached to the office of the motel and shot the owner once in the chest during the robbery. The victim's son found his father shot and called the police.
Accommodation/Food Services Management	
September 10 Hood River OR 2009-27-1	
<i>Gored by bull</i>	A 68-year-old male was killed after he was attacked by a bull. He was tending to livestock duties on his son's rural property when the bull charged and fatally gored him. The cause of the bull's behavior is unknown. The bull weighed approximately 1,200 pounds.
Agriculture Farm/Ranch	
July 5 Clackamas OR 2009-40-1	

Worker Fatalities – Violence

Lab-tech homicide A 36-year-old technician for a drug-testing laboratory was killed when her estranged husband entered her workplace and shot her nine times. The assailant died from a self-inflicted gunshot wound. Reports indicate that one week prior to the incident, the victim and assailant were separated and that the assailant may have received a restraining order from the victim. Two of the victim's coworkers were shot during the incident, but survived.

Health Care/Social Asst
Healthcare Practice/
Tech

November 10
Washington
OR 2009-42-1

Stylist homicide A 20-year-old hairstylist at a salon was shot and killed by her ex-boyfriend. The assailant called earlier in the day to ask whether the victim was working that day. Shortly before the victim's shift was complete, the assailant entered the salon and they moved into the break room to have a conversation. They began to fight and the assailant shot her multiple times, then shot himself once in the head. According to news reports, the ex-boyfriend had a history of domestic violence and the victim had ended the relationship one month before the shooting. He had been stalking and harassing her since the break-up and the victim was in the process of filing a restraining order.

Other Services
Personal Care/Services

November 29
Washington
OR 2009-45-1

Basement suicide A 52-year-old owner of a financial investment group died from a self-inflicted gunshot wound to the head. He killed himself in the basement of his business. The decedent was being treated for depression.

Finance/Insurance
Business/Finance

December 5
Baker
OR 2009-56-1

Firefighter suicide A 52-year-old city firefighter died after he shot himself with a shotgun. The victim had been experiencing work-related stress over a forced resignation, and killed himself at his home the night before his termination date. The decedent also had a history of depression and previous suicide attempts.

Public Administration
Protective Services

July 30
Washington
OR 2009-58-1

Worker Fatalities – Exposure

Exposure to harmful substance/environment

Off dock into water A 57-year-old maintenance and repair worker at a marina was killed after he fell off the dock and drowned. The victim had worked on a casual basis for several years doing cleanup and small jobs around the marina where he was also a tenant. The morning of his death, the victim's supervisor saw him heading to do repair work on a nearby dock finger, and reported that the victim was holding a chainsaw and hand tools. Later in the day, a tenant noticed the worker's absence and informed the supervisor of his disappearance. A search was initiated that evening and his body was recovered in nearby waters four days later. The victim was not wearing a personal flotation device.

Arts/Entertainment/Rec
Install/Maintain/Repair

March 3
Multnomah
OR 2009-04-1

Clam diver A 42-year-old clam diver drowned while fishing for clams on his own. The victim borrowed an inflatable boat and diving equipment to fish for clams in the bay. When he did not return as expected, the boat owner requested that the Coast Guard search for the missing diver. The Coast Guard was able to locate the boat. The motor that pumped air to the diver was not running when they arrived. The diver was found underwater attached to the air hose, and was unresponsive when they pulled him out of the water. The boat owner speculated the diver's weight belt might have caught on the hose as he tried to surface, trapping him in the water.

Fishing
Fishing

January 16
Tillamook
OR 2009-24-1

Heat exposure A 25-year-old laborer on a melon farm was killed as a result of outdoor heat exposure. The victim became very tired toward the end of the workday, and was told to rest in the shade and drink water. He chose not to rest and began to walk home. He was found unconscious and seizing in a ditch near the farm. Reports indicate he was coming off a four-day alcohol and drug binge, which may have magnified the adverse effects of heat exposure. The daily high was approximately 99 degrees Fahrenheit.

Agriculture
Farm/Ranch

July 11
Umatilla
OR 2009-34-1

Towboat drowning A 23-year-old towboat worker was found drowned in a river after he was reported missing by his boss. Prior to the incident, the victim called his father and informed him that he was going to spend the night on the boat so he could be at work early the next morning. Sometime during the evening, the victim fell through a dimly lit 2.5 to 3-foot gap between the boat and dock. The victim did not know how to swim. His blood alcohol content was 0.30.

Transportation
Transportation

September 16
Multnomah
OR 2009-47-1

Storage-facility drowning A 57-year-old live-in manager of a storage facility died after he fell headfirst into a bucket of water he used to extinguish cigars. The cause of death was drowning. It is unknown what caused the decedent's fall, but his blood alcohol was 0.36.

Real Estate/Rental/
Leasing
Management

April 15
Washington
OR 2009-57-1

Worker Fatalities – Falls, Fire/Explosion

Falls

<i>Residential rooftop fall</i>	A 43-year-old service technician for a satellite TV provider was killed after he fell off of a rooftop. At the time of the incident, the victim was working with his manager to relocate a satellite dish for a customer when he lost his balance, slid approximately 15 feet down the roof, and then fell 9-10 feet further to the ground where he landed on his head. The satellite dish had been moved and secured, and the only step remaining was to connect the coaxial cable. No electrical tools or wires were near the site where the worker fell. Both employees were wearing roof cleats, though neither wore fall protection.
Information Install/Maintain/Repair	
September 15 Washington OR 2009-28-1	
<i>Mill scaffold fall</i>	A 60-year-old millwright was killed after he sustained fatal brain damage caused by a fall. On the day of the incident, the victim was in the process of adjusting a piece of machinery used to finish plywood. The repair required the victim to work on a platform above the machine. Apparently, the bolts supporting the platform had been removed and not replaced during a different repair operation. Two of the corners of the unsecured flooring broke off immediately after the victim hopped onto the platform. The victim fell 9 feet and hit his head on a concrete floor. He died 5 days later.
Manufacturing Install/Maintain/Repair	
November 24 Douglas OR 2009-44-1	

Fire/Explosion

<i>Welding explosion</i>	A 23-year-old welder was killed when an explosion occurred inside a water-clarifying tank that was used to clean potatoes for processing. The tank was 23-foot tall and 12-foot wide in diameter. The victim's employer was contracted to repair a crack at the cone-shaped bottom of the tank. The welder entered the tank through a small side door and struck an arc to check for ground, which caused an explosion inside the confined space. The explosion dislodged overhead plastic piping that was full of dirt and debris from the process water. The piping fell onto the welder, impaled, and buried him in mud. He died from multiple blunt force injuries. Prior to the incident, employees expressed safety concerns about improperly hanging pipe and irregular carbon monoxide readings on the 4-way gas meter. It is likely the explosion occurred when an unidentified atmosphere, possibly leaking through the crack in the tank, was ignited by the welding unit.
Other services Production	
February 16 Morrow OR 2009-01-1	

Event Definitions

The event or exposure describes the manner in which the injury or illness was produced or inflicted by the source of injury or illness.

CONTACT WITH OBJECTS AND EQUIPMENT

Codes apply to injuries produced by contact between the injured person and the source of injury except when contact was due to falls, transportation accidents, fires, explosions, assaults, or violent acts.

Contact may be denoted by a statement that the injured person struck or was struck by an object, was caught in an object, rubbed against an object, or by words such as “hit by,” or “hit,” “bumped into,” “crushed by,” or “banged.”

FALLS

Falls are events in which the injury was produced by impact between the injured person and the source of injury when the motion producing contact was generated by gravity.

BODILY REACTION AND EXERTION

Codes apply to cases, usually non-impact, in which injury or illness resulted from free bodily motion, from excessive physical effort, from repetition of a bodily motion, from the assumption of an unnatural position, or from remaining in the same position over a period of time.

EXPOSURE TO HARMFUL SUBSTANCES OR ENVIRONMENTS

Codes apply to cases in which the injury or illness resulted from contact with, or exposure to, a condition or substance in the environment. Cases of burns, heat stress, smoke inhalation, or oxygen deficiency resulting from an uncontrolled or unintentional fire are generally coded Fire and Explosions, unless a transportation incident or assault or violent act was involved.

TRANSPORTATION ACCIDENTS

This code covers events involving transportation vehicles, powered industrial vehicles, or powered mobile industrial equipment in which at least one vehicle (or mobile equipment) is in normal operation and the injury/illness was due to collision or other type of traffic accident, loss of control, or a sudden stop, start, or jolting of a vehicle regardless of the location where the event occurred. References to “vehicles” in should be interpreted to include powered industrial vehicles and powered mobile industrial equipment unless otherwise noted. Cases classified in this code include pedestrians, roadway workers, or other non-passengers struck by vehicles, powered industrial equipment on or off the roadway (including indoor locations) when the accident meets these criteria (a) at least one vehicle was in regular operation, and (b) the impact was caused by a traffic accident or forward/backward travel of the vehicle.

FIRES AND EXPLOSIONS

Codes apply to cases in which the injury or illness resulted from an explosion or fire. Included are cases in which the person fell or jumped from a burning building, inhaled a harmful substance, or was struck by or struck against an object as a result of an explosion or fire. This division also includes incidents in which the worker was injured due to being trapped in a fire or whose respirator had run out of oxygen during a fire. Excluded from this category are injuries to firefighters resulting from lifting fire hoses and falls not related to the fire or explosion itself, such as falls in the parking lot of a burning building.

ASSAULTS AND VIOLENT ACTS

Assaults and Violent Acts include cases in which a person was injured or made ill by intentional assaults or by violent, harmful actions of unknown intent. Included in this division are assaults by others, injuries to oneself, and assaults by animals. This category includes injuries occurring in a hostile environment even though the person injured was not the intended victim, such as a teacher hit while breaking up a fight.

OTHER EVENTS OR EXPOSURES

This division classifies any event or exposure, which is not classified or listed under any other division.

Adapted from US Bureau of Labor Statistics (2012), *Occupational Injury and Illness Classification Manual*. US Department of Labor. Available online (December 28, 2012): http://www.bls.gov/iif/osh_oiiics_2_4.pdf.

Contact Information

**OR-FACE Program
CROET, OHSU
3181 SW Sam Jackson Park Rd, L606
Portland, OR 97239-3098**

**phone: 503.494.2281
e-mail: orface@ohsu.edu
website: www.ohsu.edu/croet/face**

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OR-FACE conducts surveillance, investigation, and assessment of traumatic occupational fatalities in Oregon, and produces safety materials to promote worker safety. OR-FACE investigations of fatal occupational incidents assess risk factors that include the working environment, the worker, activity, tools, energy exchange, and role of management.

About the Center for Research on Occupational and Environmental Toxicology at Oregon Health & Science University

CROET is dedicated to health and safety in the workforce. CROET's mission is to promote health, and prevent disease and disability among working Oregonians and their families during their employment years and through retirement. CROET does so through basic and applied research, outreach, and education.

Oregon Health & Science University is dedicated to improving the health and quality of life for all Oregonians through excellence, innovation and leadership in health care, education and research. OHSU includes the schools of Dentistry, Medicine, Nursing, and Science & Engineering; OHSU Hospital; Doernbecher Children's Hospital; numerous primary care and specialty clinics, multiple research institutes; and several outreach and community service units. OHSU is an equal opportunity, affirmative action institution.

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