

### **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/oshcfdef.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

PNASH Pacific Northwest Agricultural Safety and Health Center

#### **Population Data Sources**

U.S. Census: www.census.gov (American Factfinder, Data Sets, Summary File 3)

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

LAUS - Local Area Unemployment Statistics: www.bls.gov/lau

OLMIS - OREGON LABOR MARKET INFORMATION SYSTEM:

http://olmis.emp.state.or.us/olmisj/CES?x=1&y=1&p\_action=

## Oregon

## Fatality Assessment and Control Evaluation

### **Annual Report 2007**

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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**

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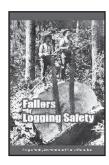
- Jae Douglas MSW PhD

## **Recent OR-FACE Publications**

#### **Investigation Reports**

- Young warehouse worker killed by backing forklift
- Mechanic killed pouring gasoline on fire
- Log truck driver killed when brakes fail on steep road
- Highway worker crushed by swinging backhoe boom







#### **Safety Booklets**

- · Young Workers: Stay Alive on the Job!
- Fallers Logging Safety
- State Regulation of Cell Phone Use While Driving and the Risk of Driver Distraction

#### **Hazard Alerts**

- · Can you identify fatal hazards on your farm or ranch?
- ¿Podría identificar riesgos fatales en su granja o rancho? (Agriculture alert inSpanish)
- Parked Vehicles Kill (as brochure in English and Spanish)

#### **Annual Report**

Annual Report 2006; Annual Report 2005

#### **Posters**

- Young Workers: Stay Alive on the Job!
- Trees Kill: Key Factors in Logging Safety

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

## **Summary**

- OR-FACE conducts surveillance, investigation, assessment, and outreach related to traumatic occupational fatalities in Oregon (see p. 7).
- OR-FACE began publishing safety booklets in 2007, combining narratives of incidents with safety recommendations in areas of concern (see p. 4).
- Hazard alerts in 2007 highlight incidents with (a) fall hazards, (b) violence, and (c) contact events (see p. 8-10).
- Basic characteristics of fatal events and the workers involved are quantified in charts (see p. 11-15).
- An abstract for each incident provides a brief description of each event and contributing factors (see p. 16-30).
- In 2007, cases of delayed death (over 2 days following the date of injury) spanned from 3 days to 15 years, with falls remaining the most frequent type of event (see p. 31).
- Contact OR-FACE for more information; or to offer your own comments, see the OR-FACE web survey online (see p. 31).

#### INTRODUCTION

In 2007, Oregon Fatality Assessment and Control Evaluation recorded 66 fatal occupational incidents, with 68 worker deaths. The number represents a rate of 3.7 fatalities per 100,000 employed workers in the civilian labor force in Oregon. The national worker fatality rate in 2007 was 3.8 (CFOI).

The following notable trends occurred in 2007.

- Incidents occurred most frequently in construction occupations, associated mostly with fall hazards.
- A number of incidents of violence occurred in agricultural occupations.
- Incidents among the oldest workers (aged 65+) all occurred while operating or working around large trucks, tractors, or other mobile machinery.

"Your investigative reports set the standards for the safety industry."

OR-FACE web feedback, 2007

Gravity Kills: card-sized newsletter ad, 2007



#### Recommendations

- Double-check the stability of a ladder or scaffold before using it.
- Three-point rule: Get a firm grip with three of four limbs.
- Beware of losing your balance from overreaching, or from the unexpected release of a weight you are carrying.
- Avoid standing up suddenly next to a ledge, as momentary dizziness can cause you to lose your balance.
- Cover and guard holes securely.

OR -FACE 503-494-2281
www.o.hsu.ed.u/croet/face
Oregon Fatality Assessment and Control Evaluatio

## **OR-FACE Coding Issues**

t the state level, the relatively small number of cases each year allows the details of every case to be known; but to discern patterns and root causes, each case still needs summary information – coding for industry, occupation, and event, as well as time, place, and personal information, plus a brief descriptive narrative. Reviewing assigned codes for 2007 fatal occupational incidents in Oregon by industry (NAICS), occupation (SOC), and event (OIICS) revealed two anomalies that other coders of occupational injuries may find worth observing.

#### **TEMPORARY WORKERS**

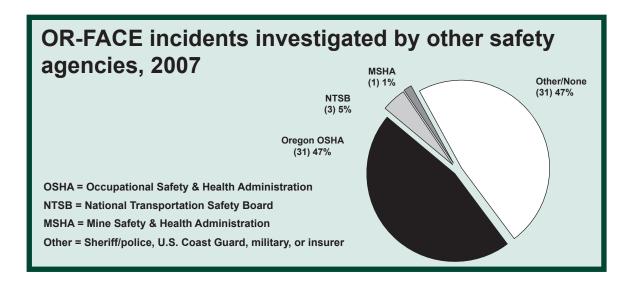
Two incidents in 2007 involved temporary workers, represented under a multiplex NAICS industry code: 56 Administration, Support, Waste & Remediation; subcode 5613 Employment Services (abstracts, p. 24, 28). Temporary workers are related to other types of contingent labor, however, including incidental house repair or dispatched union workers, which are not identified separately from the industry where the work is performed. Previously, OR-FACE

coded a 2005 incident with a temporary worker for the manufacturing firm where the incident occurred, rather than the "employment services" industry, following the OSHA focus on the direct workplace. Temporary worker status was tracked separately.

Workers' Compensation and the Bureau of Labor Statistics, however, track temporary workers using the "employment services" industry code, and produce worthwhile analyses with a large national database; though admittedly, at the cost of losing track of the industry sectors where the incidents actually occurred. The coding choice is a tradeoff.

For 2007 incidents, OR-FACE chose to adopt the NAICS code 5613 for temporary workers according to standard practice, and changed the earlier 2005 case to match. Abstracts retain information needed to place such incidents with others of a similar type. Notably, all incidents to date involving temporary workers occurred in manufacturing firms.

(continued on page 28)



### **Core Activities**

#### **SURVEILLANCE**

The OR-FACE record of traumatic occupational fatalities, in 2007 as in other years, is about double the record of "program-related" incidents by Workers' Compensation and Oregon OSHA. Earliest first notification originated mostly from Oregon OSHA and news reports. Death certificates marked "at work," collected quarterly, added incidents up to 9 months later.

#### **INVESTIGATION**

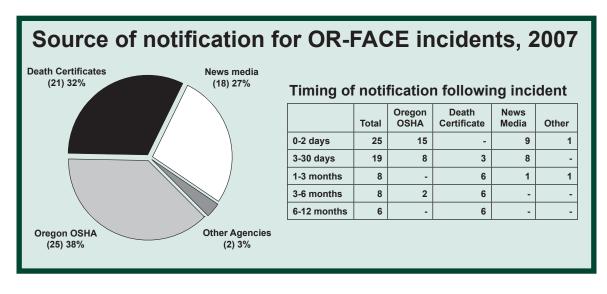
Two independent investigators and a research editor continued to produce OR-FACE investigation reports and draw attention to urgent safety issues. A report on a log truck brake failure highlighted widespread error in maintaining automatic brake adjusters, and a need for education. A report on a backhoe incident (abstract, p. 23) recommended regulation to develop a guard or disabling mechanism for backhoe foot pedals on machines with foot-pedal controls. Other industrial machinery requires foot-pedal guards. Prior to publication, reports are reviewed by occupational safety experts.

#### **ASSESSMENT**

OR-FACE safety booklets published in 2007 provided opportunities to look more closely at a broad range of incidents and safety recommendations, particularly related to driving and logging. Numerous types of events were covered in the safety booklet on young workers.

#### **OUTREACH**

Each safety booklet was circulated to a target audience: the cell-phone booklet to Oregon legislators, the Oregon Department of Transportation Safety Division, and driver education trainers statewide; the fallers safety booklet to loggers through Associated Oregon Loggers; and the young workers booklet to groups of educators and students. OR-FACE also received media attention: news stories based on OR-FACE investigation reports appeared in the online journal *Occupational Hazards* (March and November); the *Fallers Logging Safety* booklet was featured in the PNASH newsletter *Northwest Forest Worker*; and a trade newspaper reported the Spanish translation of *Parked Vehicles Kill*.



### **Hazard Alert - Falls**

he number of incidents involving falls doubled in 2007, with 12 fatal fall incidents compared to 6 in 2006, making fall hazards a prominent area of concern. Over half (7) of the incidents were in construction occupations. The principal risk factor was ladders. The age range for all fall incidents was 32-60, with half concentrated between ages 43 and 49.

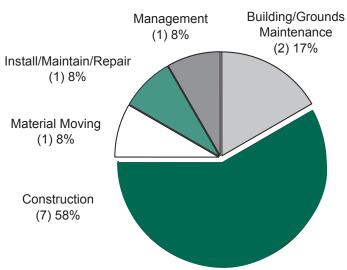
Construction falls occurred at both residential and business sites, involving ladders (3), a roof or elevated work area (3), and a hole in a roof (1). Two of the incidents involved makeshift scaffolding: a platform raised on a forklift, and a ladder mounted on a scaffold. Physical or medical factors may have been involved in two incidents: one an apparent case of overexertion; and one case involving a very obese worker on a ladder.

Less common falls represented familiar risk factors, such as tree climbing or an elevator shaft. A new pattern emerged related to new workers. Both falls through a hole in a roof or floor involved new workers: one a temporary worker at a mill, on the job 2 weeks; and one a union worker dispatched to a construction site, on the job only a few hours. Another 2007 incident, in highway construction.

also involved a union worker dispatched to a site and only 2 days on the job.



This hole, only 2-3 feet wide, is filled with hazardous energy.



Worker Fatalities in Falls by Occupation, 2007

#### Fatal Falls by Setting, 2007

Ladder	.5
Roof or elevated work area	.4
Hole in roof or floor	.2
Tree climbing	.1

## **GRAVITY KILLS!**

Temporary status and tenure on the job may be risk factors in occupational injuries, particularly associated with fall hazards. Employers can help.

- Employers must identify fall hazards at the worksite and provide effective training in fall prevention to all workers, including temporary and other contingent workers.
- Experienced union workers should get training on specific jobsite hazards and safe work practices.

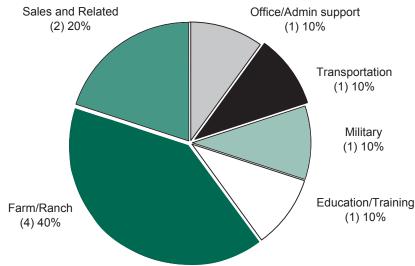
## **Hazard Alert - Violence**

The number of incidents involving violence tripled in 2007, with 9 fatal incidents, compared to 3 in 2006. One event involved two workers. A large proportion of the incidents were associated with agriculture. The age range of the victims was 18-57.

Incidents of violence
were evenly divided
between homicide and suicide. One
suicide incident involved a military
recruiter, reflecting a trend that has
received national media attention.
The association of a number of
homicide and suicide incidents
with agriculture exhibited no
characteristic patterns.

Over half (5) of the incidents involved use of a firearm. Other means included a pocket knife, toxic chemical, strangulation, and hanging.

In May 2007, as a contribution to the annual Oregon OSHA Safety Break initiative, OR-FACE produced a safety message for OHSU employees on violence prevention, with tips to develop a safer workplace (see box).



Worker Fatalities in Violence by Occupation, 2007

# VIOLENCE PREVENTION STRATEGIES

- Safety starts at the top. Managers should develop an open-door policy to encourage employee communication. Employees need to feel managers will listen and respond promptly to concerns.
- Offer employee training to recognize, report, and respond to acts of aggression.
- Establish a written violence prevention policy, including a plan to control aggressive behavior.
- Make a formal risk assessment to identify risk factors and reevaluate security after any incident.

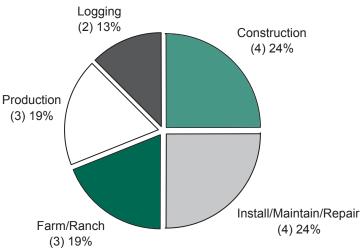
### **Hazard Alert - Contact**

ontact was the principal type of event in 2007, involving 16 workers, somewhat more than in 2006. Several active occupations produced a variety of contact risks, nearly all (14) associated with machinery. The age range of victims in contact events was 26-70.

No strong association appeared with contact events and a particular occupation or setting.

Maintenance work was commonly involved, and work outside a parked vehicle. Less common but familiar settings involved road construction, and towing/lifting operations.

Exceptionally few incidents occurred in logging.



Worker Fatalities in Contact Events by Occupation, 2007

### **MACHINE SAFETY**

- Most important, shut down a
   machine completely and block
   out hazardous energy before
   maintenance. Clearly communicate
   with coworkers when working
   together.
- Stay clear of power take-off drives, pinch points, and unexpected movement working around tractors, trailers, or other heavy equipment.
   Never stand in the pinch point of the boom on a running backhoe.
- Refresh and reinforce safety training, even for experienced workers; be sure to review safety materials and equipment operator instructions for each machine used.

### Contact Events by Setting, 2007

Maintenance 4
Parked vehicle3
Road construction2
Towing/Lifting2
Production2
Falling tree1
Horse1

## **Older Workers**

In 2007, a long-standing trend continued, showing workers aged 65 and over at much higher risk than other workers. All eight incidents in this oldest age category involved transportation, either operating or working on the ground near vehicles. All occurred in rural counties.

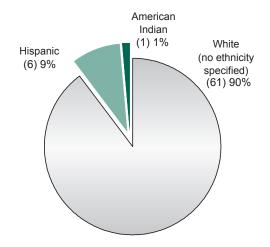
#### **Events for Workers Aged 65-80, 2007**

Transportation (Motor Vehicle)	4
Transportation (Air)	2
Parked Tractor	2

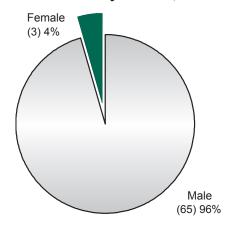
H ispanic workers in different occupations were involved in a variety of events: two in falls (2007-49, 57), two in violence (2007-51, 60), one in a motor vehicle (2007-37), and one in contact with machinery (2007-67). Few women were involved in any event. The age distribution in 2007 continued to overrepresent workers aged 55 and over, and particularly those aged 65 and over. The evident spike in incidents involving workers aged 45-54 is associated with higher incidence of falls and violence.

In the following charts and abstracts, OR-FACE splits several combined categories in the original two-digit occupational injury codes to highlight independent risk factors. In industry (NAICS), Agriculture/Fishing/Forestry/Hunting is split. In occupation (SOC), Farming/Fishing/Forestry, Construction/Extraction, and Transportation/Material Moving are split. For event (OIICS): Transportation is divided into Motor Vehicles, Mobile Machinery, Air, and Water.

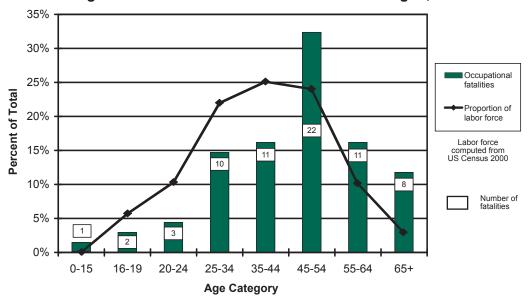
#### Worker Fatalities by Race/Ethnicity, 2007



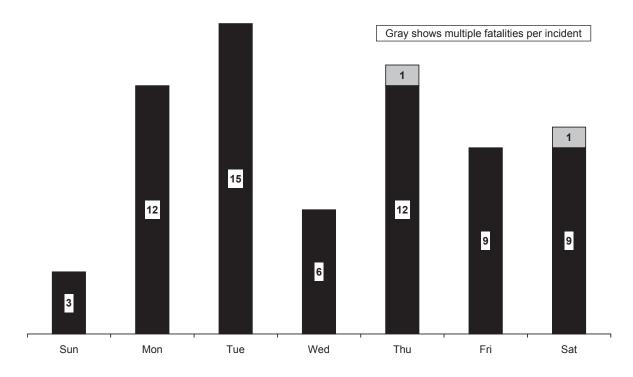
Worker Fatalities by Gender, 2007



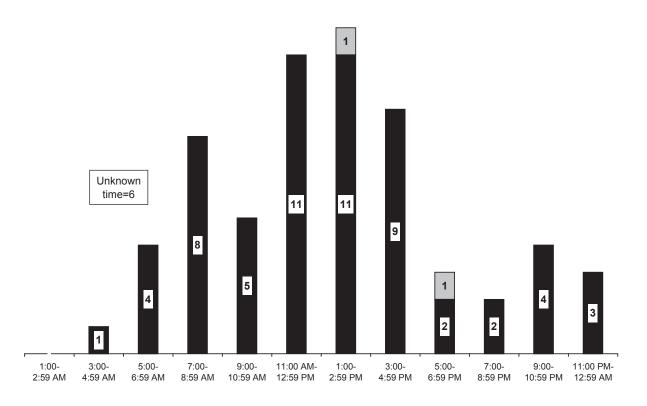
## Occupational Fatalities in Oregon by Age, Compared to Age Distribution of Civilian Labor Force in Oregon, 2007



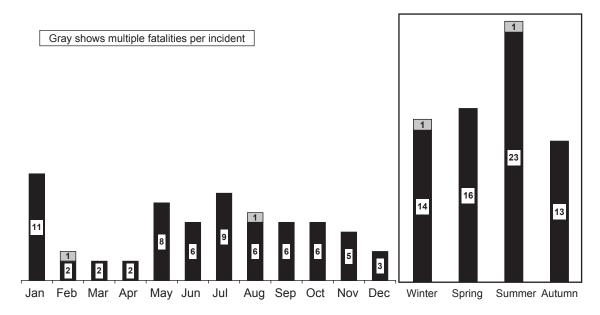
Worker Fatal Incidents and Total Fatalities by Day, 2007



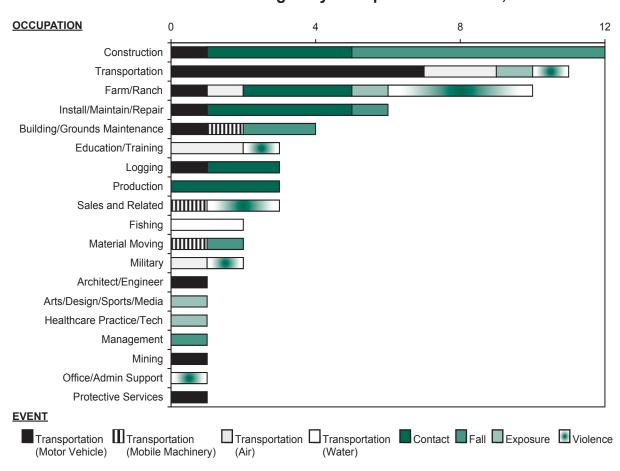
Worker Fatal Incidents and Total Fatalities by Time of Incident, 2007



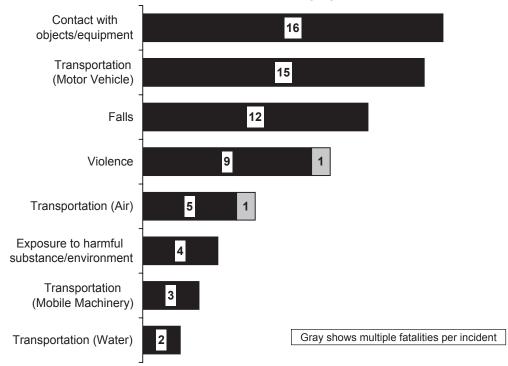
#### Worker Fatal Incidents and Total Fatalities by Month and Season, 2007



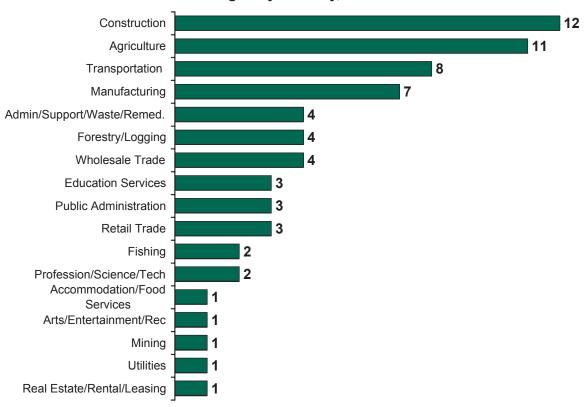
### Worker Fatalities in Oregon by Occupation and Event, 2007



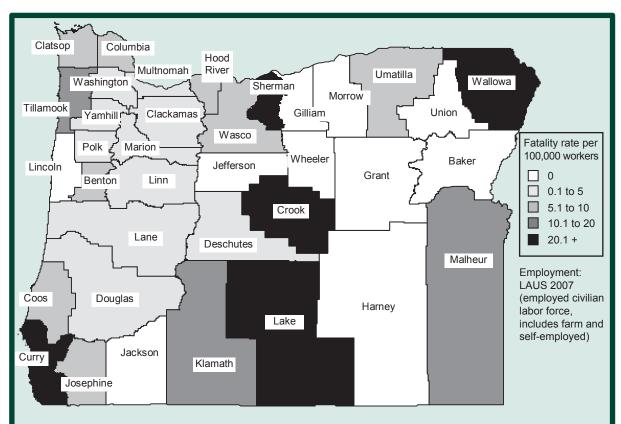
### Worker Fatal Incidents and Total Fatalities by Type of Event, 2007



#### Worker Fatalities in Oregon by Industry, 2007



## **Oregon Counties**



## Oregon Population, Employed Labor Force, and Fatalities by County, 2007

County	Total population	Employed labor force	Worker fatalities	County	Total population	Employed labor force	Worker fatalities
OREGON TOTAL	3,745,455	1,825,660	68				
BAKER	16,435	6,881	0	LAKE	7,565	3,380	1
BENTON	85,300	40,641	3	LANE	343,140	172,335	7
CLACKAMAS	372,270	187,731	7	LINCOLN	44,630	21,306	0
CLATSOP	37,440	18,991	1	LINN	109,320	50,346	2
COLUMBIA	47,565	22,427	2	MALHEUR	31,620	12,022	2
coos	63,050	26,406	2	MARION	311,070	143,812	2
CROOK	25,885	9,198	2	MORROW	12,335	5,044	0
CURRY	21,475	8,902	2	MULTNOMAH	710,025	361,253	8
DESCHUTES	160,810	77,747	2	POLK	67,505	36,637	1
DOUGLAS	104,675	43,490	2	SHERMAN	1,855	886	1
GILLIAM	1,885	1,001	0	TILLAMOOK	25,845	11,839	2
GRANT	7,580	3,166	0	UMATILLA	72,245	34,576	3
HARNEY	7,680	3,080	0	UNION	25,250	11,581	0
HOOD RIVER	21,470	12,321	1	WALLOWA	7,130	3,432	2
JACKSON	202,310	95,902	0	WASCO	24,125	12,608	1
JEFFERSON	22,030	8,676	0	WASHINGTON	511,075	272,181	5
JOSEPHINE	82,390	32,456	3	WHEELER	1,570	578	0
KLAMATH	65,815	28,503	3	YAMHILL	93,085	44,325	1
Data sources: Portland State University Population Research Center, and LAUS 2007							

### **Worker Fatalities**

**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

2007

Transportation – Contact – Exposure – Falls Fire/Explosion – Violence

## **Transportation (Motor Vehicle)**

Pickup on icy road

Construction Construction

January 15 Deschutes OR 2007-66-1 A 34-year-old construction worker was killed on the way to a jobsite when the company flatbed pickup he was driving lost control on an icy road and spun into the path of an oncoming semi-truck. Snow and ice on the shoulders of the highway extended into the driving lanes. The semi-truck driver was taken to a hospital with significant injuries.

Log truck icy road

Forestry/Logging Transportation

January 16 Curry OR 2007-01-1 A 71-year-old log truck driver was killed when his unloaded log truck failed to negotiate a turn on a road covered with snow and ice. It was snowing heavily. The truck went over a hillside and came to rest about 200 feet below. The driver was ejected from the cab. Reports do not indicate if the driver was wearing a seatbelt. The driver had just learned by CB radio that log loading was suspended for the day due to snow and he should turn around. He was continuing a few miles on the dangerous road, without chains, when the incident occurred.

Truck parking in traffic

Transportation Transportation

January 26 Washington OR 2007-05-1 A 49-year-old truck driver was killed when he was run over while helping another truck driver park. The second driver had just unloaded heavy equipment, and was maneuvering to park his semi-truck on the side of the road. He backed up until the first truck driver, on the ground near the rear of the trailer on the driver's side, signaled to stop. The driver outside then faced the road to direct backed-up traffic. The driver in the truck pulled forward to finish parking, looking in his right mirror to judge the distance from the curb. Apparently, the driver in the road retreated toward the trailer to allow traffic to pass and was standing just forward of the rearmost dual wheels when they started to move. When he tried to jump away, his feet were caught under the wheels and they rolled over him.

Crash without seatbelt Retail Trade Install/Maintain/Repair February 13 Curry OR 2007-06-1	A 56-year-old garage-door installer was critically injured in a highway crash, and died the next day. The installer was driving a 1-ton company pickup on the way to a jobsite with a coworker, who was asleep. The vehicle struck a guardrail, then crossed the road and struck a concrete bridge before the wakened passenger managed to steer into the middle of the road and stop the vehicle. The passenger was wearing a seatbelt. The driver was not wearing a seatbelt, and was partially ejected through the driver-side window. The reason for the loss of control is unknown.
Backing log truck Forestry/Logging Logging April 12 Marion OR 2007-43-1	A 72-year-old logger, working as a flagger, was killed when a log truck backed over him while he directed traffic at a logging site. The flagger was controlling road access through an active falling zone. After the flagger waved through two empty log trucks, the rear truck stopped as a noisy skidder passed along the road from the opposite direction. The driver of the stopped truck then backed up a bit to talk to a person behind him, and ran over the flagger standing behind the vehicle. The victim was pronounced dead at the scene.
Wrong way oncoming Transportation Transportation May 22 Hood River OR 2007-46-1	A 78-year-old shuttle driver in an SUV collided head on with a pickup going the wrong way on the freeway, and died 23 days later. The driver was wearing a seatbelt and the air bags deployed. The incident occurred in the dark with no streetlights on a four-lane freeway with a center guardrail. The shuttle moved into the left lane to pass a semi-truck and struck the oncoming pickup traveling near the center guardrail. The pickup driver was killed instantly. A passenger was treated for minor injuries. The shuttle driver was in critical condition, but was slowly recovering before suffering cardiac arrest.
Sheriff siren call  Public Administration Protective Services  June 16 Marion OR 2007-13-1	A 33-year-old sheriff was killed in a head-on highway collision while responding to an emergency call about 11:30 p.m. Two cars in the opposite lane pulled to the side in response to the lights and siren of the sheriff's vehicle. A third car swerved around them and crossed the centerline. The sheriff's vehicle struck the oncoming car and overturned in a ditch, where it immediately burst into flame. Cause of death was smoke inhalation. An occupant in the second vehicle was also killed.
Skidding dump truck  Admin/Support/ Waste/Remed. Building/Grounds Mtc  June 18 Crook OR 2007-14-1	A 74-year-old arborist was killed in a head-on collision while driving a dump truck. The truck started skidding and swerving for an unknown reason, with blue smoke coming from the tires, before crossing the centerline and crashing into an oncoming utility truck. The arborist was ejected from the truck. Seatbelt use was not reported. The second driver wore a seatbelt and incurred minor injuries.

Sidewalk work zone  Profession/Science/ Technology Architect/Engineer  June 28 Washington OR 2007-18-1	A 60-year-old road surveyor was struck by a motor vehicle while setting up his surveying equipment, and died 4 days later. The surveying crew set up a work zone with traffic warning signs and cones prior to beginning work. The surveyor, wearing a hardhat and reflective orange vest, was walking and carrying his tripod past a parking lot driveway outside the perimeter of the work zone. A car exited the parking lot to turn right and struck the surveyor. He was dragged 25 feet before the vehicle stopped. Witnesses arriving at the scene called 911 and lifted the victim from under the vehicle with a serious head injury.
Runaway wheat truck  Agriculture Farm/Ranch  July 14 Umatilla OR 2007-24-1	A 16-year-old summer ranch worker was killed when he lost control of his fully loaded wheat truck and crashed into an embankment. Heading down a field road, the ranch worker radioed for help, saying the brakes were not holding. He was advised to turn uphill, but he did not want to roll the truck. He was then advised to jump, but he chose against it. The truck reached the bottom of the hill, rolled up an adjoining hill, crossed a road, and struck an embankment on the other side of the road at an estimated 50 mph. The cab was completely crushed by the loaded trailer. The vacuum brake system on the truck required the engine to be running and revved up to work properly.
Dump truck off bridge  Mining Mining  July 24  Lane OR 2007-20-1	A 57-year-old plant supervisor at a sand and gravel operation, working as a truck driver, was killed when the loaded dump truck he was driving went through a bridge guardrail into a river below. The right front tire struck the highway-type guardrail on the company-owned bridge; the tire was damaged and lost air, and the driver lost control. The dump truck went off the bridge and overturned into 10 feet of water. The supervisor was wearing a seatbelt, and was protected by the cab's rollover protective structure, but his legs were pinned between the steering wheel and seat. Cause of death was drowning.
Double trailer on curve Transportation Transportation September 1 Umatilla OR 2007-30-1	A 47-year-old semi-truck driver pulling double trailers was killed when the truck overturned on a downhill curve on the highway in the dark. The out-of-state truck driver had driven through this mountain pass many times, but may have been traveling too fast for the curve. A guardrail penetrated the windshield and the driver was ejected. It is unclear if he was wearing a seatbelt. The victim was found dead at the scene. A partner driver was freed from the sleeping compartment of the cab with minor injuries.
Truck in wrong lane Retail Trade Transportation September 14 Crook OR 2007-32-1	A 47-year-old delivery driver in a flatbed pickup was killed on the highway while traveling in the wrong lane. The truck struck one vehicle and continued on, and struck another vehicle head on. The driver was not wearing a seatbelt and was killed instantly. Other drivers sustained minor injuries. Prior to the incident, witnesses noticed the driver weaving, evidently distracted – perhaps trying to pass, or trying to use the cell phone. Calls were recorded a few minutes before the crash, telling the driver he needed to change his destination.

Semi-truck on curve

Transportation Transportation

October 1 Umatilla OR 2007-37-1 A 43-year-old truck driver was killed when the semi-truck he was driving left the highway and caught fire after striking two trees. At a slight curve, the truck went straight across the highway and left the road, crashed through a fence, and traveled about 300 feet before hitting the trees and halting. No skid marks were observed on or off the roadway. Police concluded speed may have been a factor.

Foggy highway pileup

Transportation

November 5 Klamath OR 2007-39-1 A 46-year-old log truck driver in an unloaded truck was killed on a foggy highway when he rear-ended a stopped truck in front of him and was rear-ended by other vehicles in an early morning pileup. At least 18 vehicles were involved in collisions over six miles of road. Visibility was zero, due to heavy fog and smoke from field burning. Seatbelt use was not reported. No other fatalities occurred in the incident.

## Transportation (Mobile Machinery)

Forklift truck ramp

Wholesale Trade Material Moving

May 22 Linn OR 2007-10-1 A 46-year-old forklift operator was killed when the forklift overturned and he was crushed beneath the operator's cage. The operator was unloading pallets of seed bags from a truck; two coworkers loaded the pallets inside the truck. The forklift reached the truck from the ground by a 30-foot aluminum ramp secured to the back of the truck with chains. When unloading was nearly complete, the ramp slipped forward as the forklift was on it, close to the rear of the truck, the ramp tilted, and the forklift toppled. The operator was either ejected or tried to jump from the cage and was crushed. It is unknown if the victim was using the seatbelt.

Forklift loading dock

Wholesale Trade Sales and Related

June 4 Lane OR 2007-11-1 A 37-year-old forklift salesman was killed when a forklift he was operating fell off the dock plate between a truck and a loading dock. The salesman was delivering the forklift to a customer. He operated the forklift to release tension on the binding chains, while the truck driver removed the chains. The parking brake on the tow truck was set, but chocks were not yet in place to secure the wheels. The truck bed was 9 inches below the loading dock, and the dock plate connecting the truck to the dock was set at an incline. The truck driver went to store the binding chains, and the salesman backed the forklift off the bed at once. As he accelerated to go up the incline, the drive wheels on the bed pushed the truck away from the dock. The forklift fell 4 feet to the ground and the victim was crushed.

Forklift in crosswalk

Manufacturing
Building/Grounds Mtc

October 16 Douglas OR 2007-52-1 A 61-year-old clean-up worker on the night shift at a wood-products manufacturing company was struck by a forklift while walking across the mill yard, and died 39 days later. The worker was reporting to work about midnight, wearing dark clothing, and a hood against the rain. He did not stop or look up before entering a crosswalk. Forward visibility on the forklift was reduced by a metal backrest on the forks that shielded the driver from the load. A scuffed plastic windshield also reduced visibility, due to rain and glare from the yard lamps. Smoke crossed the roadway from the mill stacks. The victim did not recover from a severe head injury.

## **Transportation (Air)**

Jet fighter over ocean  Public Administration Military  June 26 Clatsop OR 2007-15-1	A 34-year-old fighter pilot was killed when his F-15A Air National Guard jet crashed into the Pacific Ocean, 42 miles off the coast from Cannon Beach. The highly experienced and qualified pilot, based in Portland, was participating in an air-combat training exercise with other aircraft. He may have become spatially disoriented; he was apparently unaware of the aircraft's proximity to the ocean. No parachute was observed in the wreckage. Weather conditions or mechanical failure were not factors in the incident. The U.S. Coast Guard dispatched cutters, helicopters, and aircraft to search for the victim.
Test flight  Transportation Transportation  July 21 Lane OR 2007-47-1	A 52-year-old airplane pilot was killed when the single-engine airplane he was flying crashed shortly after takeoff. A passenger in the plane, another pilot interested in purchasing the plane, was also killed. A witness heard the engine sputter before the plane hit a tree and crashed in a pond. The plane was recently repaired and inspected after 20 years in storage, and the pilot had only 5 hours flying time in it. An investigation concluded the plane was overloaded – 130 pounds over the maximum allowable gross weight; but found no other malfunctions that would have contributed to loss of engine power. Cause of death was drowning.
Wing failure  Education Services Education/Training  Transportation Transportation  July 28 Clackamas OR 2007-22-2	An 80-year-old flight instructor and a 52-year-old airline pilot were killed when a wing on their float plane failed in a turn and the plane crashed into a river. Both men were certified commercial pilots and flight instructors, and both held airplane single-engine sea ratings. The younger pilot was accruing flight hours with the well-known older pilot. It is unknown which of the two pilots was controlling the plane at the time of the incident. The plane was performing "touch and go" maneuvers close on the water, then rose to 100 feet and banked into a sharp left turn. The left wing folded back against the fuselage, and the plane plunged. Both victims were killed instantly. Later investigation discovered substantial corrosion and a growing fatigue fracture in the left wing strut assembly.
Flight training crash  Education Services Education/Training  September 12 Benton OR 2007-65-1	A 24-year-old flight instructor and a student pilot were killed when the four-seat airplane they were flying crashed. The plane was seen flying low at a slow speed prior to the crash. It is unknown which of the pilots was flying the plane at the time of the incident. The flight instructor started using the plane 1 month earlier. There was no evidence of structural or mechanical failure.

Airplane moving cattle

Agriculture Farm/Ranch

October 3 Malheur OR 2007-48-1 A 76-year-old cattle rancher was killed when his single-engine airplane collided with power transmission lines and crashed. The rancher was helping to move cattle with the airplane, working with a ranch hand moving the cattle with an ATV on the ground. The rancher dove twice toward the cows, and after the second run, made a complete circle, leveled off, and collided with the power lines. There was no indication of mechanical failure.

## **Transportation (Water)**

Fishing Fishing

January 25 Tillamook OR 2007-04-1

Crashing waves at bar A 50-year-old crew member on a crabbing boat was injured by flying metal objects caused by crashing waves while crossing the bar into an ocean bay, and died the next day. The 58-foot boat was fully loaded with 5,000 pounds of crab as it approached the turbulent bar in the dark with lights on. Apparently, a 20-foot wave, larger than the 11-foot waves reported at the bar, struck the boat's stern and turned it sideways. Large swells then rolled the boat three times before it emerged upright against the jetty, disabled. The boat's emergency radio beam helped U.S. Coast Guard rescuers locate the boat, and using a helicopter and a rescue swimmer, the Coast Guard hoisted off the four-man crew, all suffering from hypothermia. The victim was in the galley when the wave struck. Death was due to blunt chest trauma.

Crab boat overboard

Fishing Fishing

December 7 Lane OR 2007-55-1 A 22-year-old crab boat fisherman was killed when he was swept overboard into the ocean from a 75-foot vessel. The fisherman was on deck alone, wearing rain gear and heavy boots, but no life jacket. An

extensive search failed to recover the body.

### **Worker Fatalities - Contact**

## Contact with objects/equipment

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Forestry/Logging Logging

January 30, 1992 Josephine OR 2007-64-1 A 40-year-old logger, working as a tree faller, was struck by the top of a nearby madrone tree that fell on him. He suffered severe, disabling injuries, including lower body paralysis, and died 16 years later due to complications associated with the original injury. Immediate cause of death was sepsis.

#### Exposed tractor PTO

Agriculture Farm/Ranch

January 5 Douglas OR 2007-07-1 A 65-year-old rancher was killed when his clothing became entangled in the power take-off drive behind his tractor. The rancher was apparently moving bags of feed. The tractor was running; the PTO was not attached to any implement. Standing behind the tractor, the rancher's shirt tail or bottom corner of his flannel jacket caught in the exposed PTO and quickly wound up tight around the shaft. Cause of death was strangulation.

#### Starter outside vehicle

Manufacturing Install/Maintain/Repair

January 22 Multnomah OR 2007-02-1 was killed when he started the ignition on a semi-tractor while standing outside the cab. The truck was in reverse gear, and immediately lurched backward as it started, pinning the mechanic between the cab door and a nearby metal paint locker. The mechanic asked a coworker to help him fix a problem with the truck's charging system and the two workers had just approached the truck following a break. The victim was pronounced dead at the scene.

A 55-year-old maintenance mechanic at a metal fabrication company

#### Spooked horse

Agriculture Farm/Ranch

May 14 Malheur OR 2007-08-1 A 44-year-old cowboy was critically injured when he was bucked off his horse, and died the next day. The cowboy was in the alley of a cowpen on horseback counting cows with two coworkers when his horse got spooked and started bucking. The cowboy slid off the side of the horse and fell to the ground. The horse stomped on his head.

#### Falling tree kickback

Agriculture Logging

May 16 Columbia OR 2007-44-1 A 53-year-old rural property owner was killed while felling trees on his land. The property owner had cleared numerous other trees from his land. He was working alone on a 100-foot tree, standing in a depression 3-4 feet deep, which prevented him from escaping quickly from the base of the tree as it fell. Apparently the tree twisted in an unexpected direction as it fell and the victim was crushed by the butt of the log.

## **Worker Fatalities – Contact**

Backhoe boom swing  Construction  Construction	A 47-year-old road construction worker, a journeyman equipment operator on the job 2 days, was killed while working on the ground alongside a backhoe operated by an apprentice. Preparing to pull pins from concrete barricades along the roadside to move them, the
July 1 Clackamas OR 2007-17-1	journeyman retrieved two heavy steel pin pullers from the front bucket, and walked to the rear of the backhoe, where he tossed one pin puller into the cab. The heavy object fell on a foot pedal that controlled the rear boom, which instantly swung sideways and crushed him.
Quick-coupler failure  Construction Construction July 10	A 42-year-old road construction worker was killed when a jackhammer attached to a track-hoe came loose and struck him. The worker was on the ground with a coworker within a few feet of an 8-foot jackhammer pounding the pavement at an excavation project. The two workers each held a plywood barrier to prevent debris from reaching the open street. The quick-coupler on the jackhammer was severely worn and missing
Multnomah OR 2007-19-1	safety bolts. When the track-hoe started up in a new position, the jackhammer detached and struck the construction worker in the head.
Chop saw	A 26-year-old maintenance millwright was struck by a cut log thrown
Manufacturing Install/Maintain/Repair	from a chop saw, and died 2 days later. The millwright was standing on a catwalk 12-15 feet away from the chop saw, observing loader arms at the outfeed that he had adjusted earlier in the day. The trim end of a log, 5-6 feet long, 12 inches diameter, apparently caught on the saw and was
July 25 Lane OR 2007-26-1	thrown at the backstop, then ricocheted toward the millwright, striking him in the head and chest.
Conveyor jam	A 55-year-old production worker at a metal recycling firm was injured while trying to unjam a conveyor belt on a metal-sorting machine, and
Wholesale Trade Production	died 68 days later. One week prior to the incident, a hole was cut in the side of the sorting machine to allow access with a hook to unjam the conveyor belt below the hopper without shutting down the machine.
August 2 Multnomah OR 2007-67-1	The production worker reached his hand inside the hole to unjam the conveyor and had his arm amputated. Cause of death was a stroke.
Trench collapse	A 29-year-old construction worker was crushed in a trench collapse, and died the next morning. The worker was at the bottom of a 23-foot
Construction Construction	trench to guide the installation of a section of concrete pipe in a sewer installation. As the 1,600-pound pipe was suspended over the trench, a large section of soil sloughed off the side of the trench and fell inside the
August 16 Multnomah	stacked manhole boxes, pinning the worker under a few hundred pounds of soil. The support wall knocked against the suspended concrete pipe,
OR 2007-27-1	which swung and crushed the victim.
Rolling tractor	A 70-year-old farmer was killed when a tractor rolled forward and crushed him. The farmer parked the tractor on a slight incline next to
Agriculture Farm/Ranch	a trailer to load a heavy cable from the trailer into the raised bucket of the tractor. When most of the cable was in the bucket, the tractor rolled forward and crushed the farmer. He tried to call for help on his cell
August 20 Linn OR 2007-35-1	phone, but the neighbor he called could not understand the message and hung up. The victim was discovered dead at the scene an hour later.

## **Worker Fatalities – Contact**

Wind turbine collapse  Utilities Install/Maintain/Repair  August 25 Sherman OR 2007-29-1	A 34-year-old mechanic was killed when a wind tower collapsed while he was making adjustments to the gear drive of the turbine at the top of the tower. The mechanic was part a three-person crew, all with less than 2 months experience. The blades of the turbine may have been locked in a position of maximum resistance when the mechanic performed an operation that released the brake on the shaft, causing the turbine to turn too fast. The blades twisted and struck the 231-foot, carbon-steel tower, which then buckled in the middle. The turbine toppled to the ground with the mechanic inside the hub. A coworker in the tower had minor injuries.
Unstable trailer  Construction Construction  September 5 Deschutes OR 2007-34-1	A 27-year-old mason was killed while unloading a utility trailer filled with sand, when the trailer shifted and crushed him. The mason was preparing to lay paving stones at a private residence. The custom-built trailer, designed as a seed bin with a tapered bottom and a hatch underneath, was not attached to a vehicle; the tongue rested on a sawhorse. The mason crouched underneath the rear of the trailer, apparently getting sand from the hatch, when the load shifted and the rear of the trailer slammed down on the victim's head.
Synthetic rope hoist  Manufacturing Production  November 13 Washington OR 2007-53-1	A 46-year-old welder at a heavy-equipment manufacturing company was struck by a heavy metal beam, and died 3 days later. A synthetic rope sling broke as the welder was raising the beam onto a workbench with a 1-ton crane. The falling metal beam struck him in the head. The beam weighed 1,400 pounds; the rated capacity of the rope was 1,300 pounds.
Metal tubing on rollers  Manufacturing Production  November 26 Clackamas OR 2007-54-1	A 50-year-old shop foreman, working as a metal fabricator at a heavy-equipment manufacturing company, was killed when a metal tube he was sawing disrupted and struck him. The 10x4-inch rectangular tubing was about 18 feet long and weighed 800 pounds. The tube was mounted on a row of three 4-foot-high stands with rollers that led to the saw. A gap of 10 feet between the two forward stands allowed a forklift to load stock onto the rollers. Contrary to normal practice, the foreman did not leave the forklift in place to support the tube through the gap. As he pulled the tube forward, the rear end fell in the gap between the stands and the front end swung up and struck him in the head. He fell to the ground and the tube fell and struck him again in the head.
Unblocked forklift  Admin/Support/ Waste/Remed. Install/Maintain/Repair  December 6 Lane OR 2007-61-1	A 39-year-old forklift mechanic was killed when a forklift he was working under crashed on top of him. The mechanic was a temporary worker on the job 1 week at a wood-products manufacturing company. The mechanic was helping a coworker repair a hydraulic leak. The front of the forklift was raised about 4 feet and supported on a stand. The wheels were not chocked, nor the forks blocked during the repair. The hydraulic cap blew off while the coworker, the main mechanic, was adjusting a screw; he rolled out from under the forklift with fluid spilling out. The forklift tipped off the stand and fell on the new mechanic. The coworker did not know the victim was there with him beneath the forklift.

## **Worker Fatalities – Exposure**

## **Exposure to harmful substance/environment**

Driver amphetamines

Transportation Transportation

January 8 Lake OR 2007-40-1 A 47-year-old semi-truck driver was found dead in the locked cab of his truck on a highway turnout. Cause of death was a methamphetamine overdose. The medical examiner reported a "quite high"

methamphetamine level, along with a history of drug abuse, and current

signs of heavy amphetamine use.

Accommodation/ **Food Services** Arts/Design/Sports/ Media

March 22 Multnomah OR 2007-56-1

Methadone and alcohol A 26-year-old exotic dancer at a nightclub collapsed after ingesting methadone and heavy amounts of alcohol, and died 9 days later. The dancer was drinking all night at work, and received a dose of liquid methadone from a coworker to ease a toothache. She continued drinking alcohol with a friend after work, collapsed, and could not be revived. Upon admission to the hospital, her blood alcohol content was 0.17%. Cause of death was cerebral anoxia.

Loaded syringe

Profession/Science/ Technology Health Practice/Tech A 59-year-old surgeon was found dead in his office with a loaded syringe of propofol nearby. Propofol is a sedative used in general anesthesia. Reported behavior and numerous track marks indicated the surgeon had been self-medicating for health issues for some time.

March 23 Washington OR 2007-41-1

Horse crossing river

Agriculture Farm/Ranch

May 10 Klamath OR 2007-12-1 A 12-year-old boy, working as a ranch hand, was killed when he was thrown from his horse into a river while out seeking a missing cow. A search for the ranch hand was initiated when he did not return home for dinner. The horse was found near the river, wet up to the saddle blanket. Divers recovered the body of the victim from the river the next day after a searching helicopter pilot reported a shadowy image in the river near the spot where the horse was located.

## **Worker Fatalities - Falls**

## **Falls**

Residential roof	A 47-year-old construction worker fell 15-20 feet from the roof of a two-story house onto his head, and died 2 months later. The worker was
Construction Construction	installing metal trim on a pitched shake roof without fall protection.
November 14, 2006 Benton OR 2007-50-1	
Ladder fall	A 43-year-old mechanic fell 10 feet off a ladder onto his head, and died 6 days later. The mechanic was on the job for 5 days at a truck rental firm.
Real Estate/Rental/ Leasing Install/Maintain/Repair	He was up on a 12- foot ladder to replace the rubber seal on the back door of a trailer. The event was not witnessed.
February 23 Multnomah OR 2007-42-1	
Elevated work platform	A 47-year-old owner of a machine shop was killed when he fell about 15 feet from an elevated platform onto his head. The shop owner was
Manufacturing Management	painting a wall in his warehouse, using a forklift to raise a heavy wooden workbench, about 10 feet long, to use as a scaffold. He used a ladder to reach the elevated platform. Evidently, he reached too far to the left
May 3 Lane OR 2007-45-1	while painting the wall and the workbench tipped off the forklift forks. The victim was discovered the next morning, deceased.
Sliding ladder	A 49-year-old material mover at a recycling and resale yard fell 7 feet off a ladder, and died 3 days later. The material mover climbed a ladder
Wholesale Trade Material Moving	to reach the first shelf of a metal rack to deposit a bundle of aluminum downspouts. When he mounted to descend the ladder, the base slid away from the rack and he fell, landing on his hands and knees. Saying
May 4	he was fine, he continued work, but later admitted he fell, and took a
Tillamook OR 2007-28-1	break to lie down. When he rose, he collapsed. At the hospital, the victim was found to have several broken bones and a damaged spleen.
Garage roof	A 46-year-old carpenter was killed when he fell 8-9 feet from a roof and landed on his head on concrete below. The carpenter was working at a
Construction Construction	private residence on the roof of a garage. He was discovered near the base of the ladder, though the ladder was still in place. The victim died at the scene.
May 11 Coos OR 2007-09-1	

## **Worker Fatalities – Falls**

House painter ladder	A 47-year-old house painter fell on his head from a ladder, and died 9 days later. The painter was working on window trim above the garage.				
Construction Construction	The ladder was set up on a slight incline that caused the ladder to lean away from the garage. The fall was not witnessed. The victim fell 10 feet onto concrete and broke his neck.				
July 3 Coos OR 2007-21-1					
Unsecured ladder  Construction Construction	A 54-year-old painter fell 10 feet from a second story at a construction site, landing headfirst on the concrete below, and died the next day. The painter climbed an extension ladder to a second story apartment to discuss the job with the contractor, then got back on the ladder to descend. He apparently missed a step with his foot and fell over backwards. The ladder fell with him when he tried to grab it. The medical examiner noted the victim was "very obese."				
August 6 Multnomah OR 2007-25-1					
Rotten tree roots  Admin/Support/ Waste/Remed. Building/Grounds Mtc  September 4 Washington OR 2007-31-1	A 33-year-old tree trimmer was killed when a tree he was working in uprooted and fell. The experienced tree trimmer was removing a 90-foot hemlock tree, 20 inches in diameter at stump level, in the backyard of a residence. All climbing gear was appropriate and in good condition. The tree trimmer took off branches on the way up; three coworkers on the ground removed debris and checked the tree's stability. The crew apparently knew the roots on one side of the tree were rotten. At the top, the tree trimmer cut to lop off 20 feet of the tree. As the top tipped over, the tree swayed, uprooted, and fell. The tree trimmer was safely belted to the tree until it hit a children's playhouse, which dislodged him. The victim landed on his head on a concrete patio and died at the scene.				
Construction Construction September 15 Clackamas OR 2007-49-1	A 32-year-old drywall installer was killed when he fell 20-25 feet from a ladder mounted on a scaffold. The installer and two coworkers were installing drywall in a barn under construction, with an 18-20 foot ceiling. Preparing to work on a higher part of the wall, the installer placed an extension ladder on the top plank of a 12-foot-high scaffold and secured the top of the ladder inside the dome of a skylight. The base of the ladder slipped away while the worker was on it. He was not wearing any fall-protection equipment. The event was not witnessed.				
Overexertion at height  Construction Construction  October 8 Columbia OR 2007-68-1	A 60-year-old electrician apparently lost consciousness after climbing on the bed of a utility truck and fell about 4 feet to the ground, and died in the hospital 2 weeks later. It was the electrician's first day on the job. He accompanied a coworker to reel wires from a construction site onto racks on the back of a flatbed truck. The electrician mounted the back of the truck to watch the spooling process, and collapsed and fell. Cause of death was pneumonia and hypertension.				

### **Worker Fatalities – Falls**

Welder fall	A 36-year-old welder working at an industrial construction site was killed when he fell 36 feet through a hole in the roof. The incident occurred on				
Construction	the welder's first day and first hour at the job site. The hole in the roof				
Construction	was guarded with a plywood deck, but barriers were removed for current work about 20 minutes prior to the incident. For an unknown reason,				
October 15	the welder unlatched the lanyard on his fall-protection safety harness to				
Multnomah	cross the roof and fell through the unguarded hole.				
OR 2007-38-1					
Mill manlift	A 56-year-old clean-up worker at a food mill was killed when he fell into an elevator shaft. The worker apparently tripped or misjudged				
Admin/Support/ Waste/Remed.	the handhold on a continuously running manlift in the mill that carried workers up and down between floors. He fell down the 2x3 foot floor				
Building/Grounds Mtc	opening onto a crossbeam and was struck continuously by one of the manlift steps, which was unable to pass by him. The worker was				
December 21 Yamhill OR 2007-57-1	employed through a temporary agency. He was a native Spanish speaker with very limited proficiency in English, which made communication difficult. The victim also had a vision problem, which may have been a contributing factor in the fall.				

## OR-FACE Coding (from page 6)

#### **DRUG OVERDOSE**

A 2007 incident involving a drug overdose (abstract, p. 25) exposed a coding anomaly related to the nature of the event. Accidental drug overdose is coded as an exposure event, while an overdose with suicidal intent is coded as violence. In the suicide literature, intent is essential to define a suicide event. OIICS definitions follow this standard for falls, requiring evidence of intent to count as violence; but for other types of event, undetermined intent is categorized as violence.

The National Violent Death Reporting System follows this same logic, but not reliably. About two-thirds of deaths of undetermined intent are drug overdose, or poisoning – a type of event that medical examiners in different states or localities interpret differently. NVDRS admits its reporting states do not follow the same standard, and some show inflated violence statistics due to a high

number of drug overdoses of undetermined intent. In 2005, Massachusetts reportedly addressed this problem by changing the protocol for most drug overdoses, counting them as unintentional exposure events if no evidence proved otherwise.

NVDRS follows definitions on violent death established by the World Health Organization. Researchers concerned with poisoning events use a different standard. State and CDC reports on poisoning recombine "undetermined" and "unintentional" as one category of exposure.

OR-FACE chose to follow the OIICS definition, and code a drug overdose of undetermined intent under violence. The rule was not applied in the 2007 case, because a preponderance of evidence, following much discussion and persistent uncertainty, indicated the overdose was unintentional.

## **Worker Fatalities – Violence**

## **Violence**

Orchard suicide	A 43-year-old orchard foreman committed suicide. The foreman was found in the cab of an orchard truck, with the barrel of a rifle pressed to				
Agriculture Farm/Ranch	his abdomen.				
January 2 Wasco OR 2007-51-1					
Ranch dispute	A 55-year-old rancher and a 40-year-old ranch caretaker were killed in a shootout during a dispute over cattle. The rancher and his 28-year-old				
Agriculture Farm/Ranch	son were at a cousin's neighboring ranch to retrieve three strayed cows.  The cousin was away, but a sister and her boyfriend were onsite as caretakers. The caretakers angrily disputed the right of the rancher to				
January 18 Wallowa OR 2007-03-2	take the cattle, and the man brought out a rifle. The rancher refused to dismount, and the caretaker shot him. The son wrestled with the caretaker and was hit in the head with a rock, but gained control of the rifle and fired at the running caretaker. The son then drove away to call for help. The two victims were found dead. The medical examiner reported the caretaker positive for benzodiazepines and morphine.				
Money dispute	A 50-year-old residential mover was killed in a dispute with a client over payment. The mover struck the client with a brick and chased him. In				
Transportation Transportation	the ensuing scuffle, the client stabbed the mover to death with a pocket knife. The medical examiner reported the victim positive for cocaine and a blood alcohol content of 0.15.				
January 24 Josephine OR 2007-60-1					
Ranch gunshot	A 46-year-old ranch hand was shot to death in the evening at the doorstep of his residence on a ranch, where he was a full-time caretaker.				
Agriculture Farm/Ranch	The cause of the dispute is unknown.				
April 5 Klamath OR 2007-58-1					
Professor suicide	A 40-year-old female university professor died after ingesting a toxic lab chemical. On Sunday afternoon, the professor left her husband at home				
Education Services Education/Training	to go to her laboratory on campus to finish up some work. Nothing in her behavior appeared out of the ordinary. About 1 hour later, emergency responders were alerted to a gravely ill woman in a car on campus. A				
June 10 Benton OR 2007-16-1	medic at the scene asked the professor if she tried to kill herself, and she said, "Yes." The victim died 2 hours later at the hospital.				

## **Worker Fatalities – Violence**

Shotgun suicide	A 52-year-old machinist took a shotgun from the shop where he worked walked to the far side of a nearby pasture, and shot himself. Failed			
Manufacturing Office/Admin support	romance was apparently a primary motive.			
July 21 Polk OR 2007-59-1				
Studio violence	An 18-year-old female model was killed in the apartment and studio where she lived and worked with the owner of a pornography website. She was apparently strangled. The owner was found at the scene attempting suicide, and was held by police on murder charges.			
Arts/Entertainment/Rec Sales and Related				
August 28 Multnomah OR 2007-33-1				
Recruiter suicide	A 26-year-old recruiter for the U.S. Marine Corps committed suicide by hanging himself at the corps recruiting office where he worked.			
Public Administration Military	recruiter was relieved of his position that evening, due to repeated problems. The news was conveyed to him over the telephone. A coworker went to the office to check on the recruiter shortly afterward			
October 21 Josephine OR 2007-63-1	and discovered the body.			
Market suicide	A 57-year-old orchard owner committed suicide with a handgun in his trailer home on the property of his market.			
Retail Trade Sales and Related	adici nome on the property of his market.			
November 20 Clackamas OR 2007-62-1				

## **Worker Fatalities – Delayed Death**

#### Worker Fatalities with Delayed Death from Date of Injury (over 2 days), 2007

Event	Cause of Death	Interval	Reference
Violence	Shotgun wounds	3 days	Ranch gunshot (p. 29)
Fall	Ruptured splenic hematoma	3 days	Sliding ladder (p. 26)
Transportation (Motor Vehicle)	Severe head injury	3 days	Sidewalk work zone (p. 18)
Contact	Severe head injury	4 days	Rope hoist (p. 24)
Fall	Severe head injury	6 days	Ladder (p. 26)
Exposure	Cerebral anoxia	9 days	Methadone (p. 25)
Fall	Broken neck	9 days	House painter (p. 27)
Fall	Pneumonia, hypertension	15 days	Overexertion (p. 27)
Transportation (Motor Vehicle)	Multiple blunt force trauma, cardiac arrest	23 days	Wrong way oncoming (p. 17)
Transportation (Mobile Machinery)	Severe head injury	39 days	Forklift in crosswalk (p. 19)
Fall	Severe head injury	59 days	Roofing (p. 26)
Contact	Amputation, stroke	68 days	Conveyor jam (p. 23)
Contact	Sepsis, effect of crushing injury	15.8 years	Logging (p. 22)

### **Contact Information**

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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.

Oregon Fatality Assessment and Control Evaluation
Center for Research on Occupational and Environmental Toxicology



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