

Washington FACE 2011 Work-Related Fatalities Report

Safety & Health
Assessment & Research
for Prevention (SHARP)

Department of Labor &
Industries

Phone: 888-66-SHARP

Fax: 360-902-5672

2/28/2012

State of Washington, Fatality Assessment and Control Evaluation (FACE)

The Washington State FACE program conducts surveillance on acute trauma work-related fatalities in the state of Washington. This report contains summary data of the incidents that occurred in 2011.



**2011 Work-Related Fatality Data
Washington State FACE Program
as of February 28, 2012**

Table of Contents

<u>Contents</u>	<u>Page</u>
Summary.....	4
Fatalities by Year, 2002-2011.....	5
Fatalities by Year for Major Industries, 2002-2011.....	6
Fatalities by Industry, 2010-2011.....	7
Fatalities by Incident Type, 2010-2011.....	8
Fatalities by Industry and Incident Type, 2011.....	9
Fatalities by Top 5 Industries and Occupation, 2011.....	10
Fatalities by Motor Vehicle Type, Industry, and Occupation, 2011.....	11
Fatalities by Machine Type, Industry, and Occupation, 2011.....	12
Fatalities by WA State County, 2010-2011.....	13
Fatalities by Industry and L&I Region, 2011.....	14
Fatalities by Industry and Age, 2011.....	15
Fatalities by Number of Employees and Industry, 2011.....	16
Fatalities by Ethnicity and Gender, 2011.....	16
Fatalities by Country of Origin, 2011.....	16
2011 FACE Products.....	17
Acknowledgements.....	17
Washington State FACE Program Information.....	18
Appendix A: Listing of all 2011 Washington State Fatalities by County.....	19

Work-Related Fatality Data for Washington State in 2011 as of February 28, 2012 Washington State FACE Program

The Fatality Assessment and Control Evaluation (FACE) Program at the Washington State Department of Labor and Industries collects data on all workplace acute trauma fatalities, regardless of workers' compensation insurance coverage for the deceased or whether the incident falls under the jurisdiction of L&I's Division of Occupational Safety and Health (DOSH) or the federal Occupational Safety and Health Administration (OSHA). The summaries below include all of these data, except where indicated. A complete listing of FACE products and more information on the program can be found on the FACE website at www.lni.wa.gov/Safety/Research/FACE or by calling us toll-free 1-888-667-4277.

Washington FACE is one of nine state programs that have cooperative agreements with the National Institute for Occupational Safety and Health (NIOSH) to conduct surveillance, targeted investigations, and prevention activities at the state level using the FACE model.

Who is Included:

All people who were working in Washington State or the waters within or off of the state and died due to a work-related incident. This includes workers based in other states that have fatal injury incidents in Washington.

Types of Incidents Included:

- Acute trauma fatalities
- Acute chemical exposures
- Homicides
- Suicides
- Motor vehicle incidents

Types of Incidents Not Included:

- Fatalities due to natural causes (heart attacks, aneurysms, etc.) unless there is a work-related component.
- Fatalities due to diseases from long-term exposure (example-asbestos and silica).
- Fatalities that occurred this year due to an incident from a previous year.

Other Data Sources

The US Department of Labor Bureau of Labor Statistics Census of Fatal Occupational Incidents (CFOI) also collects surveillance data on occupational fatalities in Washington State. CFOI and FACE data may differ in terms of numbers of annual work-related fatalities. The reason for this difference is that CFOI includes cases according to the date of death in its annual numbers, not the date of incident, as FACE does.

Summary

2011 ended with a historic low number of traumatic work-related fatal incidents in Washington State. Last year's total of 51 was 38 less than the 2010 total and less than half the total in 1998, the first year FACE documented work-related deaths. The low number of deaths in 2011 was marked by major decreases in two industry^a sectors. Work-related deaths decreased by 17 in agriculture, forestry, fishing, and hunting and by 10 in manufacturing from 2010 to 2011. There were also fewer fatalities resulting from incidents involving machines, violence, and being struck by objects. In addition, there were fewer multi-victim events and an absence of fatal tractor roll-overs in 2011.

Since 2006, the number of work-related fatalities has decreased by an average of 5 per year. This is despite the high number of 89 fatalities in 2010. Fatalities in the construction industry fell from a 10 year high of 23 in 2006 to 6 in 2011. During this time, the number of fishing and fishing-related worker fatalities also fell from an average of 5 per year to 0 in 2011.

The industry with the highest number of fatalities in 2011 was the transportation and warehousing industry with 13 fatalities, an increase of 3 from 2010. The industries with the second and third highest number of fatalities were public administration with 7 (8 in 2010) and construction with 6 (7 in 2010). Four of the deaths in the public administration industry were military officers involved in a two aircraft crash incident.

In 2011, motor vehicle-related incidents^b were the number one cause of fatalities. Motor vehicles accounted for 19 incidents or 37% of the annual total. This is a 16% increase in motor vehicle-related fatalities from 2010. Ten motor vehicle incidents occurred among heavy and tractor-trailer truck drivers and 4 involved semi-trucks. Machine-related incidents were the second most frequent cause of fatalities with 8 incidents or 16% of the annual total. Three of the 8 fatal incidents involved machines engaged in logging-related activities. In addition to tractor-trailer truck drivers, other high risk occupations^c in 2011 included tree trimmers and pruners, workers engaged in logging-related activities, and any worker operating a motor vehicle.

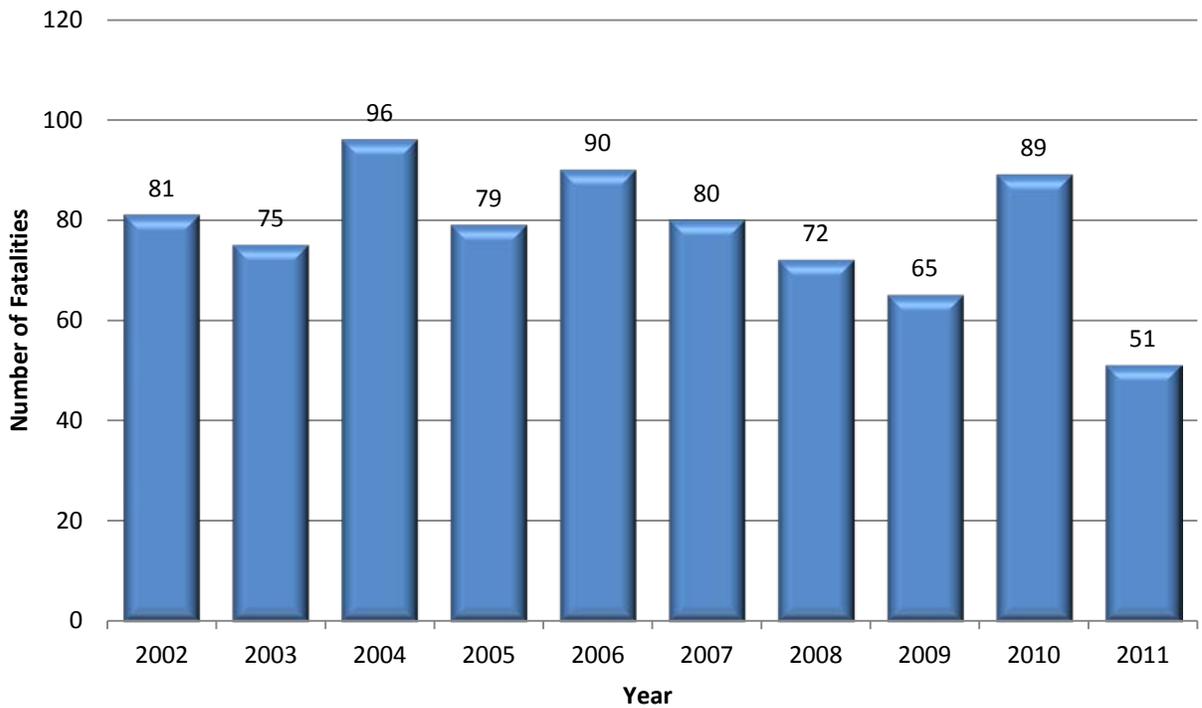
The majority of incidents (82%) involved Non-Hispanic males born in the US. Workers in the 50-59-year-old age group suffered the highest number of fatalities with the largest number occurring in the transportation and warehousing industry. Approximately one third of all incidents occurred among employers with 10 or fewer employees.

^a Industry categorized by 2-digit North American Industrial Classification System (NAICS)

^b Incident Type categorized by International Classification of Diseases, ninth revision (ICD-9)

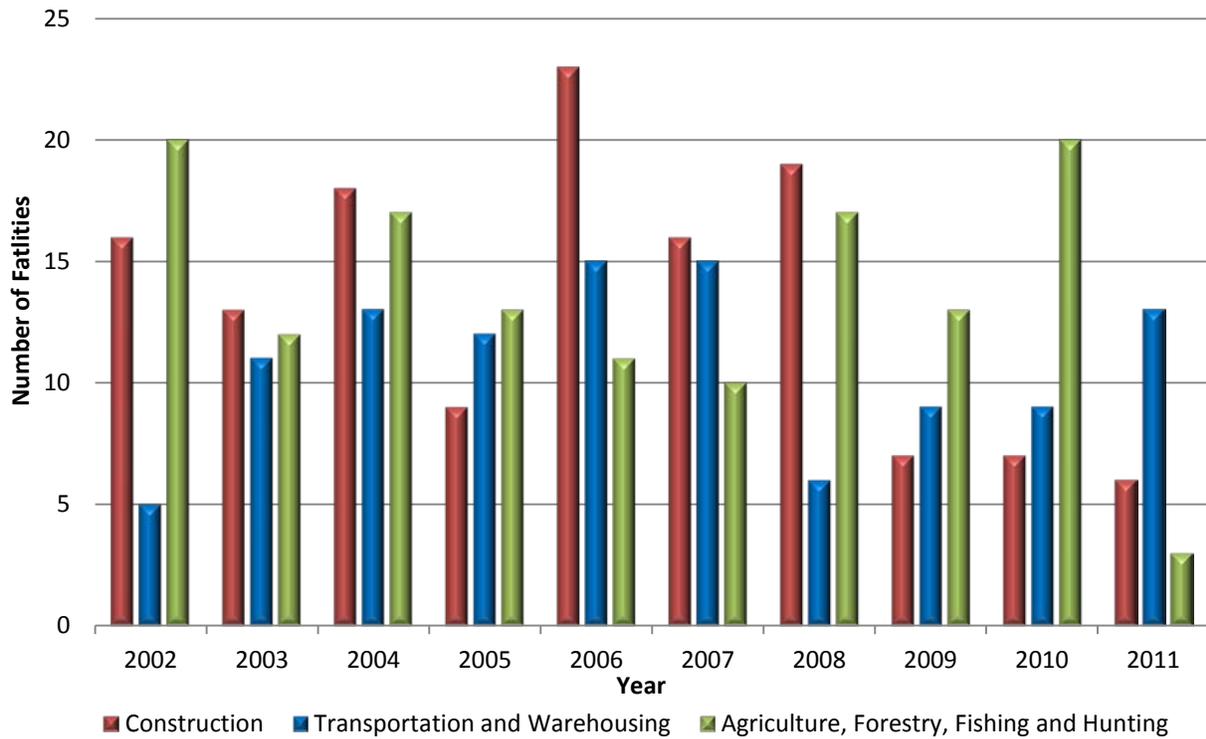
^c Occupation categorized by Standard Occupational Classification (SOC)

Fatalities by Year, 2002-2011, WA FACE



Crane lifting bridge section: Workers should never work or stand below suspended loads. Image courtesy of NIOSH/John Rekus/elcoshimages.org.

Fatalities by Year for Major Industries^a, 2002-2011, WA FACE



^a Industry by 2-digit North American Industrial Classification System (NAICS)



Motor vehicles: Accounted for 37% of work-related fatalities in 2011. One third of these involved semi-trucks. Employers should develop and enforce safe driving programs.

Fatalities by Industry^a, 2010-2011, WA FACE

Industry	2010	2011	Percent Change
Transportation and Warehousing	9	13	44%
Public Administration	8	7	-13%
Construction	7	6	-14%
Wholesale Trade	4	5	-25%
Admin. and Support and Waste Mgmt. and Remediation Services	6	5	-17%
Manufacturing	14	4	-71%
Agriculture, Forestry, Fishing and Hunting	20	3	-85%
Professional, Scientific, and Technical Services	3	2	-33%
Retail Trade	2	1	-50%
Real Estate and Rental and Leasing	4	1	-75%
Accommodation and Food Services	2	1	-50%
Educational Services	1	1	0%
Arts, Entertainment and Recreation	2	1	-50%
Mining, Quarrying, and Oil and Gas Extraction	1	1	0%
Health Care and Social Assistance	3		-100%
Other Services (except Public Administration)	2		-100%
Finance and Insurance	1		-100%
Total	89	51	-43%

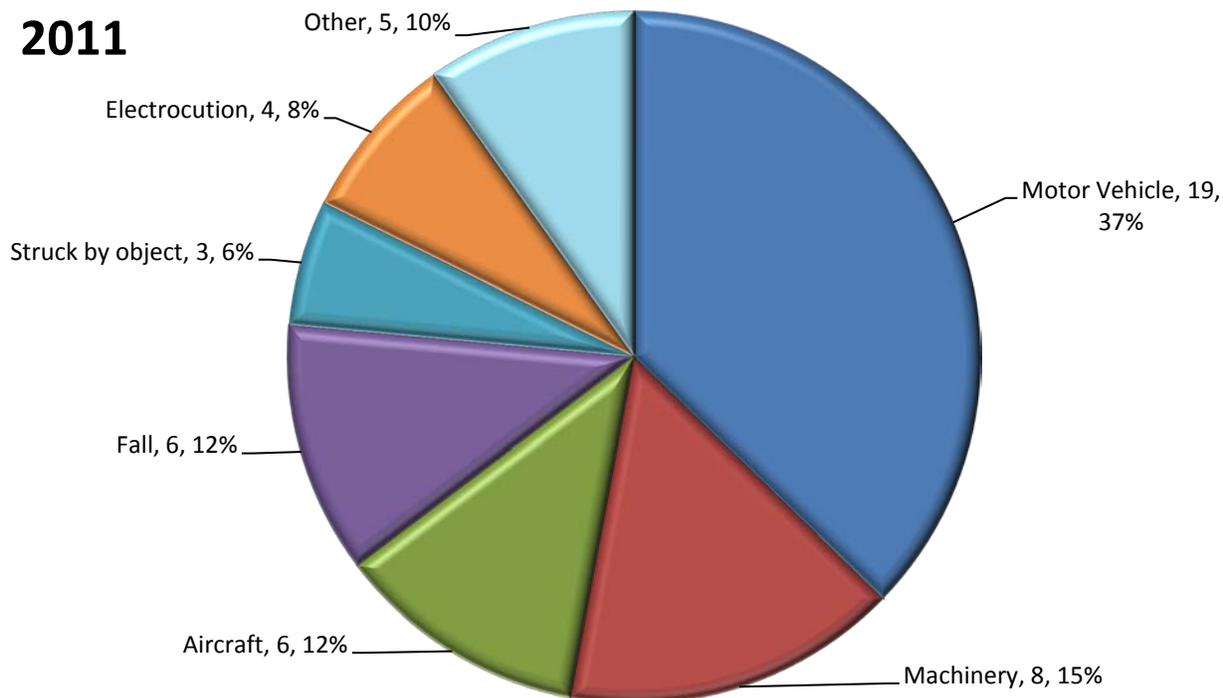
^a Industry by 2-digit North American Industrial Classification System (NAICS)



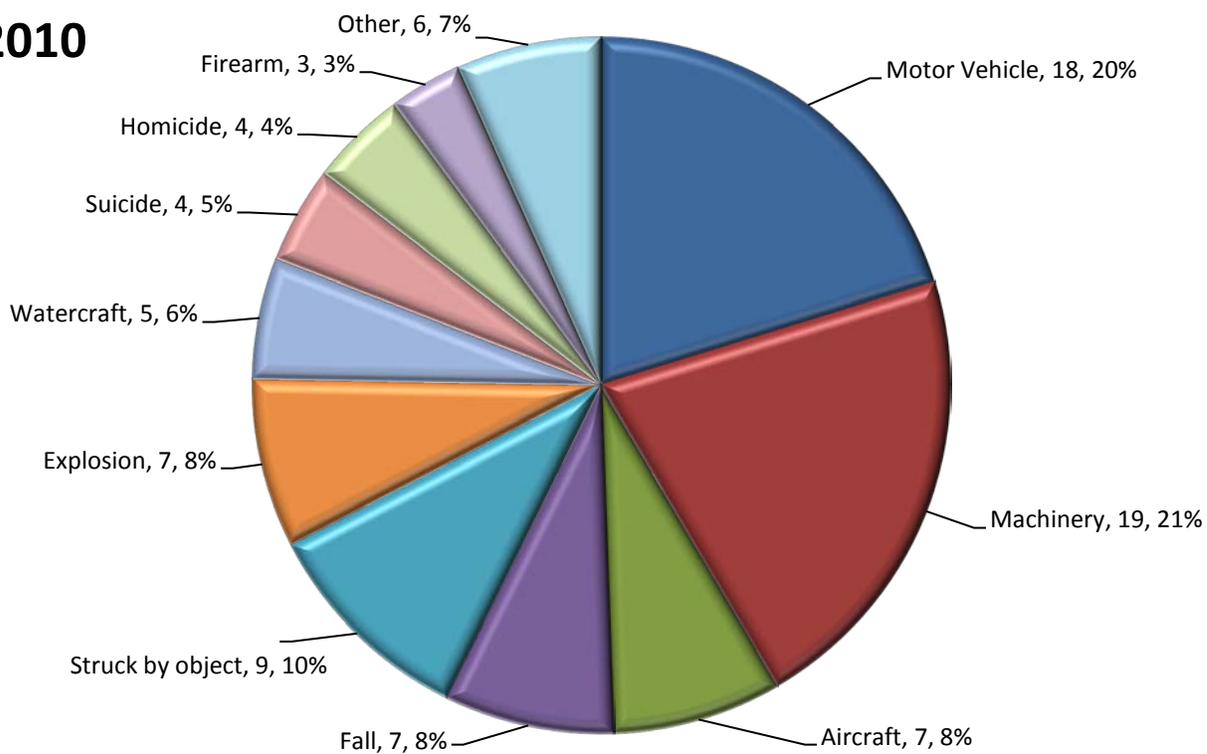
Faller cutting tree: Tree fallers should always check for snags and other danger trees and ensure the fall zone is clear and secure before falling. *Image courtesy of Washington State Department of Labor & Industries.*

Fatalities by Incident Type^a, 2010-2011, WA FACE

2011



2010



^a Incident Type by International Classification of Diseases, ninth revision (ICD-9). Only Incident types with 3 or more fatalities are individually classified.

Fatalities by Industry^a and Incident Type^b, 2011, WA FACE

Industry	Incident Type									Total
	Motor Vehicle	Machinery	Aircraft	Fall	Electrocution	Struck by object	Homicide	Toxic Reaction to Venomous Animal	Watercraft	
Transportation and Warehousing	10	1	1	1						13
Public Administration		1	4			1	1			7
Construction	2	2		1				1		6
Wholesale Trade	3					1		1		5
Administrative and Support and Waste Management and Remediation Services	1			1	2	1				5
Manufacturing		2		2						4
Agriculture, Forestry, Fishing and Hunting		2			1					3
Professional, Scientific, and Tech. Services	1		1							2
Retail Trade				1						1
Real Estate and Rental and Leasing							1			1
Accommodation and Food Services	1									1
Educational Services	1									1
Arts, Entertainment and Recreation									1	1
Mining, Quarrying, and Oil and Gas Extraction					1					1
Total	19	8	6	6	4	3	2	2	1	51
Percent	37%	15%	12%	12%	8%	6%	4%	4%	2%	100%

^a Industry by 2-digit North American Industrial Classification System (NAICS)

^b Incident Type by International Classification of Diseases, ninth revision (ICD-9)

Fatalities by Top 5 Industries^a and Occupation^b, 2011, WA FACE

Industry Occupation	Number
Transportation and Warehousing	
Heavy and Tractor-Trailer Truck Drivers	7
Postal Service Mail Carriers	1
Commercial Pilots	1
Railroad Conductors and Yardmasters	1
Taxi Drivers and Chauffeurs	1
Locomotive Engineers	1
Motor Vehicle Operators, All Other	1
Public Administration	
First-Line Supervisors of Air Crew Members	3
Air Crew Officers	1
Highway Maintenance Workers	1
Correctional Officers and Jailers	1
Excavating and Loading Machine and Dragline Operators	1
Construction	
Construction Laborers	2
Machinists	1
Operating Engineers and Other Construction Equipment Operators	1
Drywall and Ceiling Tile Installers	1
Electrical Power-Line Installers and Repairers	1
Wholesale Trade	
Heavy and Tractor-Trailer Truck Drivers	3
Farm Equipment Mechanics and Service Technicians	1
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	1
Administrative and Support and Waste Management and Remediation Services	
Tree Trimmers and Pruners	3
Carpenters	1
Refuse and Recyclable Material Collectors	1

^a Industry by 2-digit North American Industrial Classification System (NAICS)

^b Occupation by Standard Occupational Classification (SOC)

Fatalities by Motor Vehicle Type, Industry^a, and Occupation^b, 2011, WA FACE

Industry Occupation	Motor Vehicle Type							Total	
	Automobile	Delivery Truck	Dump Truck	Garbage Truck	Pilot Car	Semi-truck	Shuttle Van		
Transportation and Warehousing								10	
Heavy and Tractor-Trailer Truck Drivers		1				4			
Railroad Conductors and Yardmasters							1		
Postal Service Mail Carriers	1								
Locomotive Engineers							1		
Taxi Drivers and Chauffeurs							1		
Motor Vehicle Operators, All Other					1				
Wholesale Trade								3	
Heavy and Tractor-Trailer Truck Drivers		1				2			
Construction								2	
Electrical Power-Line Installers and Repairers							1		
Construction Laborers			1						
Administrative and Support and Waste Management and Remediation Services								1	
Refuse and Recyclable Material Collectors				1					
Professional, Scientific, and Tech. Services								1	
Couriers and Messengers	1								
Accommodation and Food Services								1	
Food Servers, Non-restaurant	1								
Educational Services								1	
Soil and Plant Scientists	1								
Total	4	2	1	1	1	6	3	1	19

^a Industry by 2-digit North American Industrial Classification System (NAICS)

^b Occupation by Standard Occupational Classification (SOC)

Fatalities by Machine Type, Industry^a, and Occupation^b, 2011, WA FACE

Industry Occupation	Machine Type								Total
	Construction Barge Winch	Brush Cutting Machine	Bailing Machine	Skid-steer Loader	Sawmill Machine	Logging Skidder	Logging Loader	Logging Shovel	
Construction									2
Operating Engineers and Other Construction Equipment Operators				1					
Machinists	1								
Agriculture, Forestry, Fishing and Hunting									2
Logging Workers, All Other								1	
Logging Equipment Operators						1			
Manufacturing									2
Sawing Machine Setters, Operators, and Tenders, Wood					1				
Machine Feeders and Offbearers			1						
Transportation and Warehousing									1
Heavy and Tractor-Trailer Truck Drivers							1		
Public Administration									1
Excavating and Loading Machine and Dragline Operators		1							
Total	1	1	1	1	1	1	1	1	8



Trench digging: Workers should not stand near or under operating machinery. Spotters should be used if machine operators cannot see workers inside a trench area. *Image courtesy of OSHA Training Institute, Southwest Education Center / elcoshimages.org.*

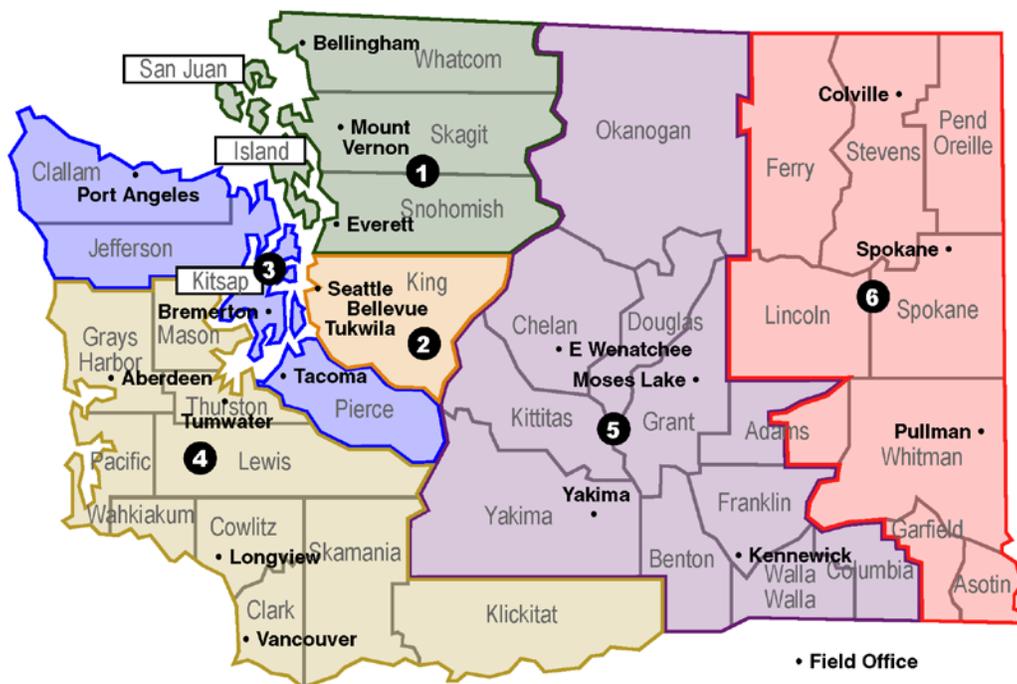
Fatalities by WA State County, 2010-2011, WA FACE

County	2010	2011
King	16	13
Chelan	1	4
Pierce	4	4
Benton	4	3
Cowlitz	1	3
Kittitas	3	2
Okanogan	1	2
Clark	1	2
Stevens		2
Snohomish	4	2
Jefferson	2	2
Thurston		1
Whitman	3	2
Yakima	6	2
Kitsap	3	2
Lewis	5	2
Skamania		1
Adams	1	1
Pacific	1	1
Skagit	12	
Clallam	5	
Grant	3	
Klickitat	3	
Spokane	2	
Grays Harbor	2	
Franklin	2	
Mason	1	
Douglas	1	
Whatcom	1	
Garfield	1	
Total	89	51

Fatalities by Industry^a and L&I Region, 2011, WA FACE

Industry	L&I Region						Total
	1	2	3	4	5	6	
Transportation and Warehousing		5	1	1	4	2	13
Public Administration	1	2		2	1	1	7
Construction		1	1	1	3		6
Wholesale Trade		2	2		1		5
Administrative and Support and Waste Management and Remediation Services			2	3			5
Manufacturing		2		1	1		4
Agriculture, Forestry, Fishing and Hunting	1				2		3
Professional, Scientific, and Technical Services			1		1		2
Retail Trade				1			1
Real Estate and Rental and Leasing				1			1
Accommodation and Food Services		1					1
Educational Services						1	1
Arts, Entertainment and Recreation				1			1
Mining, Quarrying, and Oil and Gas Extraction					1		1
Total	2	13	7	11	14	4	51

^a Industry by 2-digit North American Industrial Classification System (NAICS)



Fatalities by Industry^a and Age, 2011, WA FACE

Industry	Age Group							Total
	<20	20-29	30-39	40-49	50-59	60-69	80-89	
Transportation and Warehousing		2	2	2	5	2		13
Public Administration		1	4		1	1		7
Construction	1		1	3	1			6
Wholesale Trade				1	1	3		5
Admin. and Support and Waste Mgmt. and Remediation Services		1	1	2		1		5
Manufacturing		2			2			4
Agriculture, Forestry, Fishing and Hunting		1	1	1				3
Professional, Scientific, and Technical Services					2			2
Retail Trade					1			1
Real Estate and Rental and Leasing							1	1
Accommodation and Food Services		1						1
Educational Services			1					1
Arts, Entertainment and Recreation		1						1
Mining, Quarrying, and Oil and Gas Extraction			1					1
Total	1	9	11	9	13	7	1	51
Percent	2%	18%	22%	18%	25%	14%	2%	100%

^aIndustry by 2-digit North American Industrial Classification System (NAICS)



Electrical workers: Four workers in various occupations were electrocuted in 2011. Three were caused by incidental contact with energized lines.

Fatalities by Number of Employees and Industry, 2011, WA FACE

Industry	Number of Employees					Total
	0-10	11-50	51-100	>100	Unknown	
Transportation and Warehousing	3	2		5	3	13
Public Administration				7		7
Construction	3	1		1	1	6
Administrative and Support and Waste Management and Remediation Services	4			1		5
Wholesale Trade	1	3	1			5
Manufacturing		1	1	2		4
Agriculture, Forestry, Fishing and Hunting	2			1		3
Professional, Scientific, and Technical Services	1			1		2
Retail Trade				1		1
Real Estate and Rental and Leasing	1					1
Educational Services				1		1
Accommodation and Food Services				1		1
Arts, Entertainment and Recreation	1					1
Mining, Quarrying, and Oil and Gas Extraction		1				1
Total	16	8	2	21	4	51
	31%	16%	4%	41%	8%	100%

Fatalities by Ethnicity and Gender, 2011, WA FACE

Ethnicity	Male	Female	Total	Percent
Non-Hispanic	42	4	46	90%
Hispanic	2	1	3	6%
Unknown	2		2	4%
Total	46	5	51	100%
Percent	90%	10%	100%	

Fatalities by Country of Origin, 2011, WA FACE

Country of Origin	Number of Fatalities	Percent
US	46	90%
Mexico	3	6%
India	1	2%
Venezuela	1	2%
Total	51	100%

2011 FACE Products

Construction Fatality Narratives

Available at: www.lni.wa.gov/Safety/Research/Face/ReptNarr/Narratives/Default.asp

Skid-Steer Loader Operator Crushed Between Backhoe Attachment and Cab

Framer Falls When Floor Section Collapses

Contractor Killed When Boom Truck Crashes

Laborer Crushed Under House

Ironworker Killed When Rebar Cage Collapses

Floor Installer Killed in Motor Vehicle Crash

Agriculture Fatality Narratives

Available at: www.lni.wa.gov/Safety/Research/Face/ReptNarr/Narratives/Default.asp

Ranch Worker Dies When ATV Rolls Over

Nursery Laborer Electrocuted When Irrigation Pipe Contacts Overhead Power Line

Fatality Investigation Reports

Available at: www.lni.wa.gov/Safety/Research/Face/ReptNarr/Investigations/Default.asp

Crane Operator Dies after Falling From Crane Turntable Deck in Washington State

A Commercial Cleaning Company Worker Dies of Carbon Monoxide (CO) Poisoning at a Warehouse in Washington State

Acknowledgements:

This report was made possible due to the cooperation and efforts of several collaborators. Though we are unable to acknowledge specific individuals for their contributions to this report, we would like to recognize the following for their help and support of the FACE mission and objectives:

- Division of Occupation Safety and Health (DOSH) Compliance Operations
- Division of Occupation Safety and Health (DOSH) Enforcement
- Federal FACE Program Management (NIOSH)
- Safety & Health Assessment & Research for Prevention (SHARP)
- Washington State Attorney General's Office

Washington State FACE Program Information

The Washington State Fatality Assessment and Control (WA FACE) program is one of many workplace health and safety programs administered by the Washington State Department of Labor & Industries' Safety & Health & Research for Prevention (SHARP) program. It is a research program designed to identify and study fatal occupational injuries. Under a cooperative agreement with the National Institute for Occupational Safety and Health (NIOSH), WA FACE collects information on occupational fatalities in WA State and targets specific types of fatalities for evaluation. WA FACE investigators evaluate information from multiple sources. Findings are summarized in narrative reports that include recommendations for preventing similar events in the future. These recommendations are distributed to employers, workers, and other organizations interested in promoting workplace safety. NIOSH-funded, state-based FACE programs include: California, Iowa, Kentucky, Massachusetts, Michigan, New Jersey, New York, Oregon, and Washington. WA FACE does not determine fault or legal liability associated with a fatal incident. Names of employers, victims and/or witnesses are not included in written investigative reports or other databases to protect the confidentiality of those who voluntarily participate in the program.

Additional information regarding the WA FACE program can be obtained from:
Washington State FACE Program
www.lni.wa.gov/Safety/Research/FACE

PO Box 44330
Olympia, WA 98504-4330
1-888-667-4277

Appendix A

Listing of all 2011 Washington State Fatalities by County

County Description	Number
Adams County	1
A farm and garden machinery technician died of a hornet sting.	1
Benton County	3
A construction laborer was backed into by a dump truck in a state highway workzone at night.	1
A pilot car driver was struck from behind by a tow truck, pushing his vehicle under the transport truck.	1
A semi-truck driver died when he collided head-on with a semi-truck while driving on a state highway.	1
Chelan County	4
A helicopter pilot died when he struck power lines and crashed while blowing water off orchard trees.	1
A truck driver died after he exited his truck, missed a step, and fell backwards onto the ground.	1
An orchard worker contacted metal house siding energized by an improperly grounded electrical panel.	1
A worker at a company renting tubes to float down a river drowned when his kayak overturned.	1
Clark County	2
A tree service worker was struck by a falling section of tree that was cut by another worker.	1
A worker contacted overhead power lines while pressure washing a silo from a manlift.	1
Cowlitz County	3
A locomotive engineer died when the shuttle van in which he was a passenger was struck by a train.	1
A shuttle van driver died when the van he was driving was struck by a train as it was crossing railroad.	1
An apprentice railroad conductor died when the shuttle van he was riding in was struck by a train.	1
Jefferson County	2
A propane delivery driver died under the rear truck wheel after apparently trying to repair the brakes.	1
An equipment operator trying to dislodge brush was pulled into the brush cutter's rotating blade.	1
King County	13
A sandwich shop bicycle food delivery worker collided with an automobile on a city street.	1
A Department of Transportation worker was setting up safety cones in a road when a tree fell on him.	1
A drug store assistant manager fell while chasing a shoplifter, was knocked out, and died two days later.	1
A trash collector fell off the rear standing platform of a moving garbage truck.	1
A truck driver died when his truck left the highway, striking a jersey barrier and then flipped over.	1
A utility lineman was knocked under the rear tire of a reversing work truck while removing a tension wire.	1
A worker locked-out a bailing machine and entered it to un-jam a bale of plastic, which then fell on her.	1
A worker was struck by a falling bale of used clothing. The bale weighed between 600 and 900 lbs.	1
A landscaping employee was cutting limbs from a tree when he contacted an overhead power line.	1
A janitor at a shelving manufacturer fell down stairs.	1
The manager of a self storage unit was stabbed.	1
A skid steer loader operator removing demolition debris was struck in the neck by protruding rebar.	1
A stockman was picking orders from a rack. He climbed to the rack's second level, fell and hit his head.	1

Listing of all 2011 Washington State Fatalities by County (Continued)

County Description	Number
Kitsap County	2
A construction worker operating a barge winch was struck in the head when the winch malfunctioned.	1
A tree service worker with harness fell 50 feet from a crane when the safety line came off the crane hook.	1
Kittitas County	2
A glider pilot in a film shoot for a commercial being towed started to lift off and crashed, killing the pilot.	1
A semi- truck driver was killed when he struck another truck that pulled onto the interstate shoulder.	1
Lewis County	2
A construction worker who was working with a crew repairing a roof fell 30 feet through a hole in the roof.	1
A sawmill worker was caught in machinery.	1
Okanogan County	2
A construction worker hanging sheetrock in the basement of a house died after being stung by a bee.	1
A contract mail carrier died when his vehicle was struck by another as he was turning onto a highway.	1
Pacific County	1
A logger was caught between a logging shovel and a stump as the shovel swung and struck him.	1
Pierce County	4
Four army aviators died when two helicopters crashed during a training exercise at a military base.	4
Skamania county	1
A logging skidder operator died when the skidder left the road and rolled 250 feet down an embankment.	1
Snohomish County	2
A corrections officer at a state prison was strangled by an inmate.	1
A delivering truck driver stepped out from behind his truck and was struck by an oncoming vehicle.	1
Stevens County	2
A courier was killed when his vehicle pulled onto a state highway and was struck by another vehicle.	1
A log truck driver died when struck by logs being loaded onto his truck while standing on his truck.	1
Thurston County	1
A semi-trailer truck driver died after his vehicle rear-ended another vehicle and then crashed.	1
Whitman County	2
A horticultural researcher driving back to the university died in a head-on collision with another vehicle.	1
A gravel plant worker was electrocuted when he made contact with a generator's energized line.	1
Yakima County	2
A semi-truck driver died when his truck left an interstate highway and rolled into the median.	1
A truck driver on-foot outside his truck was struck by a tractor-trailer pulling out of a parking area.	1
Total	51