

# Washington FACE 2010 Work-Related Fatalities Report

Safety & Health  
Assessment & Research  
for Prevention (SHARP)

Department of Labor &  
Industries

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## 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 2010.



**2010 Work-Related Fatality Data  
Washington State FACE Program  
as of January 31, 2011**

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## **Work-Related Fatality Data for Washington State in 2010 as of January 31, 2011 Washington State FACE Program**

The Fatality Assessment and Control Evaluation (FACE) Program at the [Washington State Department of Labor and Industries](http://www.wa.gov/industry) collects data on all workplace acute trauma fatalities, regardless of DOSH/OSHA jurisdiction or workers' compensation insurance coverage. 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 web site at [www.lni.wa.gov/Safety/Research/FACE](http://www.lni.wa.gov/Safety/Research/FACE) or by calling us toll-free 1-888-667-4277.

The Washington FACE program is one of nine state health or labor departments that have cooperative agreements with the [National Institute for Occupational Safety and Health](http://www.cdc.gov/niosh) (NIOSH) for conducting 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

The year of 2010 ended with 86 work-related deaths in Washington State, 21 more than the 2009 total. The industry<sup>a</sup> with the highest number of fatalities was the agriculture, forestry, fishing, and hunting industry with 20 fatalities, an increase of 7 from 2009. The industries with the second and third highest number of fatalities were the manufacturing and the transportation and warehousing industry with 14 (3 in 2009) and 10 (9 in 2009) fatalities respectively. Other factors that contributed to the increase in fatalities in 2010 were the explosion that took the lives of 7 refinery workers and a series of plane crashes that took 7 more workers' lives.

In 2010, machine-related incidents<sup>b</sup> were the number one cause of fatalities at 19 incidents or 22% of the annual total. This more than doubled the 9 machine-related fatalities in 2009. The largest number of machinery incidents happened in the agriculture, forestry, fishing, and hunting industry. Motor vehicle incidents were the second most frequent cause of fatalities with 18 incidents or 21% of the annual total. A third of the 18 motor vehicle incidents occurred in the transportation and warehousing industry and five of these involved heavy and tractor-trailer truck drivers.

In contrast to the overall increase in work-related fatalities in 2010, came another year of low construction-related fatalities, with a total of 7. Other changes from 2009 to 2010 were the dramatic decrease in workplace homicides and suicides from 20 to 7. Historically, the highest numbers of monthly fatalities have been in summer months. In 2010, the highest number of work-related fatalities was recorded in April, the month when the tragic refinery explosion occurred that took the lives of 7 petroleum pump system and refinery operators and gaugers.

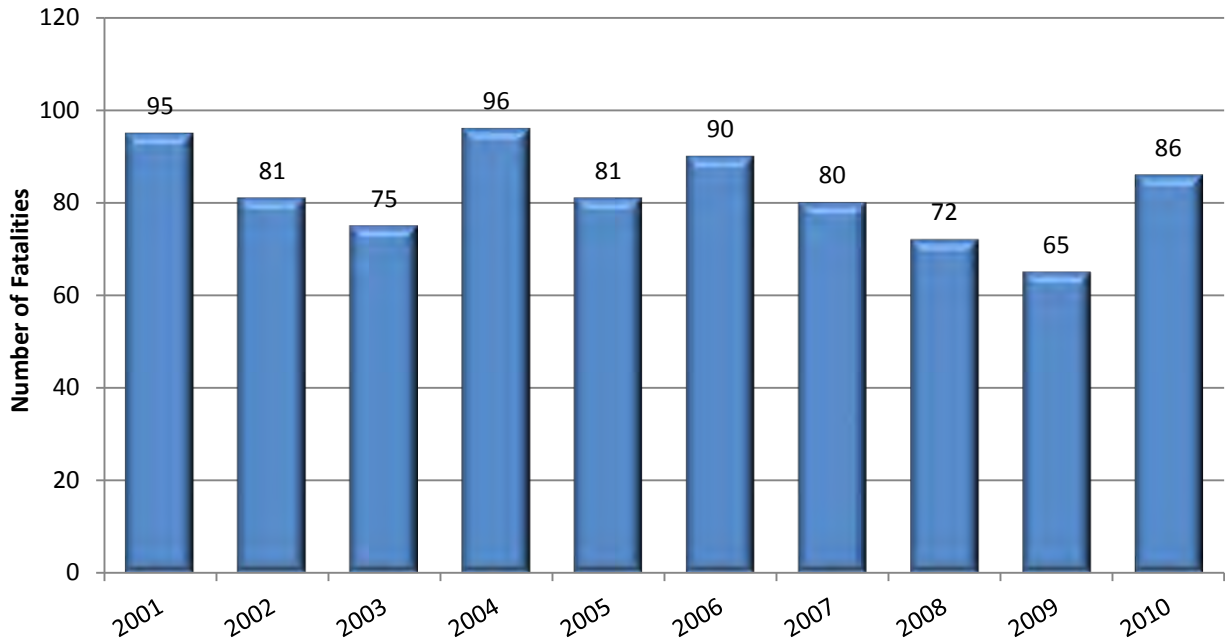
In addition to refinery workers and tractor-trailer truck drivers, other high risk occupations<sup>c</sup> in 2010 included; fishers and related fishing workers, agriculture equipment operators, and tree fallers and other logging-related workers.

<sup>a</sup> Industry categorized by 2-digit North American Industrial Classification System (NAICS)

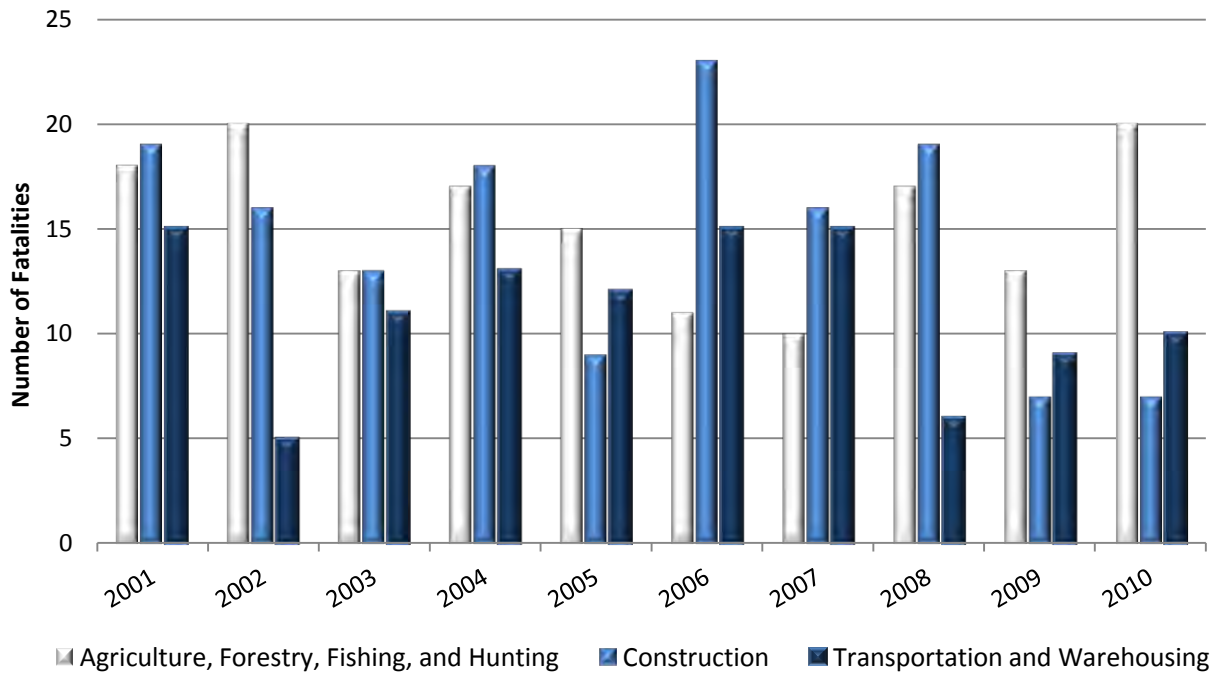
<sup>b</sup> Incident Type categorized by International Classification of Diseases, ninth revision (ICD-9)

<sup>c</sup> Occupation categorized by Standard Occupational Classification (SOC)

## Fatalities by Year, 2001-2010, WA FACE

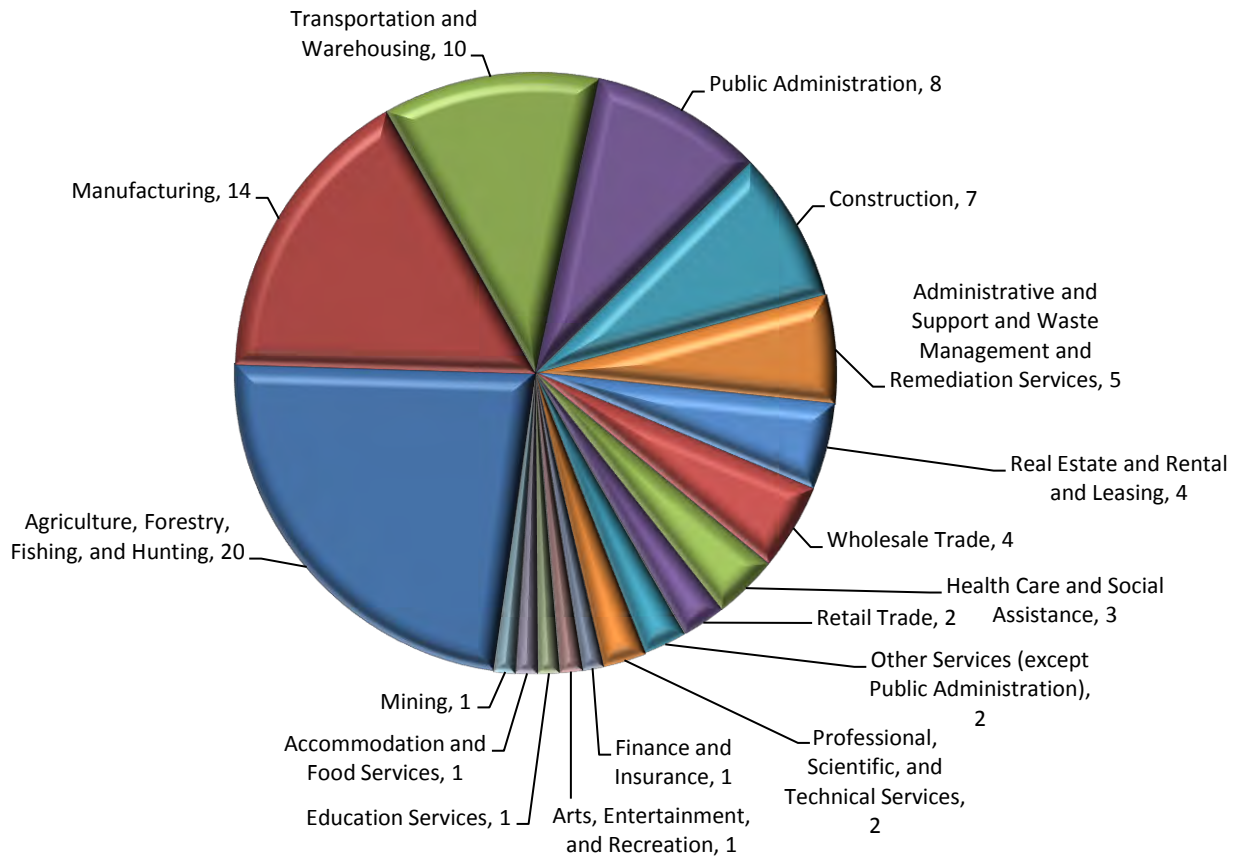


## Fatalities by Year for Major Industries<sup>a</sup>, 2001-2010, WA FACE



<sup>a</sup> Industry by 2-digit North American Industrial Classification System (NAICS)

## Number of Fatalities by Industry<sup>a</sup>, 2010, WA FACE



<sup>a</sup> 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<sup>a</sup>, 2009-2010, WA FACE

Incident Type	2009	2010
Machine	9 (14%)	19 (22%)
Motor Vehicle	15 (23%)	18 (21%)
Struck by Falling Object	9 (14%)	9 (10%)
Explosion		7 (8%)
Fall	5 (8%)	7 (8%)
Air Transportation	1 (2%)	7 (8%)
Water Transportation	3 (5%)	5 (6%)
Homicide	13 (20%)	4 (5%)
Suicide	7 (11%)	3 (3%)
Electrocution	1 (2%)	2 (2%)
Firearm		2 (2%)
Drowning	2 (3%)	2 (2%)
Injury Caused by Animal		1 (1%)
Drug Overdose	1 (2%)	
<b>Total</b>	<b>65 (100%)</b>	<b>86 (100%)</b>

<sup>a</sup> Incident Type by International Classification of Diseases, ninth revision (ICD-9)



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

## Fatalities by Industry<sup>a</sup> and Incident Type<sup>b</sup>, 2010, WA FACE

Industry	Incident Type											Total		
	Machine	Motor Vehicle	Struck by Falling Object	Explosion	Fall	Air Transportation	Water Transportation	Homicide	Suicide	Electrocution	Firearm		Drowning	Injured by Animal
Agriculture, Forestry, Fishing, and Hunting	7	1	5		1		5					1		20
Manufacturing	4	1		7					1			1		14
Transportation and Warehousing		6	2			1			1					10
Public Administration	1	3			1	3								8
Construction	4	1			2									7
Administrative and Support and Waste Management and Remediation Services	1		1		1			1			1			5
Real Estate and Rental and Leasing		2			1			1						4
Wholesale Trade		1	1							2				4
Health Care and Social Assistance					1	2								3
Retail Trade		1									1			2
Other Services (except Public Admin.)	1	1												2
Professional, Scientific, and Tech. Services						1							1	2
Finance and Insurance									1					1
Arts, Entertainment, and Recreation		1												1
Education Services									1					1
Accommodation and Food Services									1					1
Mining	1													1
<b>Total</b>	<b>19</b>	<b>18</b>	<b>9</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>86</b>

<sup>a</sup> Industry by 2-digit North American Industrial Classification System (NAICS)

<sup>b</sup> Incident Type by International Classification of Diseases, ninth revision (ICD-9)



## Fatalities by Top 3 Industries<sup>a</sup> and Detailed Incident Type<sup>b</sup>, 2010, WA FACE

Incident Type	Industry			Total
	Agriculture, Forestry, Fishing, and Hunting	Manufacturing	Transportation and Warehousing	
<b>Machinery</b>				<b>11</b>
Agricultural machines	5			
Logging machines	1			
Transmission machinery	1			
Earth moving, scraping, and other excavating machines		1		
Lifting machines and appliances		1		
Metalworking machines		1		
Woodworking and forming machines		1		
<b>Motor Vehicles</b>				<b>8</b>
Motor vehicle traffic accident due to loss of control, without collision on the highway		1	2	
Motor vehicle traffic accident involving collision with motor vehicle			1	
Motor vehicle traffic accident with pedestrian			1	
Non-traffic accident involving off-road motor vehicle	1			
Other motor vehicle non-traffic accident involving collision with moving object			1	
Accidents involving powered vehicles used in buildings and premises of an industrial or commercial establishment			1	
<b>Struck by Object</b>	5		2	<b>7</b>
<b>Explosion</b>		7		<b>7</b>
<b>Water Transportation</b>	5			<b>5</b>
<b>Drowning</b>	1	1		<b>2</b>
<b>Suicide</b>		1	1	<b>2</b>
<b>Firearm</b>	1			<b>1</b>
<b>Air Transportation</b>			1	<b>1</b>
<b>Total</b>	<b>20</b>	<b>14</b>	<b>10</b>	<b>44</b>

<sup>a</sup> Industry by 2-digit North American Industrial Classification System (NAICS)

<sup>b</sup> Incident Type by International Classification of Diseases, ninth revision (ICD-9)

## Fatalities by Top 3 Industries<sup>a</sup> and Occupation<sup>b</sup>, 2010, WA FACE

Industry Occupation	Number
<b>Agriculture, Forestry, Fishing, and Hunting</b>	<b>20</b>
Fishers and Related Fishing Workers	5
Agricultural Equipment Operators	4
Fallers	3
Forest and Conservation Workers	1
Bus and Truck Mechanics and Diesel Engine Specialists	1
Logging Workers, All Other	1
Logging Equipment Operators	1
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	1
Sailors and Marine Oilers	1
Farmworkers, Farm, Ranch, and Aquacultural Animals	1
First-Line Supervisors of Farming, Fishing, and Forestry Workers	1
<b>Manufacturing</b>	<b>14</b>
Petroleum Pump System Operators, Refinery Operators, and Gaugers	7
Managers, All Other	1
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1
Excavating and Loading Machine and Dragline Operators	1
Mobile Heavy Equipment Mechanics, Except Engines	1
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1
Electricians	1
Machinists	1
<b>Transportation and Warehousing</b>	<b>10</b>
Heavy and Tractor-Trailer Truck Drivers	5
Bus and Truck Mechanics and Diesel Engine Specialists	2
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	1
Baggage Porters and Bellhops	1
Commercial Pilots	1
<b>Total</b>	<b>44</b>

<sup>a</sup> Industry by 2-digit North American Industrial Classification System (NAICS)

<sup>b</sup> Occupation by Standard Occupational Classification (SOC)

## Occupations<sup>a</sup> with greater than 2 fatalities and Incident Type<sup>b</sup>, 2010, WA FACE

Occupation Incident Type	Number
<b>Petroleum Pump System Operators, Refinery Operators, and Gaugers</b>	<b>7</b>
Explosion	7
<b>Heavy and Tractor-Trailer Truck Drivers</b>	<b>6</b>
Motor Vehicle	5
Suicide	1
<b>Agricultural Equipment Operators</b>	<b>5</b>
Machine	5
<b>Fishers and Related Fishing Workers</b>	<b>5</b>
Water Transportation	4
Struck by Falling Object	1
<b>Bus and Truck Mechanics and Diesel Engine Specialists</b>	<b>4</b>
Machine	2
Struck by Falling Object	1
Motor Vehicle	1
<b>Managers, All Other</b>	<b>3</b>
Drowning	1
Motor Vehicle	1
Fall	1
<b>Fallers</b>	<b>3</b>
Struck by Falling Object	2
Water Transportation	1
<b>Property, Real Estate, and Community Association Managers</b>	<b>3</b>
Homicide	1
Motor Vehicle	1
Injury Caused by Animal	1
<b>Total</b>	<b>36</b>

<sup>a</sup> Occupation by Standard Occupational Classification (SOC)

<sup>b</sup> Incident Type by International Classification of Diseases, ninth revision (ICD-9)

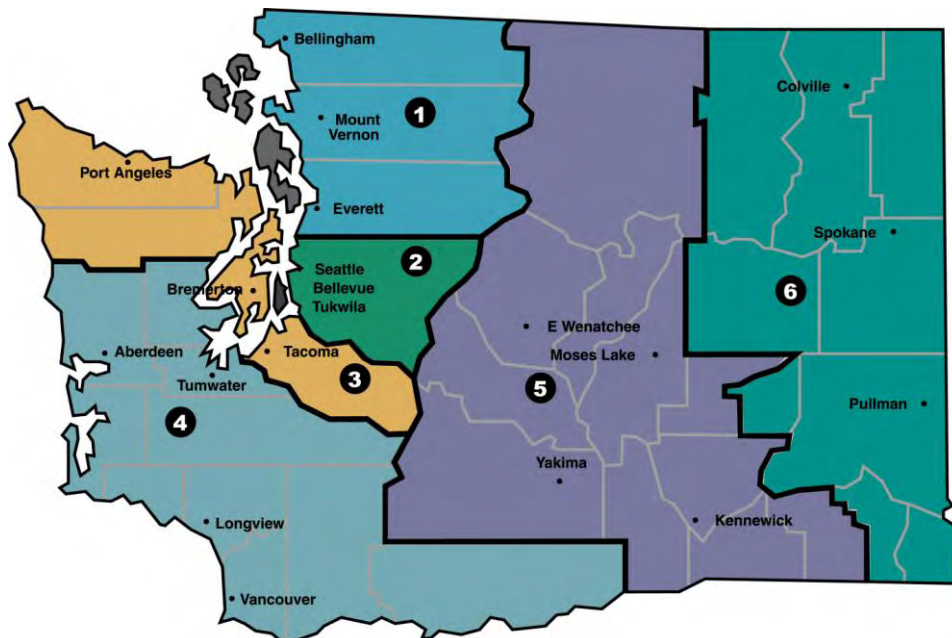
## Fatalities by County, 2009-2010, WA FACE

County	2009	2010
King	13	14
Skagit	1	12
Yakima	1	7
Lewis	2	5
Clallam	2	5
Pierce	16	5
Snohomish	4	4
Benton	2	3
Grant	1	3
Whitman		3
Kittitas		3
Klickitat	1	3
Kitsap	1	3
Jefferson		2
Franklin	1	2
Grays Harbor	3	2
Spokane	4	1
Garfield		1
Clark	1	1
Douglas		1
Chelan	3	1
Whatcom		1
Cowlitz	1	1
Adams		1
Mason		1
Pacific	3	1
Island	1	
Lincoln	1	
Thurston	2	
Asotin	1	
<b>Total</b>	<b>65</b>	<b>86</b>

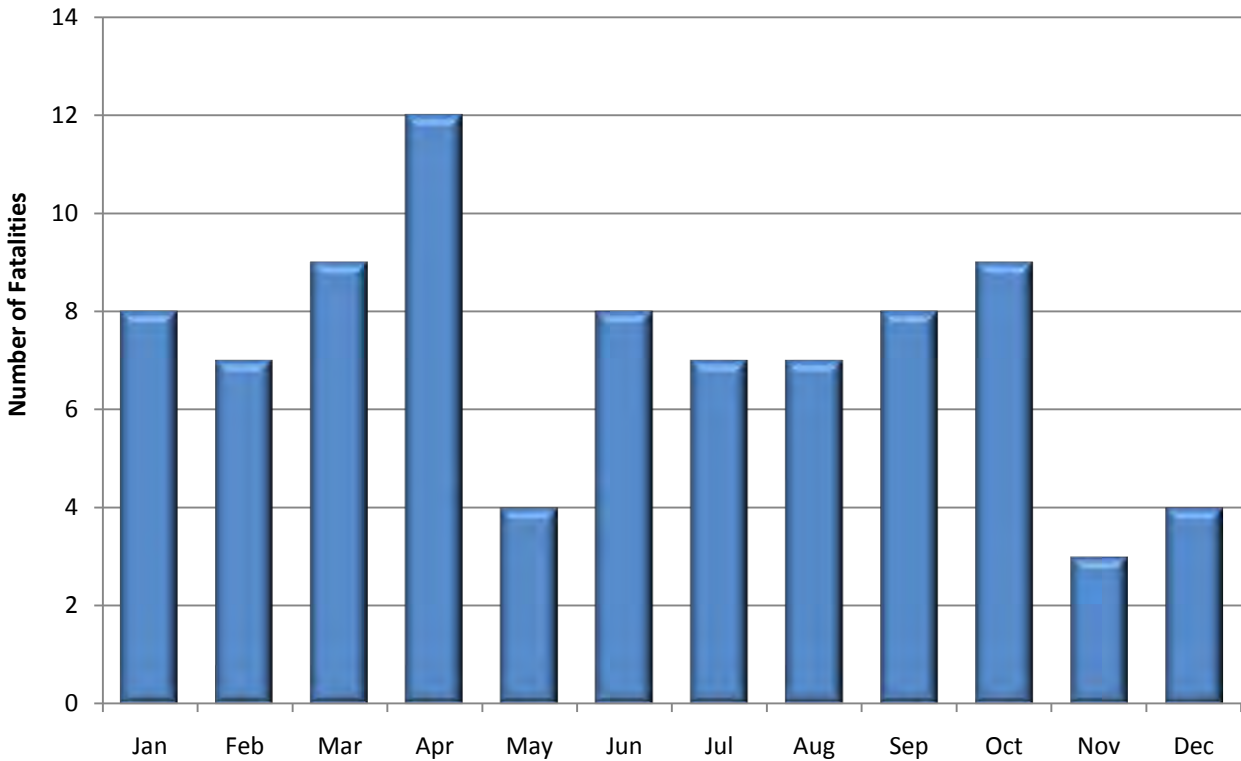
## Fatalities by Industry<sup>a</sup> and L&I Region, 2010, WA FACE

Industry	L&I Region						Total
	1	2	3	4	5	6	
Agriculture, Forestry, Fishing, and Hunting	2	2	4	7	4	1	20
Manufacturing	7	2		1	4		14
Transportation and Warehousing		2	2	3	3		10
Public Administration		1	3		4		8
Construction	1		1		3	2	7
Administrative and Support and Waste Management and Remediation Services	2	2	1				5
Real Estate and Rental and Leasing	1	1	2				4
Wholesale Trade	2	2					4
Health Care and Social Assistance	1			2			3
Retail Trade		1			1		2
Other Services (except Public Administration)			1			1	2
Professional, Scientific, and Technical Services	1			1			2
Finance and Insurance		1					1
Arts, Entertainment, and Recreation					1		1
Education Services			1				1
Accommodation and Food Services					1		1
Mining						1	1
<b>Total</b>	<b>17</b>	<b>14</b>	<b>15</b>	<b>14</b>	<b>21</b>	<b>5</b>	<b>86</b>

<sup>a</sup> Industry by 2-digit North American Industrial Classification System (NAICS)



## Fatalities by Incident Month, 2010, WA FACE



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 Industry<sup>a</sup> and Age, 2010, WA FACE

Industry	Age							Total
	Unknown	20-29	30-39	40-49	50-59	60-69	>70	
Agriculture, Forestry, Fishing, and Hunting	1	3	5	2	6		3	20
Manufacturing	1	3	4	3	1	2		14
Transportation and Warehousing	2		2	1	3	1	1	10
Public Administration			2	2	1	1	2	8
Construction		2		2		2	1	7
Administrative and Support and Waste Management and Remediation Services	1	1	2	1				5
Real Estate and Rental and Leasing					1	2	1	4
Wholesale Trade		1	1	1	1			4
Health Care and Social Assistance				1			2	3
Retail Trade		1		1				2
Other Services (except Public Administration)				2				2
Other			3	2	1		1	7
<b>Total</b>	<b>5</b>	<b>11</b>	<b>19</b>	<b>18</b>	<b>14</b>	<b>8</b>	<b>11</b>	<b>86</b>
<b>Percentage</b>	<b>6%</b>	<b>13%</b>	<b>22%</b>	<b>21%</b>	<b>16%</b>	<b>9%</b>	<b>13%</b>	<b>100%</b>

<sup>a</sup>Industry by 2-digit North American Industrial Classification System (NAICS)

## Fatalities by Ethnicity and Gender, 2010, WA FACE

Ethnicity	Male	Female	Total
Hispanic	6	1	7
Non-Hispanic	59	6	65
Undetermined	13	1	14
<b>Total</b>	<b>78</b>	<b>8</b>	<b>86</b>



## **2010 FACE Products**

### **Fatality Narratives**

[Crane Rigger Killed When Struck by Falling Crane Load](#)

[Orchard Laborer Caught in Tractor-Mounted Post Hole Digger](#)

[Laborer Struck by Boom of Excavator When it Tips Over](#)

[Roofing Contractor Falls from a Boom-Supported Elevating Work Platform](#)

[Operating Engineer Struck by Concrete Slab](#)

[Farm Tractor Operator Falls from Tractor and Run Over](#)

[Cellular Tower Crew Foreman Killed in Fall from Antenna Mast](#)

[Farm Laborer Dies from Heat Stroke](#)

[Well Driller Struck By Water Drill Pipe Sliding Off Back of Truck](#)

[Carpenter Struck By Concrete Pump Hose](#)

### **Reports**

[Assembler / Fabricator Dies When Struck by “L” Rack Loaded with Glass Mirrors in Washington State](#)

### **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](http://www.lni.wa.gov/Safety/Research/FACE)

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