Oil and Gas Industry

Fatal and Nonfatal Occupational Injuries

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Oil and Gas Industry Fatal and Nonfatal Occupational Injuries

Oil and gas industries are frequently in the news. Much of the time this news is related to changes in prices of oil and gas, which affect most consumers in one way or another. Another less frequent subject of media attention is when disasters strike, as in the offshore oil drilling platform explosion and fire on April 20, 2010, and previous incidents such as the Clearbrook, Minnesota pipeline fire in 2007 and the Texas City, Texas refinery explosion in 2005.

According to the <u>North American Industry Classification System</u>, the oil and gas extraction industry is classified in mining, as all mining industries are focused on extracting natural resources from the earth. Drilling oil and gas wells and support activities for oil and gas operations are classified under support activities for mining. Fatal injury data include oil and gas extraction, drilling oil and gas wells, and support activities for oil and gas extraction. Nonfatal injury and illness data only include drilling oil and gas wells.

Occupational injuries and fatalities associated with fires and explosions are rare events. The overall rate of injuries and illnesses with days away from work due to fires and explosions in all industries was 0.2 per 10,000 full-time workers in 2008, composed of 2,320 cases with days away from work. There were 174 fatal injuries due to fires and explosions in 2008, 18 of which were in the oil and gas industry¹.

Fatal Work Injuries

A total of 120 fatal work injuries occurred in the oil and gas extraction industry in 2008. The three most frequent fatal events in 2008 were transportation incidents (41 percent), contact with objects and equipment (25 percent), and fires and explosions (15 percent). The number of fatal work injuries associated with fires and explosions over the past five years ranged from 10 fatalities in 2007 to 21 fatalities in 2006. In 2008, there were 18 fatalities.

Of the transportation incidents in 2008, three-quarters involved highway incidents. There were four fatal work injuries where a pedestrian was struck by a vehicle or mobile equipment and five aircraft fatal work injuries in 2008. Workers who were fatally injured after being struck by objects and equipment accounted for 22 of the 30 fatal work injuries involving contact with objects and equipment.

In 2008, multiple-fatal work injury events accounted for 24 worker deaths in 10 different incidents. More than half of these deaths were caused by transportation events, while a third were from fires and explosions.

Men accounted for all of these fatal work injuries in 2008. Workers age 25 to 34 incurred the most fatal work injuries (48 fatalities or 40 percent in 2008). The majority of the workers were White, non-Hispanic (75 percent), while 17 percent were Hispanic or Latino². Ten fatally injured workers were foreign born in 2008.

The three states with the most oil and gas extraction industry fatal work injuries in 2008 were Texas (41 fatal work injuries), Oklahoma (21 fatal work injuries), and Louisiana (13 fatal work injuries). Over the five-year period of 2004-2008, Oklahoma fatal work injuries in the industry have increased 91 percent, while Texas has increased by 21 percent and Louisiana by 30 percent.

Support activities for oil and gas operations (NAICS 213112) account for about half of fatal work injuries from 2004 to 2008 in oil and gas industries on average, with 69 fatal work injuries recorded in 2008. Drilling oil and gas wells (NAICS 213111) averaged 34 fatal work injuries over the five-year period, with 37 percent of fatal work injuries resulting from contact with objects of equipment. Oil and Gas Extraction (NAICS 21111) had an average of 21 fatal work injuries.

Nonfatal Injuries

Drilling oil and gas wells (NAICS 213111) is a distinct industry from oil and gas production, and is classified under support activities for mining. Establishments in this industry are primarily engaged in drilling oil and gas wells for others on a contract or fee basis. This industry includes contractors that specialize in spudding in, drilling in, redrilling, and directional drilling.

From 2003 to 2007, the most recent data available for drilling oil and gas wells, the number of total recordable cases of nonfatal injuries and illnesses ranged between 2,400 in 2003 and 4,700 in 2005, with 2007 having 4,200 cases. The rate of injuries and illnesses ranged from 4.0 per 100 full-time workers in 2003 to 6.8 in 2004, with a rate of 4.6 in 2007. This is a little higher than the rate of 4.2 per 100 full-time workers for all industries.

The Survey of Occupational Injuries and Illnesses collects case and demographic information on cases with days away from work. These are presumed to be the most severe cases. The rate of these cases in drilling oil and gas wells ranged from 1.5 in 2003 to 2.8 in 2004. The most recent rate was 1.7 per 100 full-time workers in 2007.

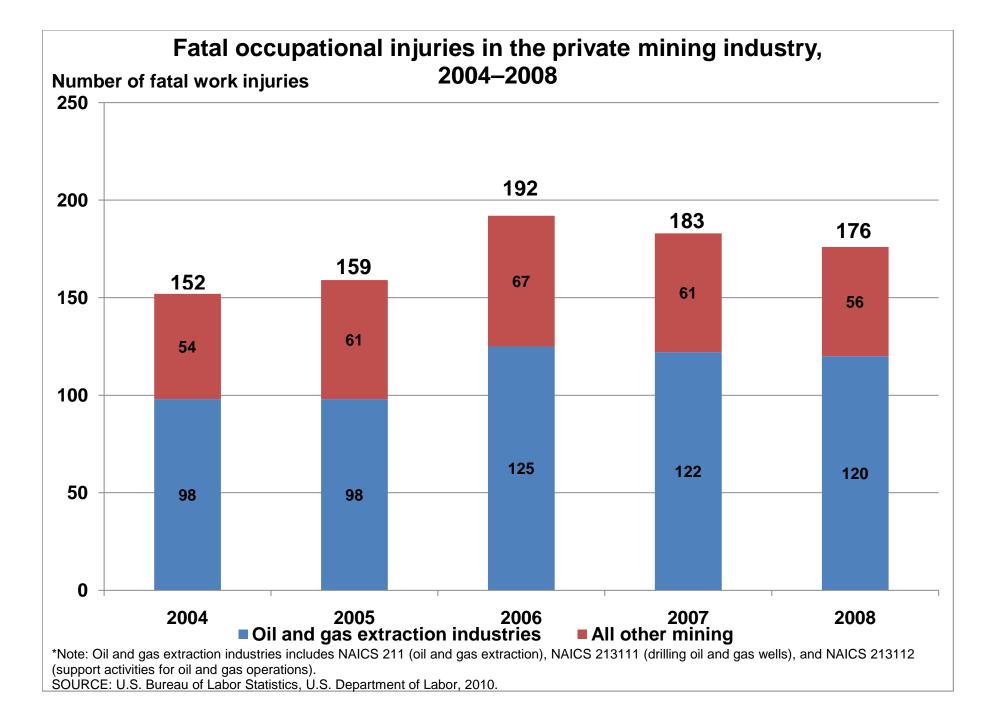
The most recent data show that the affected workers in this industry are overwhelmingly men (all of 2007 cases with days away from work affected men), and where race was reported, mostly white (74 percent of cases that reported race).

Median days away from work are a key measure of severity of injuries and illnesses. In 2007, the drilling oil and gas wells industry had a median of 30, much higher than the median for all industries of 7. One reason for the high median days away from work is that 25 percent of injuries and illnesses with days away from work are fractures, which typically have a long recovery time. Commonly, workers are injured by being struck by objects (32 percent of cases) or being caught in objects, equipment or material (21 percent of cases).

More information on injuries, illnesses, and fatalities in the oil and gas extraction industries is available at www.bls.gov/iif or (202) 691-6170.

SOURCE: Bureau of Labor Statistics (BLS), April 22, 2010. Fatality data are from the Census of Fatal Occupational Injuries. Nonfatal injury and illness data are from the Survey of Occupational Injuries and Illnesses.

¹Fatal injury numbers for oil and gas extraction industries are based on the North American Industry Classification System (NAICS), 2002 and include NAICS 211 (oil and gas extraction), NAICS 213111 (drilling oil and gas wells), and NAICS 213112 (support activities for oil and gas operations). These include both public and private sector. ² Persons identified as Hispanic of Latino may be of any race.



Fatal occupational injuries in the oil and gas extraction industry, 2004-08*

Number of fatal work injuries

