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AMERICAN PETROLEUM INSTITUTE

Workplace Injuries and Illnesses Safety (WIIS) Report

by the U.S. Oil and Natural Gas Industry

2005–2014

This report covers only the rates of injuries and illnesses as published by the BLS.

Workplace Injuries and Illnesses Safety Report (WIISR)

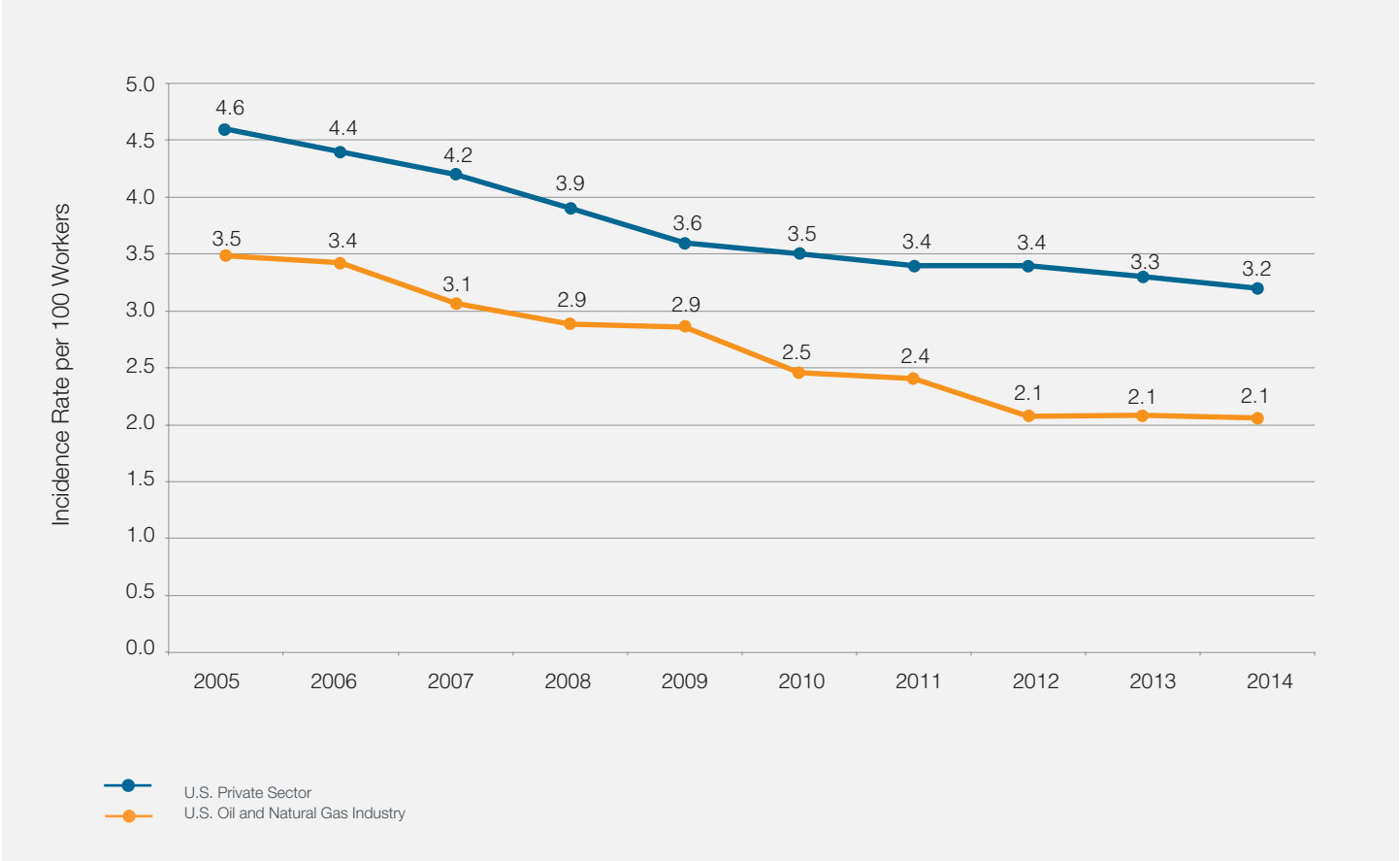
This report compares the safety rates of job related nonfatal injuries and illnesses of the U.S. Oil and Natural Gas industry with comparable U.S. industries. The Oil and Natural Gas industry's workplace safety record consistently improves on the Private sector average, reflecting the industry's commitment to safe and healthy working environments. Please note that 2014 data is preliminary.

Comparison

U.S. Oil and Natural Gas Industry vs. U.S. Private Sector

In 2014, the rate of job-related nonfatal injuries and illnesses for the Oil and Natural Gas industry was 2.1 per 100 full-time workers, compared to a rate of 3.3 for the entire U.S. Private sector.

Figure 1
U.S. Oil and Natural Gas Industry vs. U.S. Private Sector (2005-2014)
Injuries and Illnesses Incidence Rates



Comparison

U.S. Oil and Natural Gas Industry – Exploration and Production[1] vs. U.S. Mining

In 2014, the rate of job-related nonfatal injuries and illnesses among U.S. Oil and Natural Gas exploration and production workers was 1.8 per 100 full-time workers compared with 2.0 for the U.S. Mining sector. The U.S. Offshore industry , a segment of the U.S. Oil and Natural Gas Exploration and Production sector had a rate of 0.5 per 100 full-time workers.

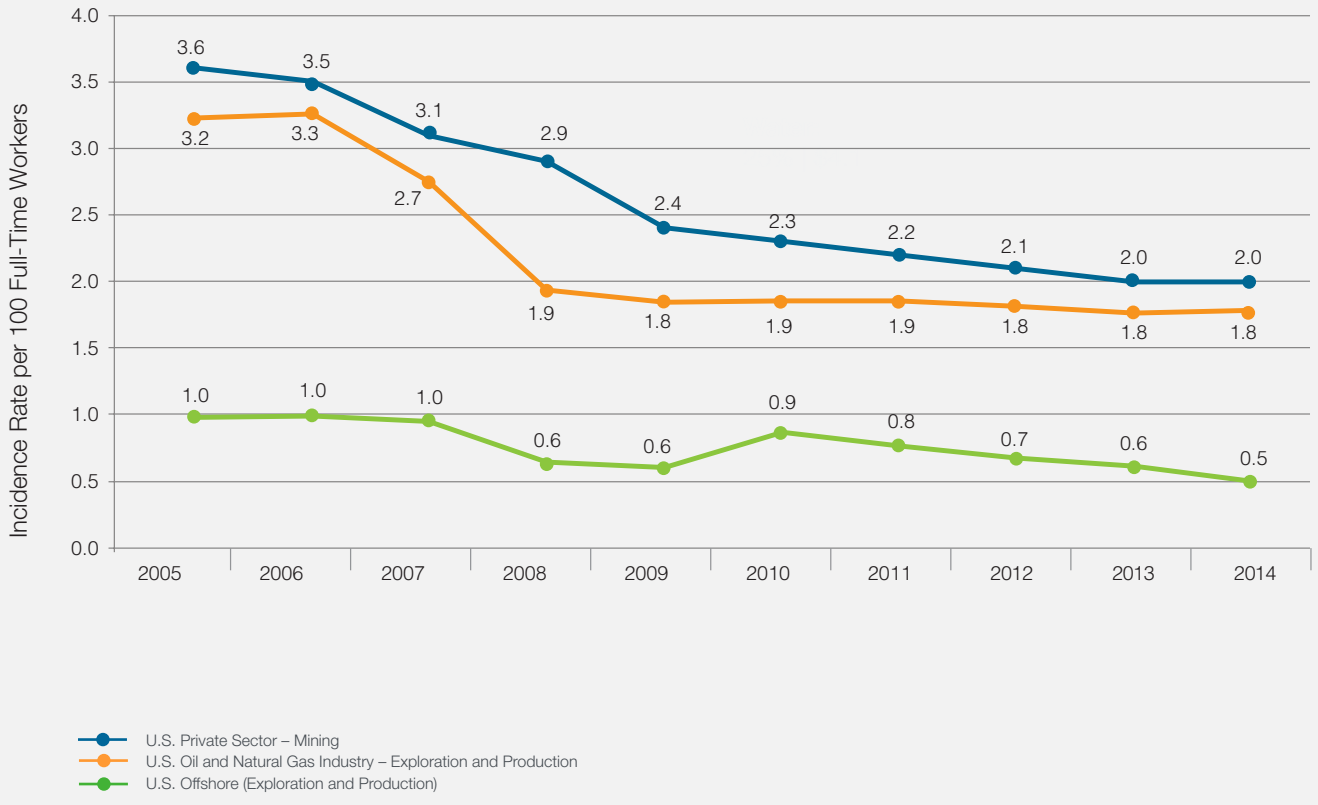
1 E&P is a weighted average calculated by API using BLS data. Support activities for oil and gas operations, drilling oil and gas wells, and oil and gas extraction make up the Exploration and Production sector. In 2008 and 2009, BLS did not publish the rates of injuries and illnesses for drilling oil and gas wells because they did not meet BLS criteria.

2 Offshore incidence rates were calculated using data from Mineral and Management Service (MMS). Effective July 17, 2006, MMS revised the regulations for Incident Reporting. Changes were made to the reporting criteria for Injuries, Loss of Well Control incidents, Collisions, and Other Incidents. Thus the number of incidents shown for 2006 and beyond may be affected by this change when compared to previous years. Offshore Illness and Injuries rate excludes construction workers. Injuries and Illnesses rates are self-reported injuries for a sample.

Figure 2

Exploration and Production vs. Mining (2005-2014)

Injuries and Illnesses Incidence Rates



Comparison

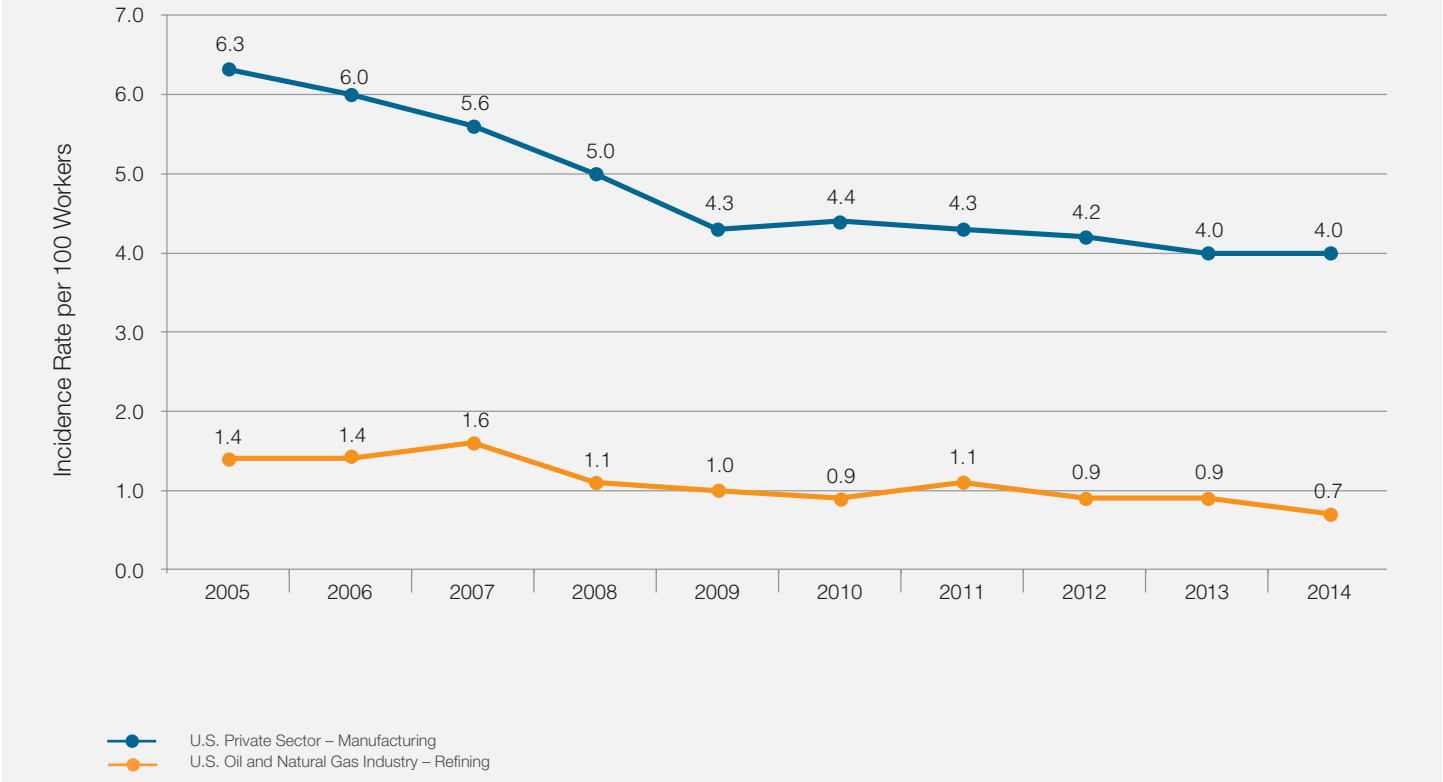
U.S. Oil and Natural Gas Industry – Petroleum Refineries vs. U.S. Manufacturing

In 2014, the rate of job-related nonfatal injuries and illnesses for petroleum refinery workers was 0.7 per 100 full-time workers, compared to a rate of 4.0 for the U.S. Manufacturing sector.

Figure 3

Petroleum Refining vs. Manufacturing (2005-2014)

Injuries and Illnesses Incidence Rates



Comparison

U.S. Oil and Natural Gas Industry – Petroleum Wholesale Marketing[3] vs. U.S. Wholesale Marketing

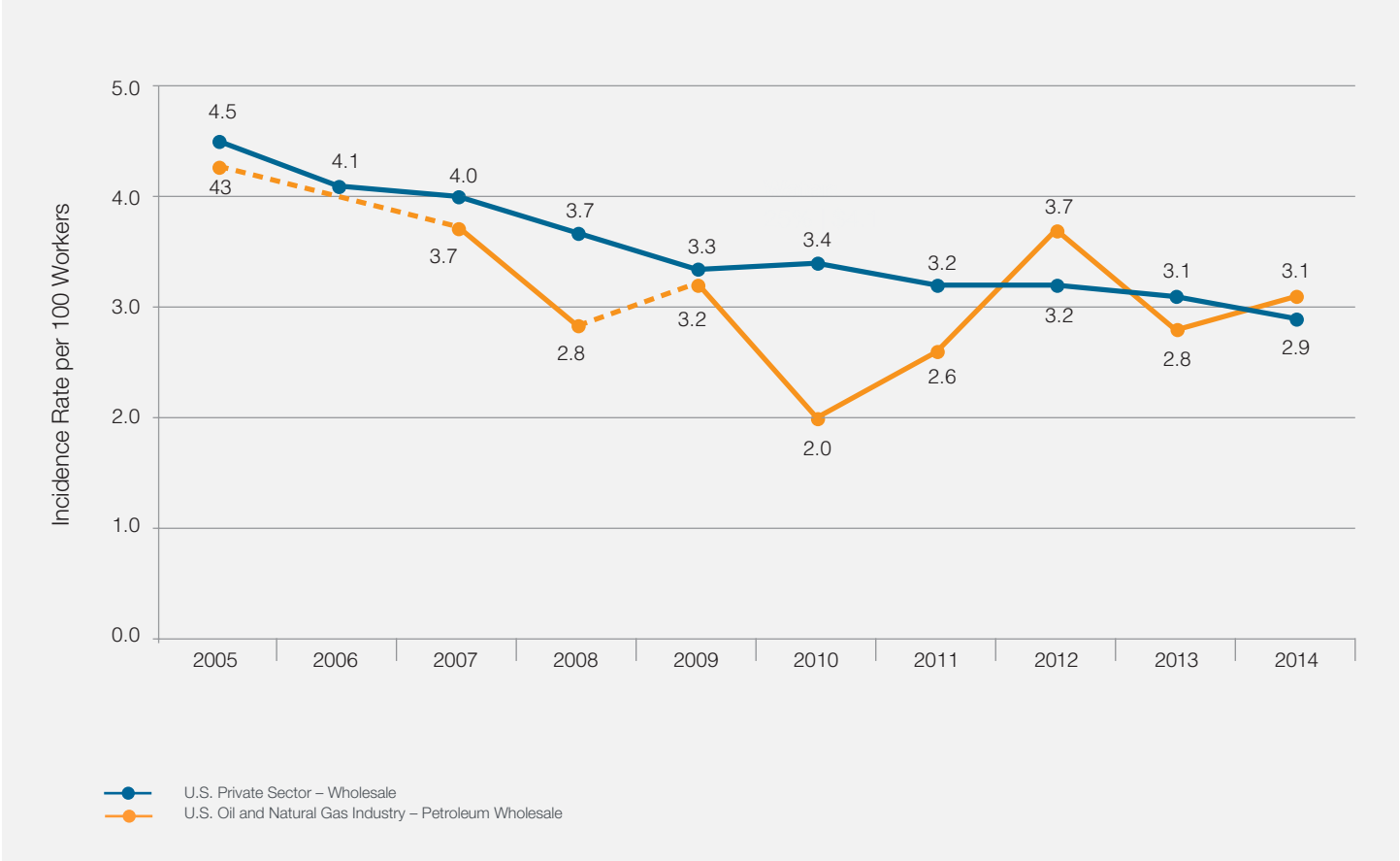
In 2014, the rate of job-related nonfatal injuries and illnesses for petroleum wholesale marketing was 3.1 per 100 full-time workers, compared to a rate of 2.9 for the U.S. Wholesale marketing sector.

3 In 2006, BLS did not publish the rate of injuries and illnesses for Petroleum Wholesale Marketing because it did not meet BLS criteria.

Figure 4

Petroleum Wholesale Marketing vs. U.S. Marketing (2005-2014)

Injuries and Illnesses Incidence Rates



Comparison

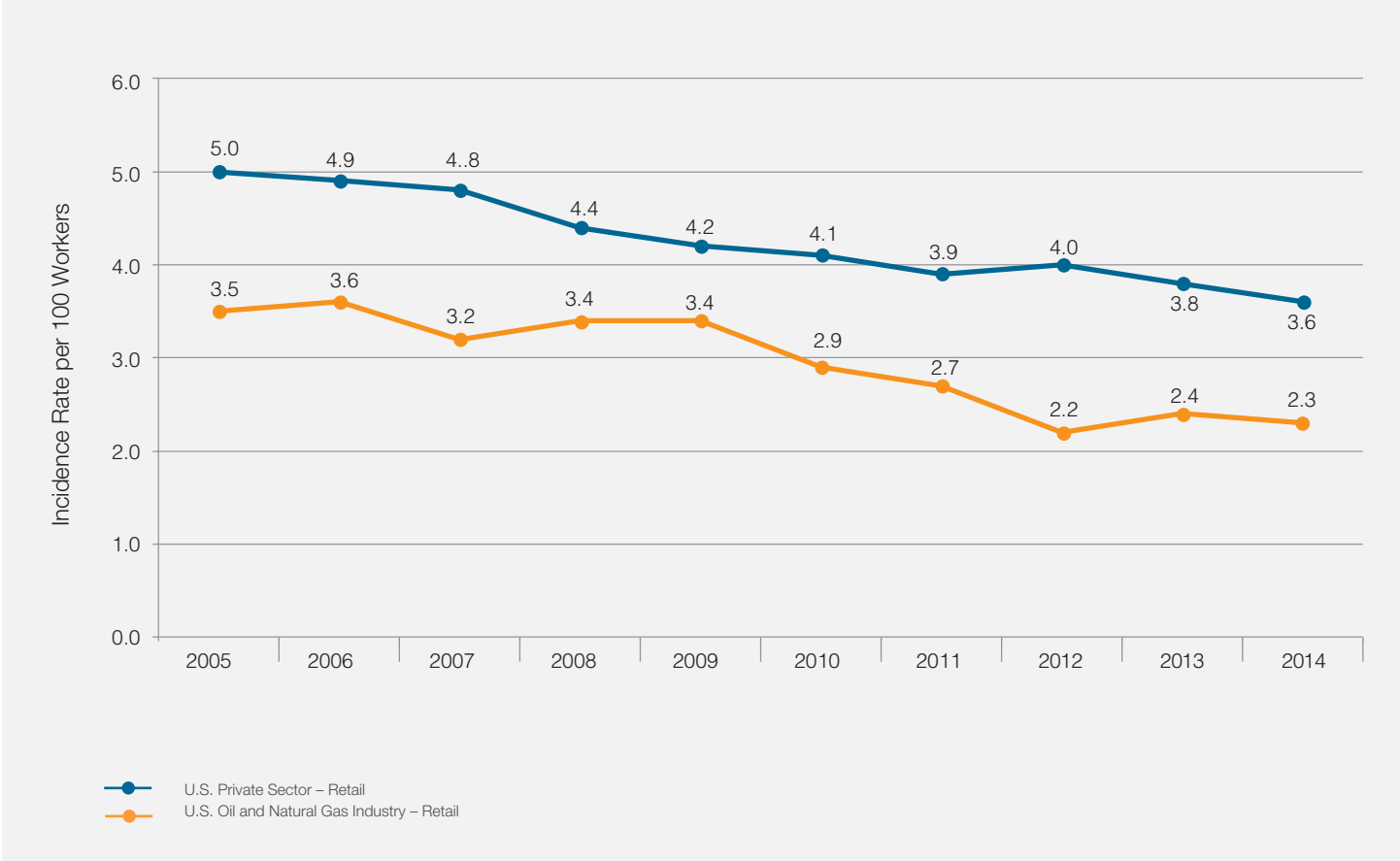
U.S. Oil and Natural Gas Industry – Retail Marketing vs. U.S. Retail Marketing

In 2014, the rate of job-related nonfatal injuries and illnesses among U.S. Oil and Natural Gas retail marketing personnel was 2.3 per 100 full-time workers, compared to a rate of 3.6 for the U.S. Retail Marketing sector.

Figure 5

U.S. Oil and Natural Gas Industry- Retail Marketing vs. U.S. Retail Marketing (2005-2014)

Injuries and Illnesses Incidence Rates



Comparison

U.S. Oil and Natural Gas Industry – Pipelines[4] vs. U.S. Transportation and Warehousing

In 2014, the rate of job-related nonfatal injuries and illnesses among U.S. Oil and Natural Gas pipeline transportation personnel[5] was 0.0 per 100 full-time workers, compared to a rate of 4.8 for the U.S. Transportation and Warehousing sector.

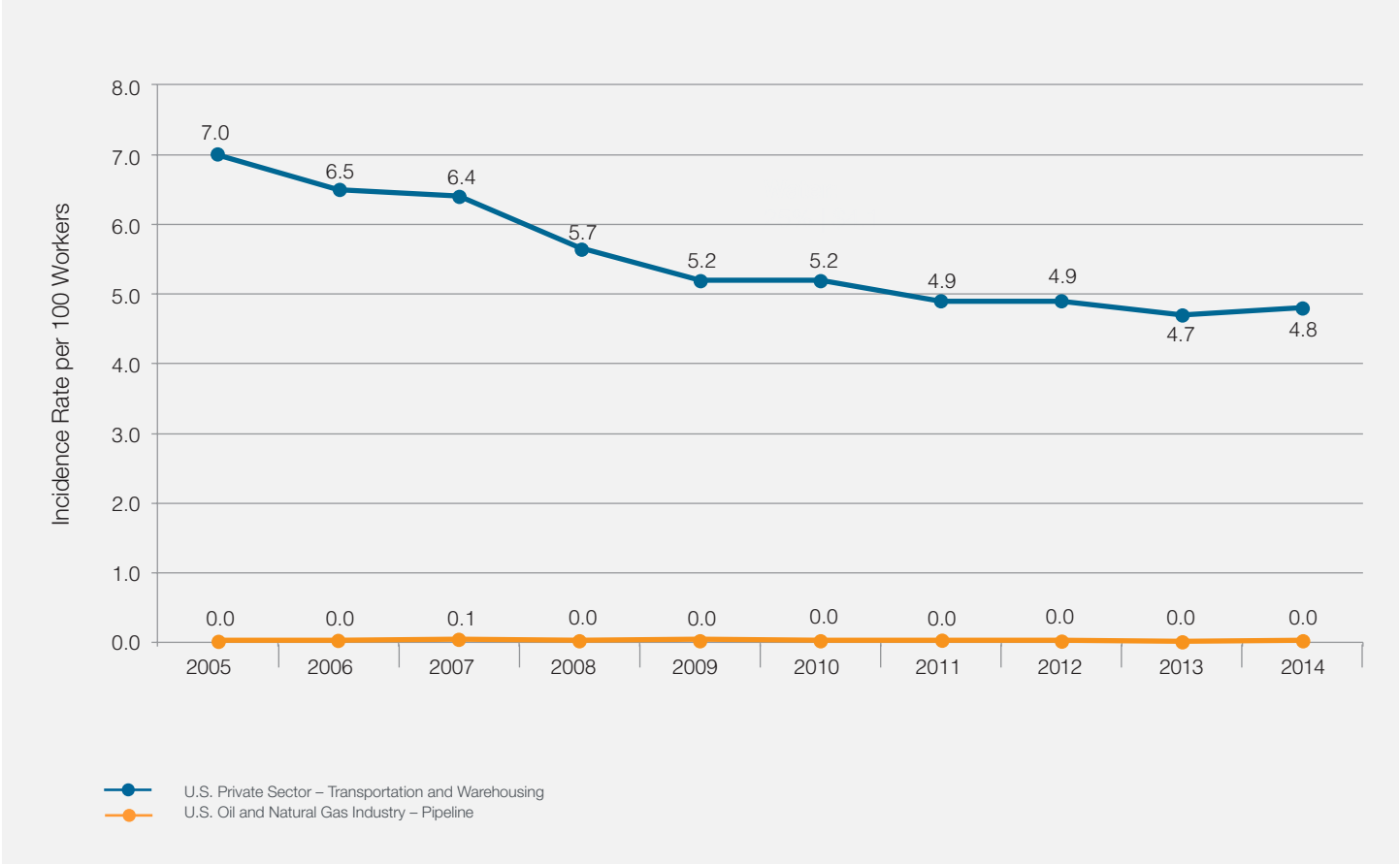
4 Pipeline injuries and illnesses numbers are from PHMSA. BLS does not consistently report pipeline data.

5 Pipeline data includes contract workers

Figure 6

U.S. Oil and Natural Gas Pipelines vs. U.S. Transportation and Warehousing (2005-2014)

Injuries and Illnesses Incidence Rates



Comparison

U.S. Oil and Natural Gas Industry – Natural Gas Distribution[6] vs. U.S. Utilities

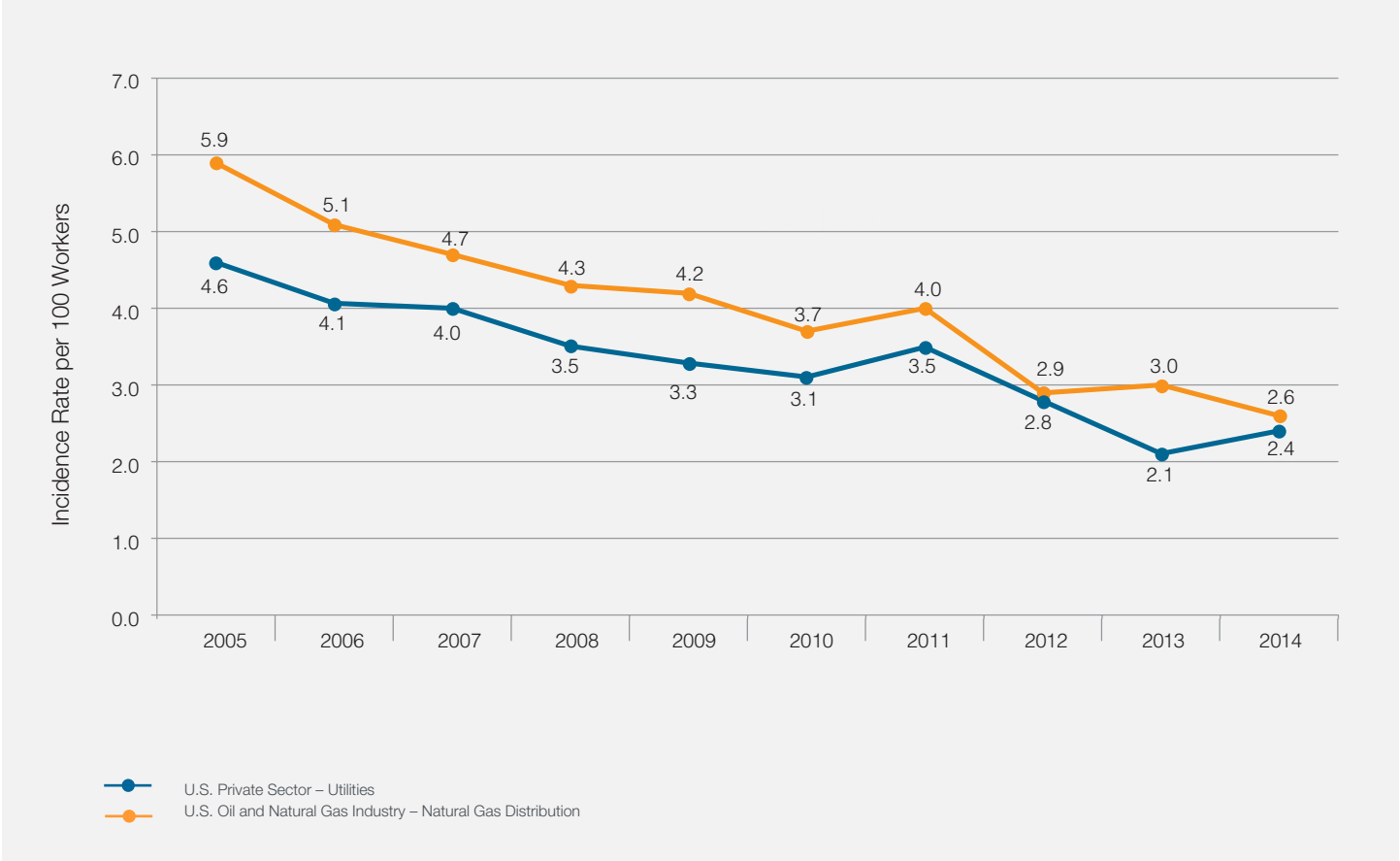
In 2014, the rate of job-related nonfatal injuries and illnesses among U.S. Oil and Natural Gas Industry's natural gas distribution personnel was 2.6 per 100 full-time workers, compared to a rate of 2.4 for the U.S. Utilities sector.

6 Natural Gas Distribution incidents where fire/explosion was the primary cause of failure, such as a house fire that subsequently resulted in - but was not caused by - a distribution line failure are excluded from 2004 onward.

Figure 7

U.S. Oil and Natural Gas Industry – Natural Gas Distribution vs. U.S. Utilities (2005-2014)

Injuries and Illnesses Incidence Rates



Comparison

U.S. Oil and Natural Gas Industry Sectors and Comparable U.S. Segments: 2014 job-related nonfatal Injury and Illnesses Incidence Rate

Figure 7

U.S. Oil and Natural Gas Industry – Natural Gas Distribution vs. U.S. Utilities (2005-2014)

Injuries and Illnesses Incidence Rates

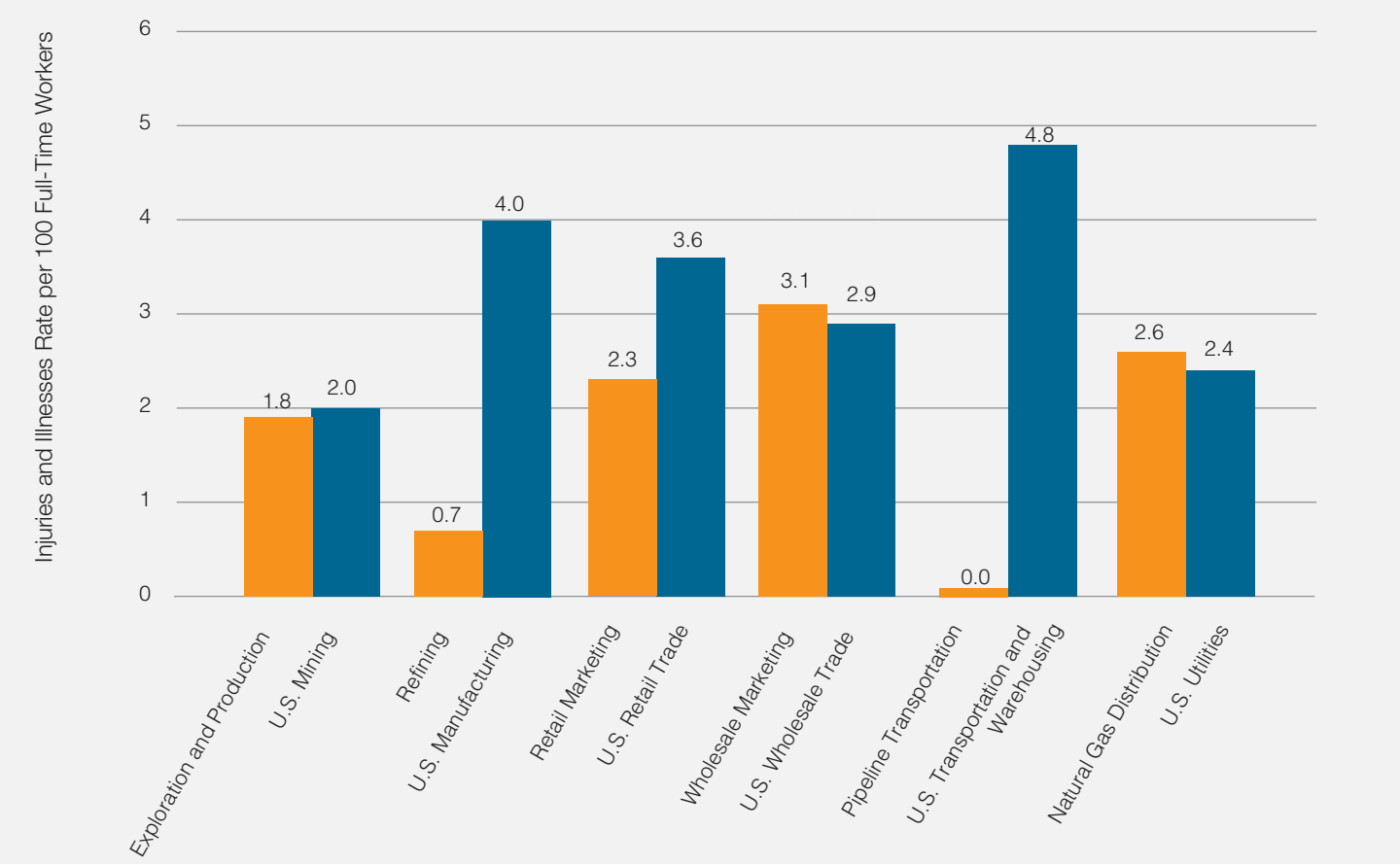


Table 1

U.S. Oil and Natural Gas Industry Job-Related Nonfatal Injuries and Illnesses Rate:

2005-2014 (per 100 full-time workers)

Year	Exploration and Production	Refining	Retail Marketing	Wholesale Marketing	Pipeline Transportation	Natural Gas Distribution	Oil and Natural Gas Industry
2005	3.2	1.4	3.5	4.3	0.0	5.9	3.5
2006	3.3	1.4	3.6	ND	0.0	5.1	3.4
2007	2.7	1.6	3.2	3.7	0.1	4.7	3.1
2008	1.9	1.1	3.4	2.8	0.0	4.3	2.9
2009	1.8	1.0	3.4	3.2	0.0	4.2	2.9
2010	1.9	0.9	2.9	2.0	0.0	3.7	2.5
2011	1.9	1.1	2.7	2.6	0.0	4.0	2.4
2012	1.8	0.9	2.2	3.7	0.0	2.9	2.1
2013	1.8	0.9	2.4	2.8	0.0	3.0	2.1
2014	1.8	0.7	2.3	3.1	0.0	2.6	2.1
% Change*							
2013-2014	1%	-22%	-4%	11%	78%	-13%	-1%
2005-2014	-45%	-50%	-34%	-28%	24%	-56%	-41%

ND = No Data available

* % change may not be exact due to rounding

Table 2

Comparable U.S. Industries Job-Related Nonfatal Injuries and Illnesses Rate:

2005-2014 (per 100 full-time workers)

Year	Mining	Manufacturing	Retail Trade	Wholesale Trade	Transportation and Warehousing	Utilities	Private Sector
2005	3.6	6.3	5.0	4.5	7.0	4.6	4.6
2006	3.5	6.0	4.9	4.1	6.5	4.1	4.4
2007	3.1	5.6	4.8	4.0	6.4	4.0	4.2
2008	2.9	5.0	4.4	3.7	5.7	3.5	3.9
2009	2.4	4.3	4.2	3.3	5.2	3.3	3.6
2010	2.3	4.4	4.1	3.4	5.2	3.1	3.5
2011	2.2	4.3	3.9	3.2	4.9	3.5	3.4
2012	2.1	4.2	4.0	3.2	4.9	2.8	3.4
2013	2.0	4.0	3.8	3.1	4.7	2.1	3.3
2014	2.0	4.0	3.6	2.9	4.8	2.4	3.2
% Change*							
2013-2014	0%	0%	-5%	-6%	2%	14%	-3%
2005-2014	-44%	-37%	-28%	-36%	-31%	-48%	-30%

* % change may not be exact due to rounding

Non-Comparable Industries –Workplace Injuries and Illnesses Safety (WIIS) Report

An in-depth look into the safety of six other industries demonstrates that the Oil and Natural Gas industry is generally safer than industries of similar characteristics. In this report, the safety rate of job related nonfatal injuries and illnesses of the Oil and Natural Gas industry was compared to the following industries: Logging [NAICS 11331], Fishing, Hunting and Trapping [NAICS 114], Agriculture and Forestry Support Activities [NAICS 115], Water Transportation [NAICS 483], Truck Transportation [NAICS 484], and Waste Management and Remediation Services [NAICS 562].

Comparison

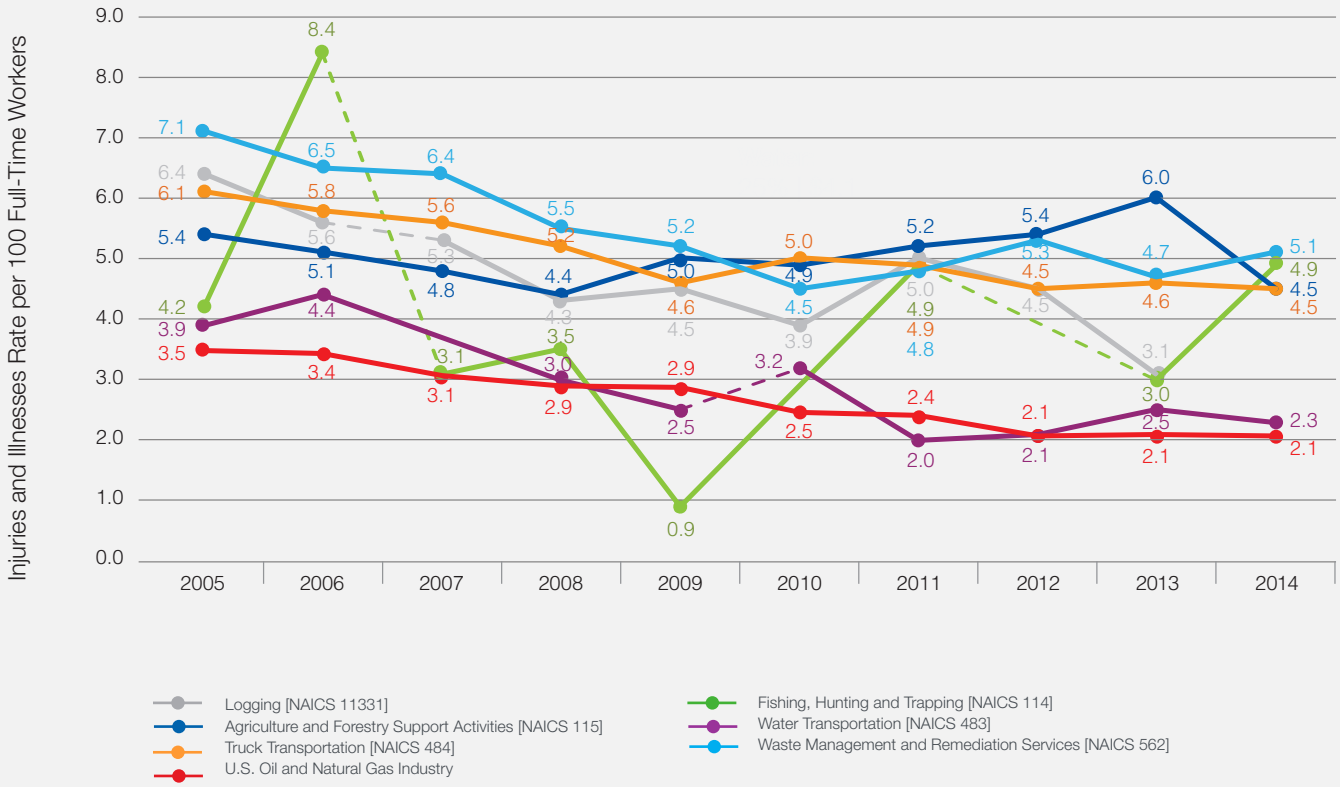
U.S. Oil and Natural Gas Industry vs. Non-Comparable Industries

In 2014, the rate of job-related nonfatal Injuries and Illnesses for the Oil and Natural Gas industry was 2.1 per 100 full-time workers.

Figure 8

U.S. Oil and Natural Gas Industry vs. Non-Comparable Industries (2005-2014)

Injuries and Illnesses Incidence Rates



Comparison

U.S. Oil and Natural Gas Industry vs. Logging Industry

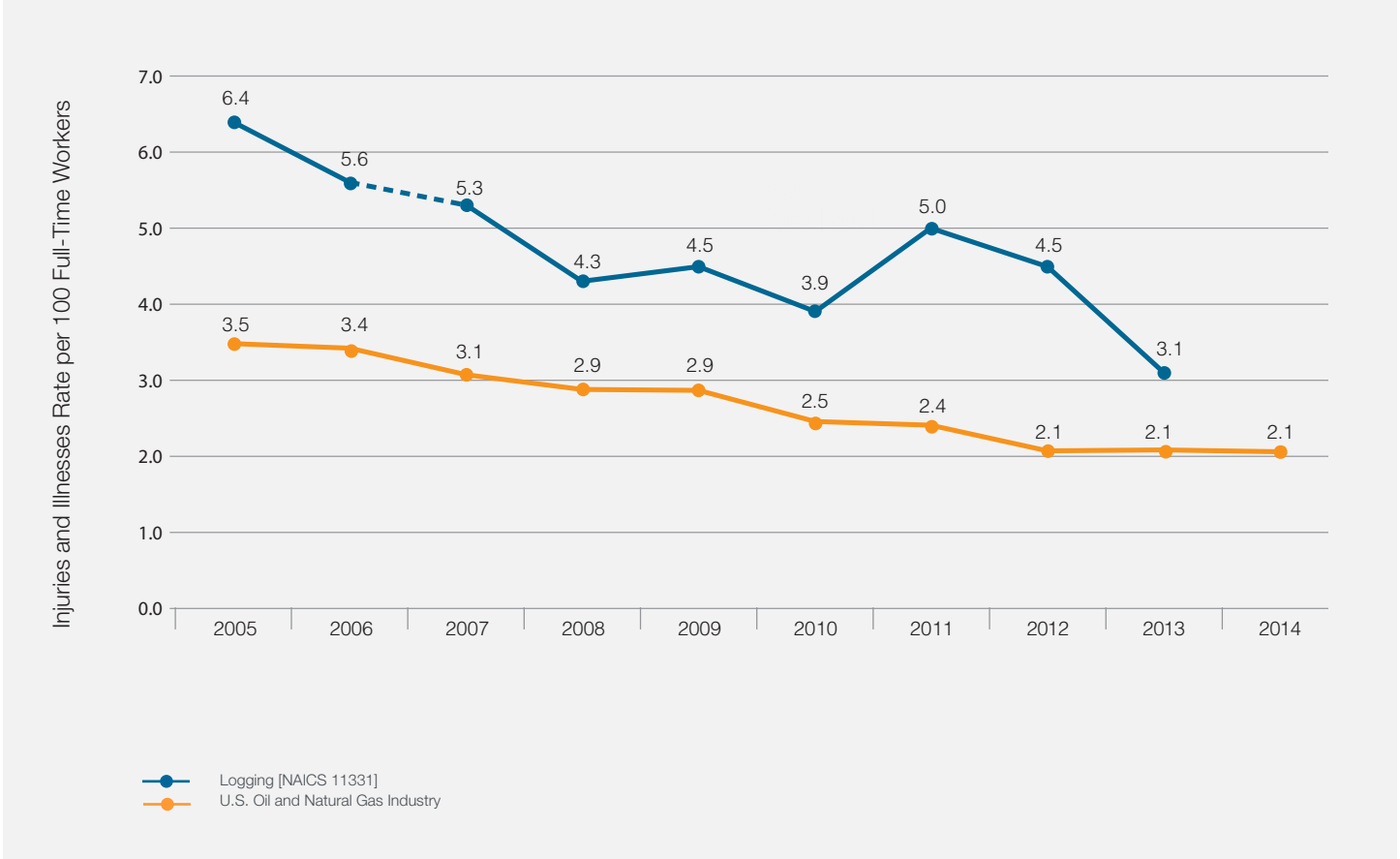
In 2014, BLS did not publish the rate of nonfatal Injuries and Illnesses for the Logging industry because it did not meet BLS criteria. However, the rate of job-related nonfatal Injuries and Illnesses for the Oil and Natural Gas industry was 2.1 per 100 full-time workers.

7 Natural Gas Distribution incidents where fire/explosion was the primary cause of failure, such as a house fire that subsequently resulted in – but was not caused by – a distribution line failure are excluded from 2004 onward. This exclusion has not been applied in years prior to 2004 due to difficulty in identifying these types of events with the older report formats.

Figure 9

U.S. Oil and Natural Gas Industry vs. Logging Industry (2005-2014)

Injuries and Illnesses Incidence Rates



Comparison

U.S. Oil and Natural Gas Industry vs. Fishing, Hunting and Trapping Industry

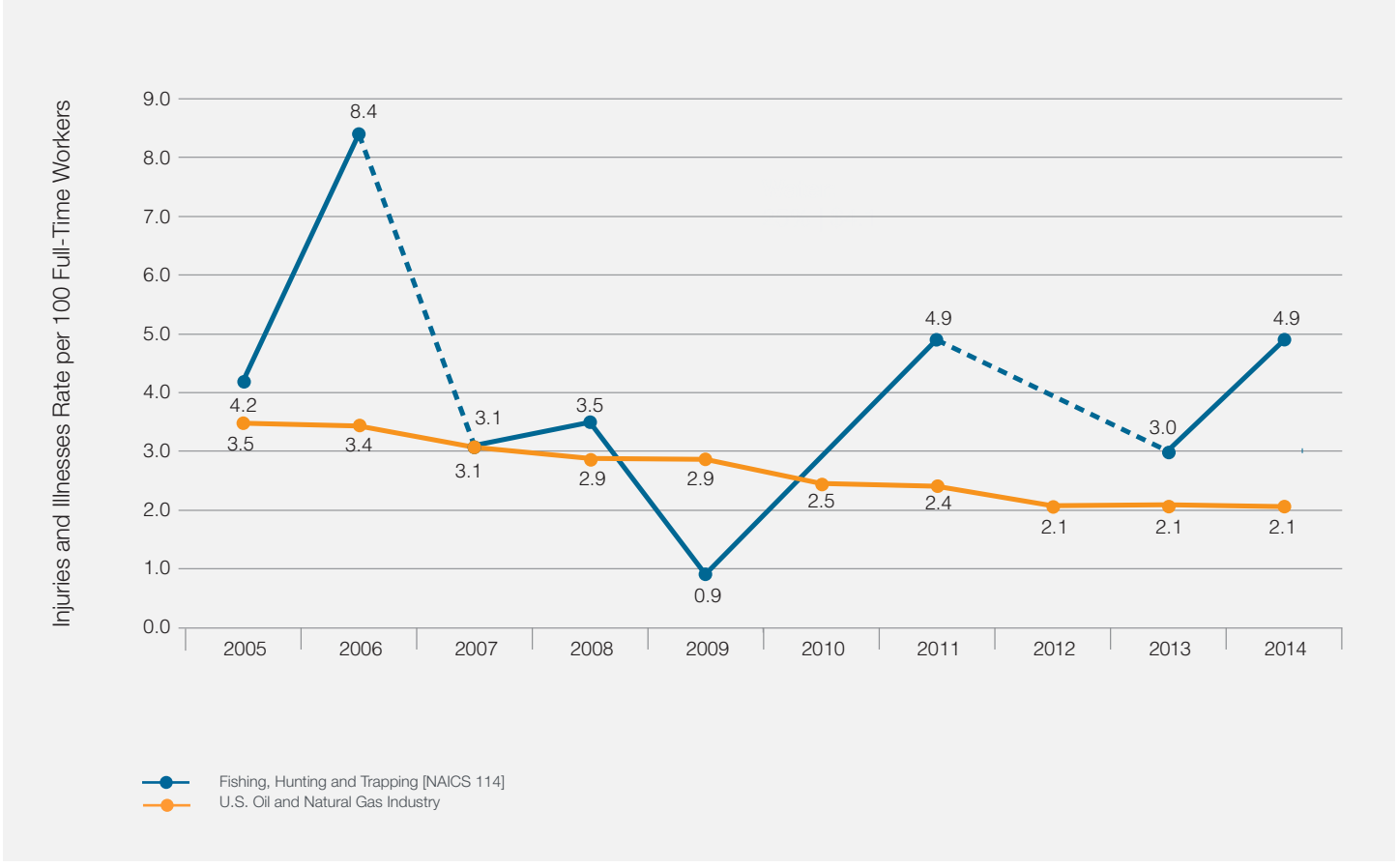
In 2014, the rate of job-related nonfatal Injuries and Illnesses for the Fishing, Hunting, and Trapping[8] industry 4.9 per 100 full-time workers compared to 2.1 for the Oil and Natural Gas industry.

8 In 2004, BLS did not publish the rate of injuries and illnesses for the Logging Industry because it did not meet BLS criteria.

Figure 10

U.S. Oil and Natural Gas Industry vs. Fishing, Hunting, and Trapping Industry (2005-2014)

Injuries and Illnesses Incidence Rates



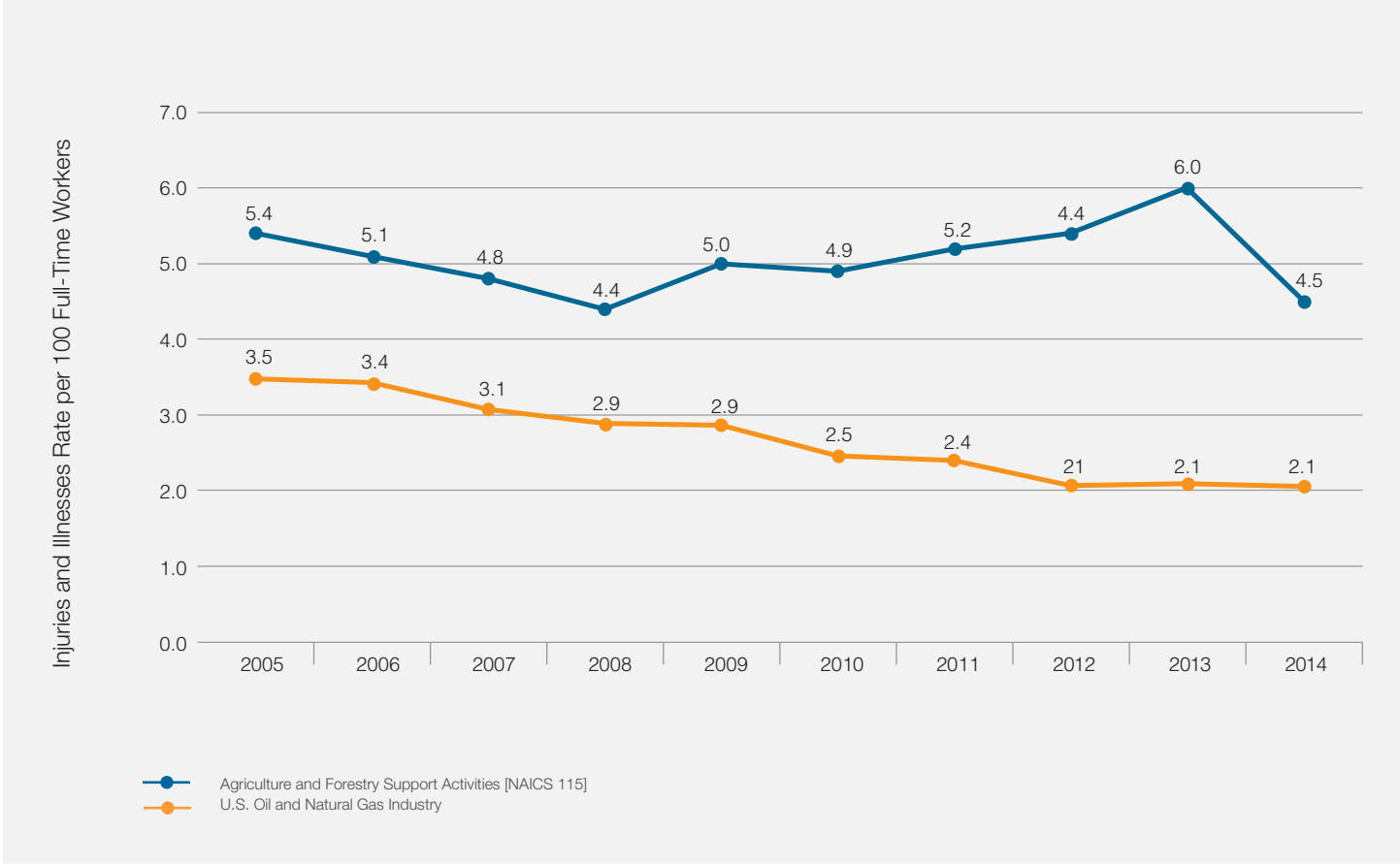
Comparison

U.S. Oil and Natural Gas Industry vs. Agriculture and Forest Support Activities Industry

In 2014, the rate of job-related nonfatal Injuries and Illnesses for the Agriculture and Forestry Support Activities industry was 4.5 per 100 full-time workers compared to 2.1 for the Oil and Natural Gas industry.

Figure 11

U.S. Oil and Natural Gas Industry vs. Agriculture and Forestry Support Activities Industry (2005-2014) Injuries and Illnesses Incidence Rates



Comparison

U.S. Oil and Natural Gas Industry vs. Water Transportation Industry

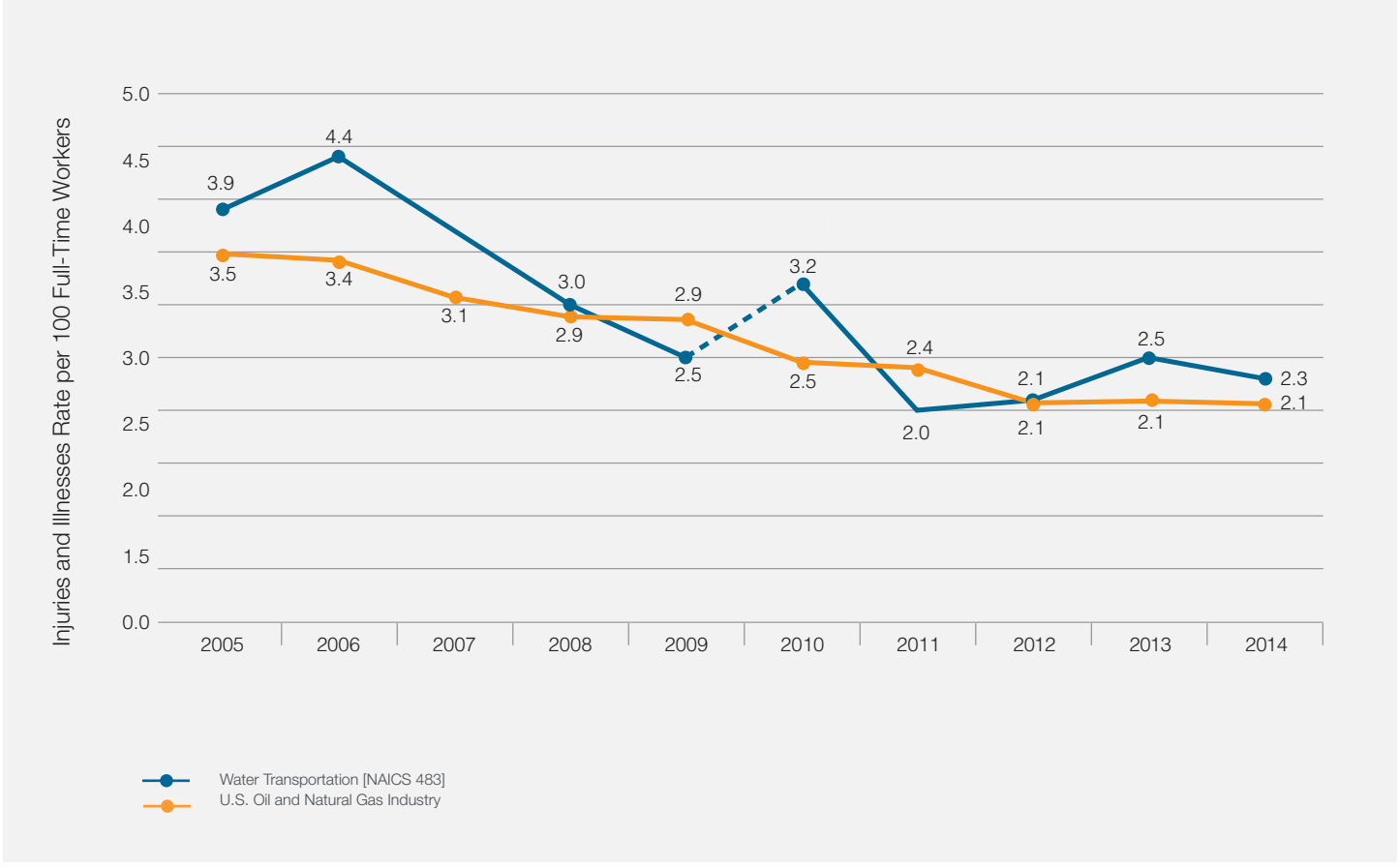
In 2014, the rate of job-related nonfatal Injuries and Illnesses for the Water Transportation[9] industry was 2.3 per 100 full-time workers compared to 2.1 for the Oil and Natural Gas industry.

9 In 2007, BLS did not publish the rate of injuries and illnesses for the Water Transportation Industry because they did not meet BLS criteria.

Figure 12

U.S. Oil and Natural Gas Industry vs. Water Transportation Industry (2005-2014)

Injuries and Illnesses Incidence Rates



Comparison

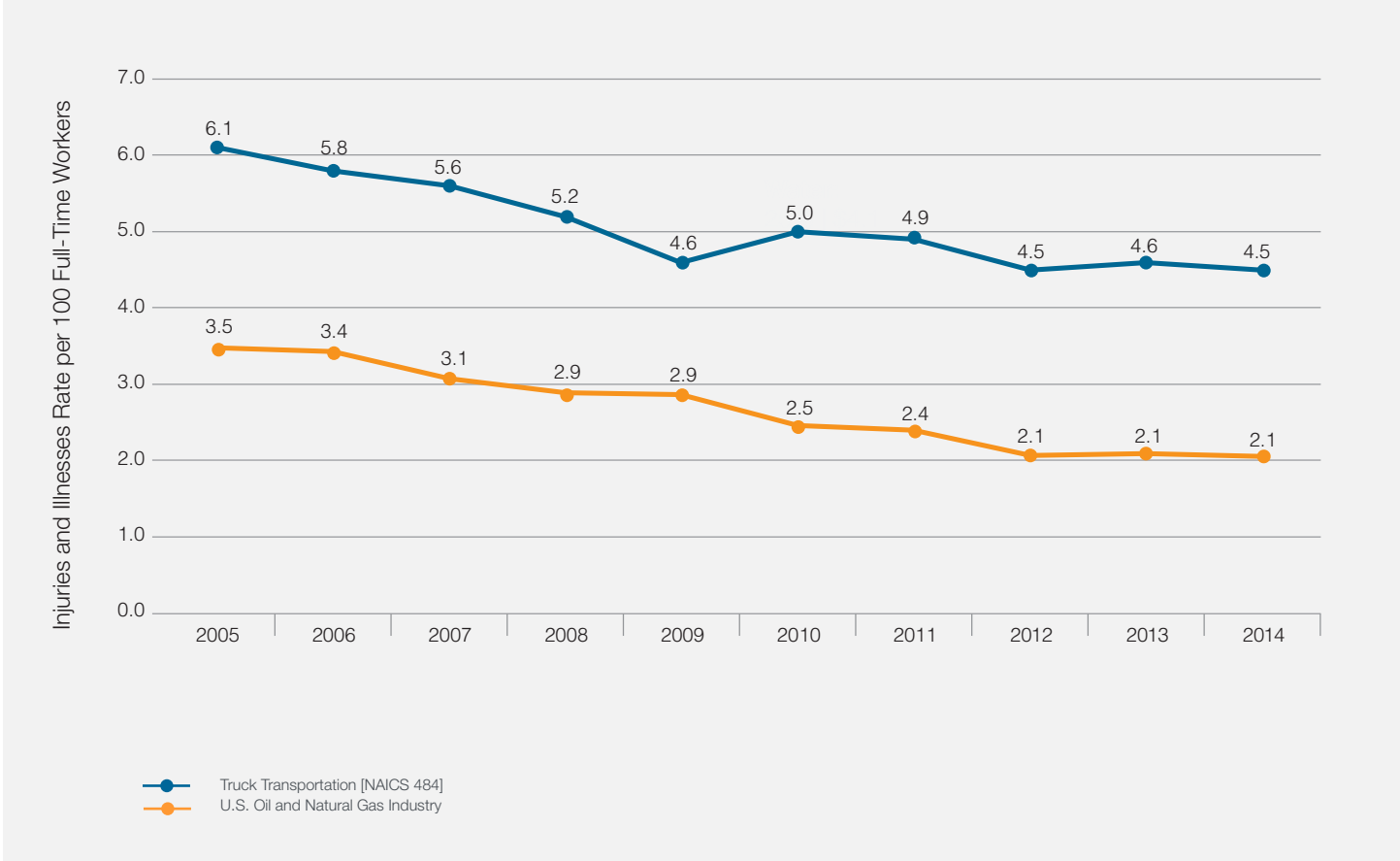
U.S. Oil and Natural Gas Industry vs. Truck Transportation Industry

In 2014, the rate of job-related nonfatal Injuries and Illnesses for the Truck Transportation industry was 4.5 per 100 full-time workers compared to 2.1 for the Oil and Natural Gas industry.

Figure 13

U.S. Oil and Natural Gas Industry vs. Truck Transportation Industry (2005-2014)

Injuries and Illnesses Incidence Rates



Comparison

U.S. Oil and Natural Gas Industry vs. Waste Management and Remediation Services Industry

In 2014, the rate of job-related nonfatal Injuries and Illnesses for the Waste Management and Remediation Services industry was 5.1 per 100 full-time workers compared to 2.1 for the Oil and Natural Gas industry.

Figure 14

U.S. Oil and Natural Gas Industry vs. Waste Management and Remediation Services Industry (2005-2014) Injuries and Illnesses Incidence Rates

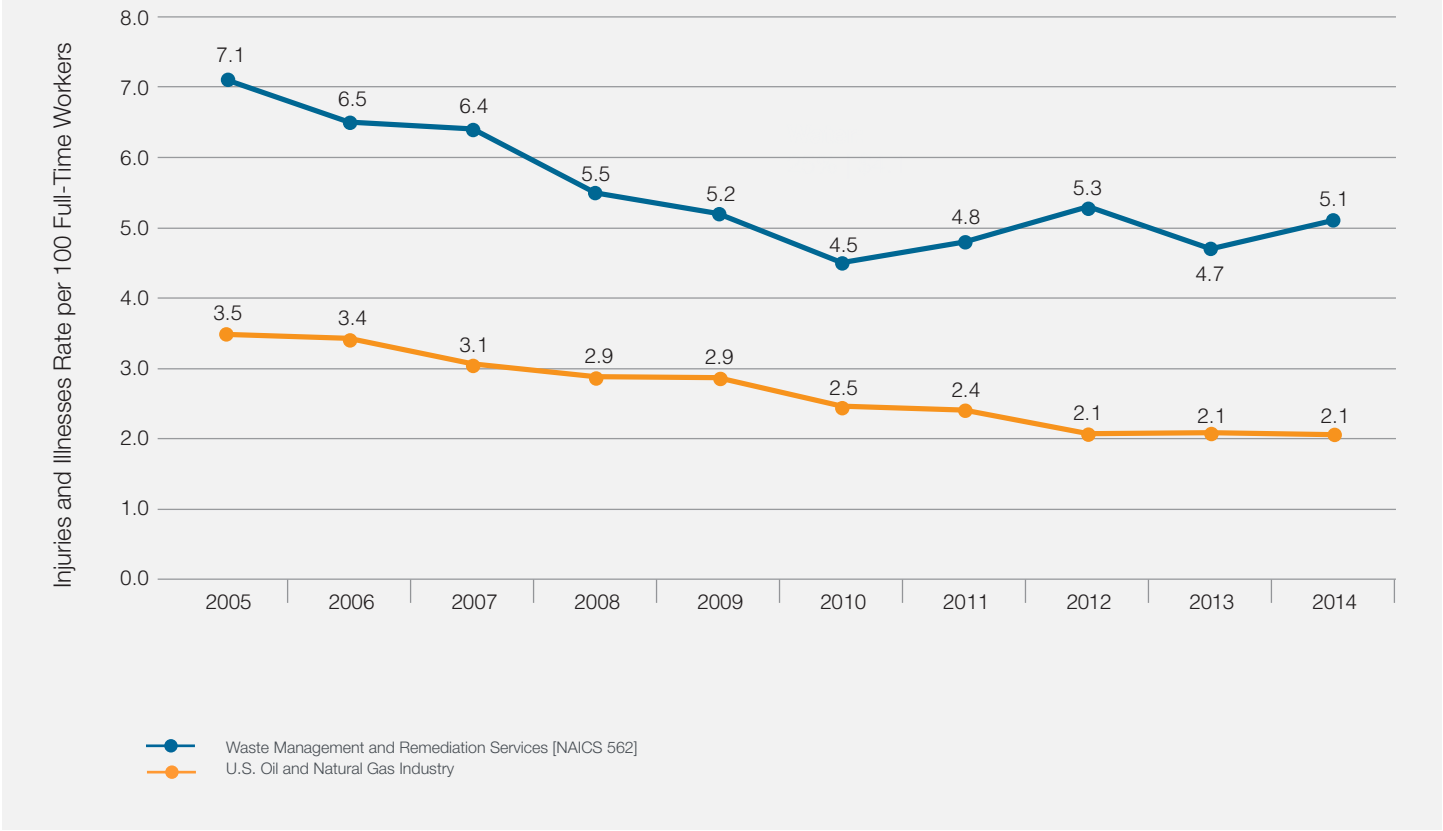


Table 3:
Select U.S. Industries Job-Related Nonfatal Injuries and Illnesses Rate: 2005–2014
(per 100 full-time workers)

Year	Logging [NAICS 11331]	Fishing, Hunting and Trapping [NAICS 114]	Agriculture and Forestry Support Activities [NAICS 115]	Water Transportation [NAICS 483]	Truck Transportation [NAICS 484]	Waste Management and Remediation Services [NAICS 562]	Oil and Natural Gas Industry
2005	6.4	4.2	5.4	3.9	6.1	7.1	3.5
2006	5.6	8.4	5.1	4.4	5.8	6.5	3.4
2007	5.3	3.1	4.8	ND	5.6	6.4	3.1
2008	4.3	3.5	4.4	3.0	5.2	5.5	2.9
2009	4.5	0.9	5.0	2.5	4.6	5.2	2.9
2010	3.9	ND	4.9	3.2	5.0	4.5	2.5
2011	5.0	4.9	5.2	2.0	4.9	4.8	2.4
2012	4.5	ND	5.4	2.1	4.5	5.3	2.1
2013	3.1	3.0	6.0	2.5	4.6	4.7	2.1
2014	ND	4.9	4.5	2.3	4.5	5.1	2.1
% Change*							
2013-2014	ND	63%	-25%	-8%	-2%	9%	-1%
2005-2014	ND	17%	-17%	-41%	-26%	-28%	-41%

ND = No Data available
* % change may not be exact due to rounding

About This Report

This report is based on information from the U.S. Bureau of Labor Statistics' (BLS) Survey of Occupational Injuries, Illnesses, and Fatalities (www.bls.gov/iif), the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) formerly known as the Minerals Management Service (MMS) (http://www.boemre.gov/incidents/IncidentStatisticsSummaries.htm) , as well as the U.S. Department of Transportation Pipeline Hazardous Materials Safety Administration (PHMSA) (http://www.phmsa.dot.gov/pipeline/library/data-stats). The Survey of Occupational Injuries, Illnesses, and Fatalities is a Federal and State program in which employer reports are collected from the private sector. It excludes the self-employed; farms with fewer than 11 employees; private households; Federal government agencies; and, for national estimates, employees in state and local government agencies.

The annual survey provides estimates of the number and frequency (incidence rates) of workplace nonfatal injuries and illnesses based on logs required to be kept by private industry employers throughout the year. These records reflect not only the year's injuries and illnesses experience, but also the employers' understanding of which cases are work-related under recordkeeping rules revised by the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor and made effective on January 1, 2002. These revisions affected how employers record various nonfatal job-related injuries and illnesses, and how the information is aggregated by BLS.

The pipeline incidence rates in this report were calculated by dividing the number of injuries reported to PHMSA by the total hours worked by all employees during a calendar year. The offshore incidence numbers were calculated by dividing the number of injuries reported to MMS by the total hours reported to MMS.

The total hours worked for the sectors are derived by multiplying the employment figures published in BLS's Table 1. Incidence rates of nonfatal occupational injuries and illnesses by industry and cases types, YEAR by 2000 hours (40 hours and 50 weeks per year per full time employee).

In 2012, BLS stopped publishing the employment numbers in Table 1. Incidence rates of nonfatal occupational injuries and illnesses by industry and cases types, YEAR. As a result, beginning with 2012 data, the employment numbers and hours will be derived by 'reverse engineering'. i.e., calculating the employment numbers using the published rates, injuries based on 2000 hours. The employment figures are derived primarily from the Quarterly Census of Employment and Wages (QCEW) program. The QCEW program publishes a quarterly count of employment and wages reported by employers covering 98 percent of U.S. jobs, available at the county, Metropolitan Statistical Area (MSA), state and national levels by industry. The employment numbers are an annual average aggregate.

The 2003 survey marked the first time that establishments in the Survey of Occupational Injuries and Illnesses were classified by industry based on the 2002 North American Industry Classification System (NAICS) Manual. Prior to 2003, the survey used the Standard Industrial Classification system (SIC). NAICS is the industry classification system now used by the statistical agencies of the United States. It is the first economic classification system to be constructed based on a single economic concept. Establishments that use the same or similar processes to produce goods or services are grouped together. It was developed jointly by the United States, Canada, and Mexico, and reflects the structure of today's economy in these three countries, including the emergence and growth of the service sector and new and advanced technologies. Consequently, beginning with the 2003 survey the estimates by sector are not comparable with those from prior years.

Definitions

Full-time worker: For purposes of this report, the equivalent of someone who works 40 hours per week for 50 weeks a year or 2,000 hours per year. Thus, two people working 1,000 hours apiece count as one full-time worker.

Nonfatal injury or illness: A nonfatal job-related injury or illness is an abnormal condition or disorder that results in days away from work, restricted work, or transfer to another job, medical treatment beyond first aid, or loss of consciousness. Injuries include cases such as, but not limited to, a cut, fracture, sprain, or amputation. Illnesses include both acute and chronic illnesses, such as, but not limited to, a skin disease, respiratory disorder, or poisoning.

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