

October 2009

**WORKPLACE
SAFETY AND
HEALTH**

**Enhancing OSHA's
Records Audit Process
Could Improve the
Accuracy of Worker
Injury and Illness Data**



GAO

Accountability * Integrity * Reliability



Highlights of [GAO-10-10](#), a report to congressional requesters

Why GAO Did This Study

Under the Occupational Safety and Health Act of 1970, the Department of Labor's (DOL) Occupational Safety and Health Administration (OSHA) is responsible for protecting the safety and health of the nation's workers. The act requires DOL to collect and compile work-related injury and illness data. GAO was asked to determine (1) whether DOL verifies that employers are accurately recording workers' injuries and illnesses and, if so, the adequacy of these efforts, and (2) what factors may affect the accuracy of employers' injury and illness records. GAO analyzed OSHA's audits of employers' injury and illness records, interviewed inspectors who conducted the audits, surveyed occupational safety and health practitioners, and obtained the views of various stakeholders regarding factors that may affect the accuracy of the data.

What GAO Recommends

GAO is recommending that the Secretary of Labor direct OSHA to (1) require inspectors to interview workers during records audits, and substitute other workers when those initially selected are unavailable; (2) minimize the time between the date injuries and illnesses are recorded by employers and the date they are audited; (3) update the list of high hazard industries used to select worksites for records audits; and (4) increase education and training to help employers better understand the recordkeeping requirements. OSHA agreed with these recommendations.

View [GAO-10-10](#) or [key components](#). For more information, contact Revae Moran (202) 512-7215 or moranr@gao.gov.

WORKPLACE SAFETY AND HEALTH

Enhancing OSHA's Records Audit Process Could Improve the Accuracy of Worker Injury and Illness Data

What GAO Found

DOL verifies some of the workplace injury and illness data it collects from employers through OSHA's audits of employers' records, but these efforts may not be adequate. OSHA overlooks information from workers about injuries and illnesses because it does not routinely interview them as part of its records audits. OSHA annually audits the records of a representative sample of about 250 of the approximately 130,000 worksites in the high hazard industries it surveys to verify the accuracy of the data on injuries and illnesses recorded by employers. However, OSHA does not always require inspectors to interview workers about injuries and illnesses—the only source of data not provided by employers—which could assist them in evaluating the accuracy of the records. In addition, some OSHA inspectors reported they rarely learn about injuries and illnesses from workers since the records audits are conducted about 2 years after incidents are recorded. Moreover, many workers are no longer employed at the worksite and therefore cannot be interviewed. OSHA also does not review the accuracy of injury and illness records for worksites in eight high hazard industries because it has not updated the industry codes used to identify these industries since 2002. OSHA officials told GAO they have not updated the industry codes because it would require a regulatory change that is not currently an agency priority. The Bureau of Labor Statistics (BLS) also collects data on work-related injuries and illnesses recorded by employers through its annual Survey of Occupational Injuries and Illnesses (SOII), but it does not verify the accuracy of the data. Although BLS is not required to verify the accuracy of the SOII data, it has recognized several limitations in the data, such as its limited scope, and has taken or is planning several actions to improve the quality and completeness of the SOII.

According to stakeholders interviewed and the occupational health practitioners GAO surveyed, many factors affect the accuracy of employers' injury and illness data, including disincentives that may discourage workers from reporting work-related injuries and illnesses to their employers and disincentives that may discourage employers from recording them. For example, workers may not report a work-related injury or illness because they fear job loss or other disciplinary action, or fear jeopardizing rewards based on having low injury and illness rates. In addition, employers may not record injuries or illnesses because they are afraid of increasing their workers' compensation costs or jeopardizing their chances of winning contract bids for new work. Disincentives for reporting and recording injuries and illnesses can result in pressure on occupational health practitioners from employers or workers to provide insufficient medical treatment that avoids the need to record the injury or illness. From its survey of U.S. health practitioners, GAO found that over a third of them had been subjected to such pressure. In addition, stakeholders and the survey results indicated that other factors may affect the accuracy of employers' injury and illness data, including a lack of understanding of OSHA's recordkeeping requirements by individuals responsible for recording injuries and illnesses.

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Abbreviations

BLS	Bureau of Labor Statistics
DART	days away from work, restricted activity, or job transfer
DOL	Department of Labor
LWDII	lost workday injury and illness (rate)
NAICS	North American Industry Classification System
NEISS	National Electronic Injury Surveillance System
NIOSH	National Institute for Occupational Safety and Health
ODI	OSHA Data Initiative
OSHA	Occupational Safety and Health Administration
OSH Act	Occupational Safety and Health Act of 1970
SIC	Standard Industrial Classification
SOII	Survey of Occupational Injuries and Illnesses

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United States Government Accountability Office
Washington, DC 20548

October 15, 2009

Congressional Requesters:

In 2007, there were approximately 4 million cases in which workers in the United States were injured or became ill as a result of unsafe or unhealthy working conditions, and more than 5,600 workers died as a result of their injuries, according to data reported by the Department of Labor's (DOL) Bureau of Labor Statistics (BLS). The rate of nonfatal occupational injuries and illnesses (hereafter referred to as injuries and illnesses) among private sector employers as reported by BLS in 2007 has generally declined since 1992; the rate of worker fatalities decreased from 1992 to 2001, and has remained relatively constant since 2002. Under the Occupational Safety and Health Act of 1970 (OSH Act), DOL's Occupational Safety and Health Administration (OSHA) is responsible for protecting the safety and health of the nation's workers. The OSH Act requires DOL to collect and compile accurate statistics on worker injuries and illnesses. One of two sources of these statistics is BLS's Survey of Occupational Injuries and Illnesses (SOII), which provides nationwide data on workers' injuries and illnesses in most industries. The other is OSHA's survey of selected employers' injury and illness records called the OSHA Data Initiative (ODI), which provides injury and illness data for workers in high hazard industries. The OSH Act and DOL regulations require employers with more than 10 employees to record other than minor injuries and illnesses on logs maintained at each worksite. However, 83 percent of all employers are generally not required to record work-related injuries and illnesses, either because the employers are too small (have fewer than 11 employees) or because they are in industries with historically low rates of injuries and illnesses and have thus been exempted by OSHA from recording injuries and illnesses.

At your request, we reviewed DOL's efforts to ensure that injuries and illnesses are properly recorded by employers. Specifically, you asked us to determine (1) whether DOL verifies that employers are accurately recording workers' injuries and illnesses and, if so, the adequacy of these efforts, and (2) what factors may affect the accuracy of employers' injury and illness records. To address our first objective, we interviewed DOL officials to determine the types of verification efforts the agency conducts for the data collected in its SOII and ODI surveys, and the agency components responsible for these efforts. We also reviewed relevant laws and regulations. After determining that OSHA verifies the ODI data it collects through onsite audits of selected employers' injury and illness

records (records audits), we interviewed OSHA headquarters officials and collected relevant documentation regarding the agency's audit procedures. We analyzed data from records audits conducted by OSHA from 2005 to 2007 of employers' calendar year 2003, 2004, and 2005 injury and illness records (the most recent data available).¹ We were not able to independently verify the injury and illness data audited by OSHA because we do not have access to the injury and illness records of private employers. To better understand OSHA's records audit procedures, we interviewed OSHA regional administrators and area directors, as well as inspectors who conducted the audits in each of OSHA's 10 regions, including inspectors with various levels of audit experience, to obtain a range of perspectives. To address our second objective, we interviewed OSHA and BLS officials; experts, including academics and researchers; labor representatives and worker advocates; and representatives from an employer association, and surveyed a representative sample of occupational health practitioners in the United States. We selected experts based on the depth of their experience and the extent to which their work had been cited by other experts, among other criteria. We selected labor representatives and worker advocacy organizations based on the number of workers and types of industries they represented. Our survey of occupational health practitioners included occupational physicians, occupational physician assistants, and nurse practitioners specializing in occupational health. We independently selected a random sample of each of the three groups, resulting in a sample of 409 of the 1,941 physicians; 396 of the 1,246 physician assistants; and 382 of the 861 nurse practitioners, for a total representative sample of 1,187 of the 4,048 occupational health practitioners. We identified these groups from information obtained from a firm that manages data on members of professional medical organizations. Our survey yielded a response rate that allowed us to generalize our results to the total population of the three groups. All estimates we report from the survey results have a margin of error of plus or minus 7 percentage points or less at the 95 percent confidence level. A more detailed description of our scope and methodology is provided in appendix I. A copy of the instrument we used to survey health practitioners is provided in appendix II. Additional findings from our survey are provided in appendix III.

¹Hereafter, all years cited in this report are calendar years unless otherwise noted. Records audits are almost always conducted 2 calendar years after the target data year. Of the 753 records audits that were conducted for 2003-2005 records, 99.7 percent were conducted in 2005-2007; two records audits were conducted in January and February of 2008.

We conducted this performance audit from August 2008 through October 2009 in accordance with generally accepted government auditing standards. These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Under the OSH Act, OSHA is responsible for protecting the safety and health of the nation's workers. The agency helps ensure the safety and health of over 112.5 million private sector workers in approximately 8.6 million worksites in the United States by setting and enforcing safety and health standards, rules, and regulations, and inspecting worksites to ensure employer compliance. OSHA helps to ensure safe and healthy working conditions for workers through its 11 national office directorates and 10 regional offices. The national office directorates include the Directorate of Enforcement Programs, which provides guidance to OSHA inspectors on how to enforce safety and health regulations and standards and how employers are to comply with them, and the Directorate of Evaluation and Analysis, which establishes policies and analyzes safety and health data. OSHA directly enforces safety and health regulations and standards in about half the states; the remaining states have each been granted authority by OSHA to set and enforce their own workplace safety and health standards for worksites under a state plan approved by OSHA (state-plan states).²

The OSH Act requires nonexempt employers to prepare and maintain records of injuries and illnesses sustained by their workers and make them

²In these states, the state standards must be at least as effective as the federal standards. See 29 U.S.C. § 667(c)(2). Most of the state-plan states cover public and private sector worksites. However, four states (Connecticut, New Jersey, New York, and the Virgin Islands) cover public sector (state and local government) worksites only; private sector worksites are covered by federal OSHA. Under the Occupational Safety and Health Act of 1970, "state" is defined to include the District of Columbia, Puerto Rico, the Virgin Islands, American Samoa, Guam, and the Trust Territory of the Pacific Islands. See 29 U.S.C. § 652(7).

available to OSHA.³ The primary record employers are required to maintain is OSHA's Form 300 Log of Work-Related Injuries and Illnesses (see app. IV). For each work-related injury and illness that requires medical treatment other than first aid, the employer is required to record the worker's name; the date; a brief description of the injury or illness; and the number of days the worker was away from work, assigned to restricted duties, or transferred to another job as a result of the injury or illness. Employers are also required to describe each injury and illness on the Injuries and Illnesses Incident Report (OSHA's Form 301). About 1.5 million employers with more than 10 employees—representing about 17 percent of the approximately 8.6 million private sector worksites and an estimated 53 million employees covered by OSHA—must keep such records. OSHA has established definitions and recordkeeping guidelines to assist employers in determining which injuries and illnesses must be recorded in their injury and illness logs. Injuries and illnesses serious enough to be recorded include those that result in lost work time, medical treatment other than first aid, restriction of work, loss of consciousness, or transfer to another job. OSHA requires employers to post summaries of their logs annually at each worksite and to provide them to OSHA and BLS if requested. OSHA's recordkeeping standards, which took effect in January 2002, were intended to simplify the recordkeeping rules and forms used to record injuries and illnesses.⁴

OSHA also promotes workplace safety and health by targeting industries and employers with the highest number of workplace injuries and illnesses for inspection. OSHA does this through both programmed (scheduled) inspections and unprogrammed (unscheduled) inspections conducted by inspectors in area offices throughout its 10 U.S. regions. OSHA places the highest priority on unprogrammed inspections initiated in response to fatality investigations, formal complaints, referrals, and other situations that could pose a risk to the safety and health of workers. OSHA gives a lower priority to programmed inspections, which include those selected by OSHA through its Site-Specific Targeting program, which it uses to

³Generally, in addition to employers with 10 or fewer employees, DOL's regulations exempt worksites in specific low hazard retail, service, finance, insurance, or real estate industries from OSHA's recordkeeping requirements. However, all employers must report to OSHA any workplace incident that results in a fatality or the hospitalization of three or more employees. In addition, employers are required to respond to the OSHA and BLS surveys even if they are otherwise exempt from OSHA's recordkeeping requirements.

⁴66 Fed. Reg. 5916.

target high hazard worksites for inspection.⁵ Table 1 shows the number of programmed and unprogrammed inspections OSHA conducted from fiscal years 2003 through 2007.

Table 1: Number of Inspections Conducted by OSHA, Fiscal Years 2003-2007

Number of inspections	FY 2003	%	FY 2004	%	FY 2005	%	FY 2006	%	FY 2007	%
Total inspections	39,778	100	39,112	100	39,828	100	38,537	100	39,323	100
Programmed inspections	22,436	56	21,576	55	21,404	54	21,506	56	23,035	59
Unprogrammed inspections	17,342	44	17,536	45	18,424	46	17,031	44	16,288	41
Fatality investigations	1,021		1,060		1,114		1,081		1,043	
Complaints	7,969		8,062		7,716		7,376		7,055	
Referrals	4,472		4,585		4,787		5,019		5,007	
Other	3,880		3,829		4,807		3,555		3,183	

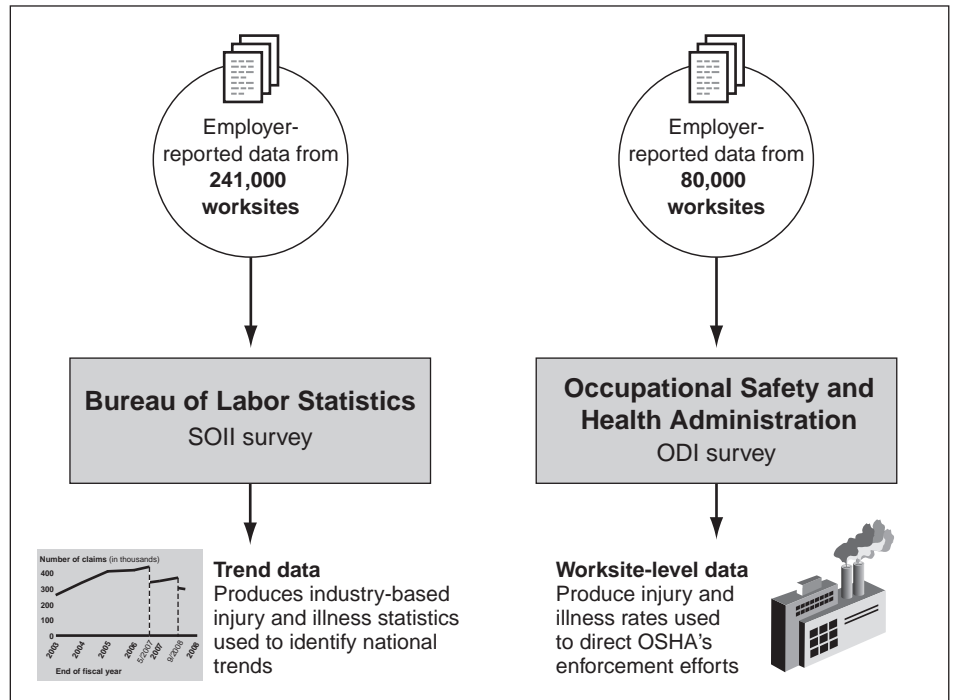
Source: GAO based on OSHA data.

BLS's SOII includes injury and illness data from employers' logs for about 241,000 worksites; the ODI survey includes data from about 80,000 worksites in high hazard industries.⁶ The SOII is a coordinated federal-state effort that estimates the number of workplace injuries and illnesses that occur at worksites in most industries in the United States. Because the data come from OSHA logs, the injuries and illnesses counted by the survey are only those required by OSHA to be recorded. As such, the data differ from those collected by other systems, such as data collected using workers' compensation claims. While BLS and OSHA collect the same basic information, they largely collect data from different employers. However, BLS estimates a potential overlap of less than 10 percent of employers who must complete both the BLS SOII and OSHA ODI surveys in a given year. In these cases, employers send the data to both BLS and OSHA because the agencies do not share data. Figure 1 shows the surveys and how they are used.

⁵In addition to targeting worksites for inspection through its Site-Specific Targeting program, OSHA also targets worksites through its national, regional, and local emphasis programs.

⁶The SOII 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.

Figure 1: DOL's Annual Occupational Injury and Illness Surveys



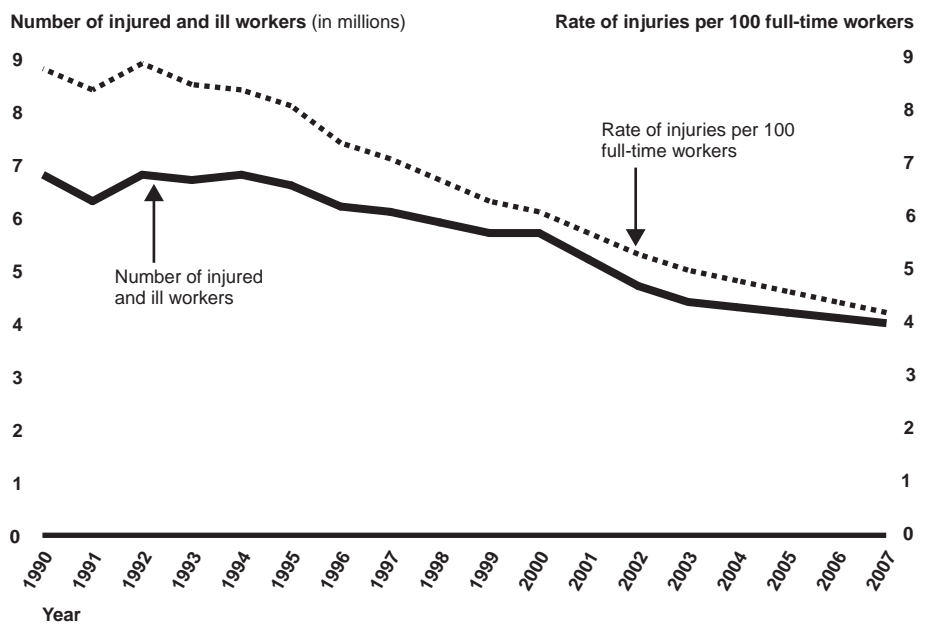
Sources: GAO analysis of DOL's Annual Occupational Injury and Illness Surveys.

BLS's data show a generally steady decline in the number and rate of injuries and illnesses reported by employers from 1992 to 2007 (see fig. 2). DOL officials often cite this decline as evidence of the success of OSHA's workplace safety programs and its enforcement efforts. However, because of the SOII's sole reliance on employer-reported injury and illness data, some academic studies have reported that the survey may undercount the total number of workplace injuries and illnesses.⁷ OSHA officials stated that the decline has been driven by employer improvements to workplace safety and health, and by the decrease in the number of manufacturing jobs in the United States. According to BLS, manufacturing jobs in the

⁷See, for example, Leslie I. Boden and Al Ozonoff, "Capture-Recapture Estimates of Nonfatal Workplace Injuries and Illnesses," *Annals of Epidemiology*, vol. 18, no. 6 (2008); Kenneth D. Rosenman, et al., "How Much Work-Related Injury and Illness is Missed By the Current National Surveillance System?," *Journal of Occupational and Environmental Medicine*, vol. 48, no. 4 (2006); and J. Paul Leigh, James P. Marcin, and Ted R. Miller, "An Estimate of the U.S. Government's Undercount of Nonfatal Occupational Injuries," *Journal of Occupational and Environmental Medicine*, vol. 46, no. 1 (2004).

United States have declined by almost 24 percent since 1998. The OSHA officials also said that the decline in the rate of U.S. occupational injuries and illnesses is consistent with declines in other countries. Data from the International Labour Organization show that several countries experienced declines in their rates of injuries and illnesses from 1992 to 2006.⁸

Figure 2: Number and Rate of Injuries and Illnesses in the United States, 1990-2007



Source: BLS.

Note: Rule changes in 2002 may affect the comparability of the data in this time series.

From the time the ODI was established in 1995, OSHA has annually surveyed about 80,000 of the approximately 130,000 worksites with 40 or

⁸The International Labour Organization is the United Nations agency that brings together representatives of governments, employers, and workers of its member states to jointly shape policies and programs that promote decent and productive employment.

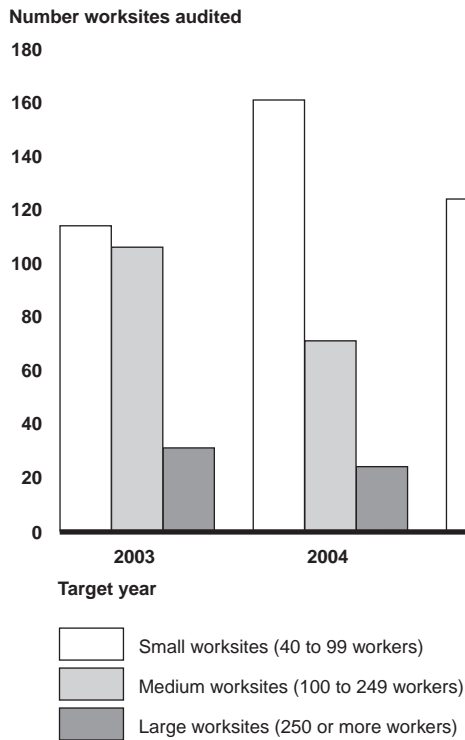
more workers it defines as being in high hazard industries.⁹ According to OSHA officials, the survey size is based on the budgetary resources OSHA had when the ODI was established. The agency uses data from the ODI to target employers for inspections, outreach, and technical assistance, and to measure its performance in reducing workplace injuries and illnesses. For example, OSHA provides employers with onsite assistance to help them identify and correct hazards and set up safety and health programs. OSHA also provides employers with training and education to help them reduce worker accidents and injuries. The 130,000 worksites in the ODI universe are selected from manufacturing and 22 other industries OSHA defined as high hazard on the basis of their injury and illness rates reported by BLS in 2002: worksites with a lost workday injury and illness (LWDII) rate of 5.0 or higher.¹⁰ To expand its coverage of high hazard worksites, OSHA included 20,000 construction worksites in its 2008 ODI. OSHA has also proposed including worksites with 30 or more employees in the ODI, instead of using the current threshold of 40 or more employees.

OSHA and some state-plan states annually conduct onsite audits of employer injury and illness logs to verify the accuracy of the ODI data. While OSHA inspectors check employers' injury and illness records during safety and health inspections, a records audit is the primary mechanism OSHA uses to verify the accuracy of the data submitted by employers for the ODI. OSHA annually conducts records audits for a representative sample of approximately 250 of the 130,000 worksites included in its ODI survey. The primary purpose of a records audit is to verify that the injury and illness data submitted to OSHA are identical to the data in the employer's injury and illness log and that they are accurate. The records audits OSHA conducted from 2005 to 2007 of employers' 2003, 2004, and 2005 injury and illness data occurred at a range of worksites of differing sizes based on the average number of workers at each worksite (see fig. 3).

⁹OSHA generally excludes from the ODI worksites with fewer than 40 employees; those in states that do not participate in the ODI; and all construction sites, hospitals, and general merchandise stores. The ODI also excludes worksites in the mining and railroad industries because their injuries and illnesses are tracked separately by the Mine Safety and Health Administration and the Federal Railroad Administration, respectively.

¹⁰Until 2002, DOL used the LWDII rate to compare the rates of injuries and illnesses among worksites of varying sizes. The rate was calculated based on the total number of injuries or illnesses resulting in lost work days. In 2002, after revising its recordkeeping requirements, DOL began using the days away from work, restricted activity, or job transfer (DART) rate to compare injuries and illnesses among worksites instead of the LWDII rate.

Figure 3: Number of Worksites Audited by Size, 2003-2005



Source: OSHA.

The audits cover worksites in a variety of industries, including health services, trucking and warehousing, fabricated metal products, and printing and publishing (see table 2).

Table 2: Number of Records Audits by Type of Industry, 2003-2005

Industry	Number of audited worksites ^a			
	2003	2004	2005	Total
Agricultural production—crops	2	0	2	4
Agricultural production—livestock	1	0	0	1
Agricultural services	1	0	1	2
Food and kindred products	22	14	13	49
Tobacco manufacturers	0	0	0	0
Textile mill products	4	2	3	9
Apparel and other textile products	3	7	5	15
Lumber and wood products	7	4	11	22

Industry	Number of audited worksites ^a			
	2003	2004	2005	Total
Furniture and fixtures	7	5	4	16
Paper and allied products	4	7	6	17
Printing and publishing	12	14	7	33
Chemicals and allied products	9	12	9	30
Petroleum and coal products	1	1	0	2
Rubber and miscellaneous plastic products	14	16	9	39
Leather and leather products	1	0	0	1
Stone, clay, and glass products	5	8	8	21
Primary metal industries	8	7	9	24
Fabricated metal products	20	24	21	65
Machinery, except electrical	23	15	20	58
Electric and electronic equipment	11	16	12	39
Transportation equipment	8	3	10	21
Instruments and related products	8	6	5	19
Miscellaneous manufacturing industries	4	3	3	10
Trucking and warehousing	15	22	21	58
U.S. Postal Service	0	0	0	0
Water transportation	0	0	0	0
Transportation by air	6	2	2	10
Transportation services	0	0	1	1
Electric, gas, and sanitary services	3	2	2	7
Wholesale trade—durable goods	5	16	8	29
Wholesale trade—nondurable goods	8	7	8	23
Building materials and garden supplies	9	10	13	32
Health services	30	33	32	95
Total	251	256	245	752

Source: OSHA.

^aOSHA surveys a portion of its ODI universe annually and as a result, an industry may be included one year and excluded the next. Therefore, industries in this table may not have any records audits for a given year because the industry was not included in that year's ODI.

Based on its analysis of OSHA's records audits of employers' 2003, 2004, and 2005 injury and illness data, Eastern Research Group, Inc.¹¹ found an accuracy rate of over 90 percent for the total number of cases that were required to be recorded and those involving days away from work, restricted activity, or job transfer (DART).¹² OSHA uses these findings to support the agency's continued use of the ODI data to target worksites for enforcement and compliance assistance, and to measure the agency's performance in reducing workplace injuries and illnesses.

DOL Verifies the Injury and Illness Data in the ODI, but OSHA Does Not Always Collect Information from Workers, and Excludes Certain Industries

Although DOL is not required to, it verifies some of the workplace injury and illness data it collects from employers on the ODI survey via OSHA's records audits. However, OSHA's efforts to verify the accuracy of the data are not adequate because OSHA overlooks some information it could obtain from workers about injuries and illnesses during these audits that could help verify the accuracy of the data. In addition, OSHA excludes certain high hazard industries from its data collection efforts, which precludes them from being selected for records audits and makes them unlikely to be targeted by OSHA for inspections, outreach, and technical assistance. BLS does not verify the injury and illness data it collects from employers in the SOII that are used to report national injury and illness statistics and trends, but it has taken or is planning to take several actions to respond to concerns about the quality and completeness of the data.

OSHA Does Not Require Inspectors to Interview Workers during Records Audits

OSHA does not require inspectors to interview workers during records audits about injuries and illnesses that they or their co-workers may have experienced. Although OSHA's procedures manual states that inspectors must conduct interviews if they believe the records do not provide full and accurate information, it does not provide criteria for what constitutes "full and accurate" information. OSHA officials confirmed that it is optional for inspectors to interview workers during records audits. As a result, inspectors may miss opportunities to obtain information from workers about injuries and illnesses that may not have been properly recorded by

¹¹Eastern Research Group, Inc. is a private consulting firm that annually analyzes the records audit data collected by inspectors.

¹²The DART rate is calculated by totaling the number of work-related injuries and illnesses that resulted in days away from work, job duty restrictions, or job transfer at a worksite; dividing by the total number of hours worked by all workers during the calendar year; and multiplying this number by 200,000, which represents a base for 100 full-time workers working 50 weeks per year.

employers on their injury and illness logs. As noted in our previous work, there are potential risks in relying solely on employer-reported data.¹³ When OSHA inspectors conduct records audits, the audit procedures direct them to inspect the records of a random sample of workers at the worksites, among other things. These records, which are provided to the inspectors by the employer, can include workers' compensation records, medical records, accident reports, and records of absences.

In addition to reviewing these records, OSHA's procedures provide inspectors with the option to interview workers. Worker interviews are the only source of information used during the audit not provided by the employer. If inspectors choose to interview workers, OSHA's audit software generates a sample of workers to be interviewed from the initial random sample of workers. For the 753 records audits OSHA conducted of employers' 2003, 2004, and 2005 injury and illness records, we found that inspectors chose to interview workers in about half of the audits. During our interviews, inspectors told us one challenge they face in interviewing workers is that many workers are no longer employed at the worksite or are unavailable to be interviewed at the time of the audit. Of these inspectors who conducted interviews, 9 of 14 reported they are rarely or never able to interview the full sample of workers. We examined the data for audits conducted from 2005 to 2007, and found that when inspectors interviewed workers, 72 percent of the time they did not interview the full number of workers recommended by the audit procedures. OSHA headquarters officials told us that, although the records audit procedures do not direct inspectors to substitute other workers to interview when the workers originally selected are unavailable, they always instruct inspectors to do so during records audit training. However, OSHA does not conduct all of the records audit training inspectors receive, and several of the inspectors we interviewed said they had not received this training.

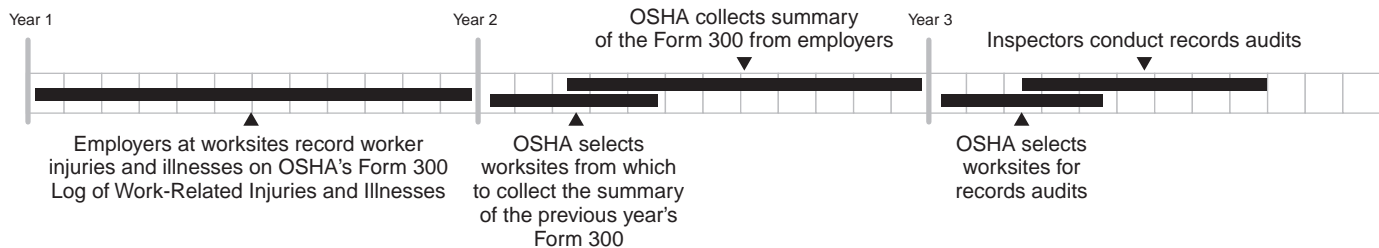
Lack of Timeliness in Conducting Interviews with Workers Can Affect Their Usefulness

Interviewing workers might provide information to help inspectors evaluate the accuracy and completeness of employer-provided data; however, the lack of timeliness in conducting the interviews can affect their usefulness. Some inspectors told us that because OSHA does not conduct records audits until about 2 calendar years after the injuries and illnesses are recorded, inspectors rarely learn about underrecorded

¹³GAO, *Occupational Safety and Health: Changes Needed in the Combined Federal-State Approach*, GAO/HEHS-94-10 (Washington, D.C.: Feb. 28, 1994).

injuries or illnesses from the interviews. Because of this lag, inspectors told us many workers are no longer employed at the worksite and those who remain may be unable to remember the injury or illness. OSHA officials said the lag exists because, after the end of the calendar year in which the injury or illness is recorded, it takes OSHA a full year to collect the data and up to 9 additional months to conduct the records audits. For example, in early 2008, OSHA selected the ODI worksites for the calendar year 2007 injury and illness data. OSHA then spent a year collecting the data from employers. After collecting the data, OSHA selected worksites for records audits in early 2009, and generally gave inspectors until the end of September to complete the audits. As a result, if a worker was injured in January 2007, OSHA might not examine the employer’s records or interview the worker about the injury until the summer or fall of 2009—2½ years after the injury occurred. Figure 4 depicts the timeline for the process and the activities performed. In comparison, it takes BLS approximately 10 months to both collect and report the SOII data; however, BLS does not conduct follow-up verifications like OSHA’s records audits.

Figure 4: Timeline for Collecting and Auditing Employers’ Injury and Illness Records



Source: GAO analysis of information provided by OSHA.

OSHA’s ODI Universe Excludes Eight High Hazard Industries

Worksites under eight high hazard industries cannot be selected for records audits or targeted for OSHA’s enforcement and compliance activities, because OSHA has not updated its list of high hazard industries included in the ODI universe since 2002. (See app. V for a list of high hazard industries included in the ODI universe.) OSHA has neither a formal written policy on how or when to update the list of industries included in the ODI, nor clear documentation that explains the original construction of the ODI or its subsequent updates. We first reported on OSHA’s lack of documentation for its ODI industry selection process in

1998.¹⁴ By not updating its high hazard industry list using the most recent BLS SOII data, we found that OSHA is excluding eight high hazard industries that had an average DART rate of 4.2, which is higher than twice the national average or greater, for the three most recent years, from 2005 to 2007. Industries excluded include amusement parks, industrial launderers, and general rental centers (see table 3). As a result, worksites in these industries are precluded from being selected for OSHA’s records audits and they are unlikely to be targeted by OSHA for inspections, outreach, and technical assistance. Table 3 shows the industries excluded from the ODI universe.

Table 3: Industries That Would be High Hazard if OSHA Updated Its ODI Universe

NAICS code ^a	Industry
22133	Steam and air-conditioning supply
483113	Coastal and Great Lakes freight transportation
53212	Truck, utility trailer, and RV (recreational vehicle) rental and leasing
5323	General rental centers
7131	Amusement parks and arcades
71392	Skiing facilities
812331	Linen supply
812332	Industrial launderers

Source: GAO analysis of DOL data.

^aNAICS = North American Industry Classification System.

OSHA officials told us they have not updated the high hazard list because an agency regulation requires them to use the Standard Industrial Classification (SIC) system to classify industries, rather than the North American Industry Classification System (NAICS) industry codes currently used by BLS to report injury and illness rates. Prior to 2003, both OSHA and BLS used the SIC codes to classify industries. OSHA officials said they would like to switch to the NAICS codes, but they stated it is not currently an agency priority to pursue the regulatory change required to do so. In addition to a regulatory change, switching to NAICS would require OSHA to re-evaluate the criteria it uses to define industries as high hazard because in 2002, OSHA switched from using the LWDII rate to the DART

¹⁴GAO, *Occupational Safety and Health: Efforts to Obtain Establishment-Specific Data on Injuries and Illnesses*, [GAO-98-122](#) (Washington, D.C.: May 22, 1998).

rate for measuring workers' injuries and illnesses.¹⁵ Because the LWDII and DART are not exactly comparable, OSHA would have to identify a DART rate that is comparable to its LWDII rate of 5.0, which was the criterion OSHA used in 2002 to define a high hazard industry. According to our analysis, the results of which we confirmed through discussions with OSHA officials, a 4.2 DART rate is comparable to a 5.0 LWDII rate.

BLS Does Not Verify Employer-reported Data in the SOII, but Has Undertaken Actions to Improve the Quality and Completeness of the Data

BLS is not required to verify the accuracy of the data employers record on their OSHA forms; however, BLS has acknowledged limitations to the survey and has taken steps to improve it. BLS uses the SOII to report national, industry-wide injury and illness data, and policymakers and employers rely on the data to understand national trends in worker safety and health. The SOII only includes injury and illness data provided by employers. In contrast, BLS reports monthly employment statistics with data from employers on the number of jobs and from households on the number of people employed. A number of studies have compared the BLS data on injuries and illnesses to data collected from other sources, such as workers' compensation, hospital discharge data, and medical records.¹⁶ These studies found discrepancies between the number of injuries and illnesses reported in the SOII and the information in the other data sets. Some researchers have also criticized the scope of the SOII, noting, for example, that the 14.7 percent of all workers in 1999 who were government workers and the 7.3 percent of all workers who were self-employed were not included in the SOII.¹⁷

In response to questions about the accuracy of the employer-reported SOII data, BLS has taken several actions designed to improve the quality and

¹⁵The DART rate is calculated using the same formula as the LWDII rate; however, the rates do not count the exact same injuries and illnesses.

¹⁶SM Marsh, SJ Derk, and LL Jackson, "Nonfatal Occupational Injuries and Illnesses Among Workers Treated in Hospital Emergency Departments—United States, 2003," *Morbidity and Mortality Weekly Report*, vol. 55, no. 16 (2006); Rosenman, et al., "How Much Work-Related Injury and Illness is Missed by the Current National Surveillance System?," *Journal of Occupational and Environmental Medicine*, vol. 48, no. 4 (2006); J. Paul Leigh, James P. Marcin, and Ted R. Miller, "An Estimate of the U.S. Government's Undercount of Nonfatal Occupational Injuries," *Journal of Occupational and Environmental Medicine*, vol. 46, no. 1 (2004).

¹⁷Leigh, Marcin, and Miller, "An Estimate of the U.S. Government's Undercount of Nonfatal Occupational Injuries," *Journal of Occupational and Environmental Medicine*, vol. 46, no. 1 (2004).

completeness of the data. For example, to address concerns about the survey's limited scope, BLS expanded the SOII for its 2008 survey to include data on state and local government workers in all states and conducted a quality assurance study to verify that employers correctly transcribed information from their 2006 OSHA logs onto BLS's SOII survey forms. BLS also interviewed employers to determine how they record injury and illness data on the OSHA and workers' compensation forms. The aim of this effort was to identify cases where employers reported an injury or illness to the state's Workers' Compensation program, but did not record the cases on the OSHA log, despite the fact that the injury or illness was an OSHA-recordable case. In addition, in a 2009 research study, BLS examined discrepancies between the number of workplace injuries and illnesses reported in states' workers' compensation databases and in the SOII to address concerns about data accuracy. From the research, BLS identified some factors associated with discrepancies between the SOII and workers' compensation data, and is continuing to conduct research to identify additional potential factors. BLS stated that some of the discrepancies arose from cases that were compensable, but in which workers had no days away from work, and cases that entered workers' compensation after the end of the year, but did appear in the BLS data.

In addition to the actions it has already taken, BLS is planning to explore the use of other data sets to improve the quality of the SOII data. For example, BLS officials told us they plan to support the work of the National Institute for Occupational Safety and Health to explore the use of occupational injury and illness data collected by emergency departments to help identify gaps in the SOII data.¹⁸ The emergency department data could be particularly important because they would capture injuries and illnesses for self-employed workers, who are currently excluded from the SOII. In addition, since these data are reported by hospitals and not employers, they could help BLS identify underrecorded injuries and illnesses. Finally, BLS is planning to work with the Council of State and Territorial Epidemiologists to evaluate the quality of the SOII data for

¹⁸The National Institute for Occupational Safety and Health (NIOSH), part of the Centers for Disease Control and Prevention within the Department of Health and Human Services, is the federal agency responsible for conducting research and making recommendations to prevent workplace injuries and illnesses. One of the research projects that NIOSH is conducting is the national surveillance of nonfatal occupational injuries using the National Electronic Injury Surveillance System (NEISS). This project collects nationally representative, timely, nonfatal occupational injury surveillance data by using a sample of U.S. hospital emergency departments through NEISS.

certain injuries such as amputations and carpal tunnel syndrome.¹⁹ BLS has issued grants to three states to evaluate the possibility of using multiple sources of data to enumerate the quality of the SOII for certain injuries such as amputations and carpal tunnel syndrome.

Occupational Safety and Health Practitioners and Stakeholders Cited Worker and Employer Disincentives as Primary Factors That May Affect the Accuracy of Injury and Illness Data

Disincentives that influence workers' decisions to report and employers' decisions to record work-related injuries and illnesses are primary factors that may affect the accuracy of the data, according to occupational safety and health practitioners and stakeholders. They also reported that a lack of understanding of OSHA's recordkeeping requirements by those responsible for recording injuries and illnesses may affect the accuracy of the data.

Various Disincentives May Discourage Workers from Reporting and Employers from Recording Injuries and Illnesses

Occupational safety and health stakeholders we interviewed and occupational health practitioners we surveyed told us that primary factors affecting the accuracy of injury and illness data include disincentives that affect workers' decisions to report work-related injuries and illnesses and employers' decisions to record them. Stakeholders most often cited workers' fear of job loss and other disciplinary actions as disincentives that can affect workers' decisions to report injuries and illnesses. Occupational health practitioners concurred: 67 percent reported observing worker fear of disciplinary action for reporting an injury or illness, and 46 percent said that this fear of disciplinary action has at least a minor impact on the accuracy of employers' injury and illness records. Workers' fear of disciplinary actions may be compounded by policies at some worksites that require workers to undergo mandatory drug testing following incidents resulting in reported injuries or illnesses, regardless of

¹⁹The Council of State and Territorial Epidemiologists is a professional organization of public health epidemiologists working in state, territorial, or local health departments, and individuals from federal health agencies or academia. It works to establish more effective relationships among states and other health agencies and provides technical advice and assistance to partner organizations.

any evidence of drug use. Several labor representatives described mandatory drug testing policies as a disincentive that affects workers' decisions to report injuries and illnesses, and 67 percent of health practitioners reported they were aware of this practice at the worksites where they treated workers in 2008.

Stakeholders also said employers' safety incentive programs can serve as disincentives for workers reporting injuries and illnesses. These programs reward workers when their worksites have few recordable injuries or illnesses. One-half of the health practitioners who responded to our survey reported they were aware of incentive programs at the worksites where they treated workers in 2008. Safety incentive programs are designed to promote safe behavior by workers, and 72 percent of health practitioners reported that these programs motivate workers to work in a safe manner. However, some stakeholders said these programs can discourage workers from reporting injuries and illnesses; more than three-quarters of health practitioners said they believed workers sometimes avoid reporting work-related injuries and illnesses as a result. Stakeholders also said that in addition to missing the chance to win prizes for themselves, workers who report injuries and illnesses may risk ruining their coworkers' chances of winning such prizes.

Various disincentives may also discourage employers from recording workers' injuries and illnesses. Stakeholders told us employers are concerned about the impact of higher injury and illness rates on their workers' compensation costs. Several researchers and labor representatives said that because employers' workers' compensation premiums increase with higher injury and illness rates, employers may be reluctant to record injuries and illnesses. They also said businesses sometimes hire independent contractors to avoid the requirement to record workers' injuries and illnesses because they are not required to record them for self-employed individuals.²⁰ Stakeholders also told us employers may not record injuries and illnesses because having high injury and illness rates can affect their ability to compete for contracts for new work. The injury and illness rate for worksites in certain industries, such as construction, affects some employers' competitiveness in bidding on the same work.

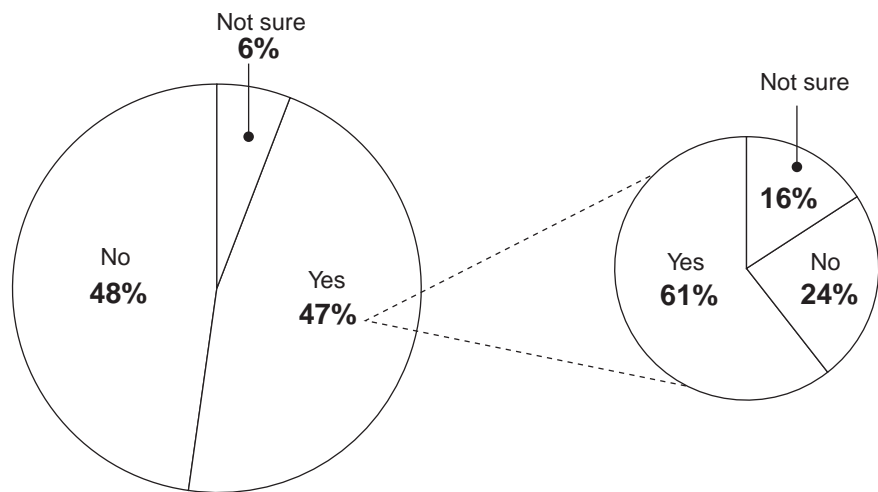
²⁰However, under DOL regulations, if an employer supervises a contractor's employee on a day-to-day basis, the employer must record the employee's injury or illness. 29 C.F.R. § 1904.31(b)(3).

Disincentives that discourage workers from reporting and employers from recording injuries and illnesses may also result in pressure on occupational health practitioners to treat workers in a manner that avoids the OSHA requirement to record injuries and illnesses. From our survey, we found that more than one-third of health practitioners were asked by company officials or workers to provide treatment that resulted in an injury or illness not being recorded, but also was not sufficient to properly treat the injury or illness. For example, in some cases, practitioners stated that employers may seek out alternative diagnoses if the initial diagnosis would result in a recordable injury or illness. One practitioner said that an injured worker's manager took the worker to multiple providers until the manager found one who would certify that treatment of the injury required only first aid, which is not a recordable injury. Fifty-three percent of the health practitioners reported that they experienced pressure from company officials to downplay injuries or illnesses, and 47 percent reported that they experienced this pressure from workers. Further, 44 percent of health practitioners stated that this pressure had at least a minor impact on whether injuries and illnesses were accurately recorded, and 15 percent reported it had a major impact. In some cases, this pressure may be related to the employers' use of incentive programs. Of those experiencing pressure from workers, 61 percent reported they were aware of incentive programs at the worksites where they treated workers (see fig. 5). In comparison, of the practitioners who reported not experiencing pressure from workers in 2008, 41 percent reported being aware of incentive programs at the worksites where they treated workers.

Figure 5: Pressure From Workers to Downplay Injuries and Illnesses and Awareness of Incentive Programs

Did you experience pressure from workers to downplay injuries or illnesses in 2008?

Did any of the worksites where you treated workers in 2008 have incentive programs?



Source: GAO analysis of occupational health practitioner survey data.

An OSHA official told us that OSHA does not have an official policy on incentive programs or practices that may affect workers' decisions to report injuries and illnesses, but it has authority under the OSH Act to discourage inaccurate reporting by employers. The official stated that, under a planned National Emphasis Program, OSHA will explore the possible impact that incentive programs have on workers' decisions to report injuries and illnesses. To address disincentives that may affect employers' decisions to accurately record injuries and illnesses, the official stated OSHA can issue citations or fine employers when recordkeeping violations are found.

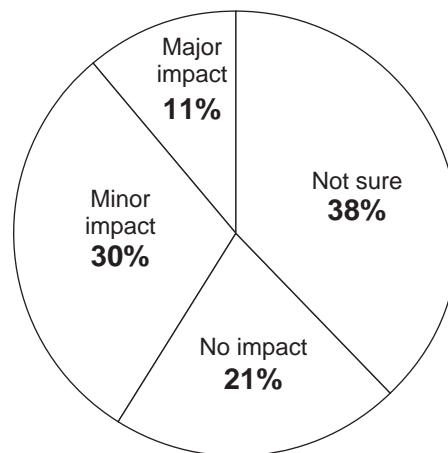
Lack of Understanding of OSHA's Recordkeeping Requirements and Other Factors May Also Affect the Accuracy of the Injury and Illness Data

Several stakeholders and nearly all of the OSHA inspectors we interviewed said that the lack of understanding of OSHA's recordkeeping requirements by the individuals charged with recording injuries and illnesses affects the accuracy of the injury and illness data. Forty-one percent of occupational health practitioners reported that misinterpretation of OSHA's recordkeeping requirements by company officials has an impact on whether injuries and illnesses are accurately recorded (see fig. 6). Several

researchers and a representative from a labor organization with whom we spoke said that inaccuracies in recording injuries and illnesses can result from a lack of understanding of the differences between OSHA’s recordkeeping requirements and the eligibility criteria for workers’ compensation claims. They stated that some individuals charged with maintaining employers’ OSHA logs erroneously think that the criteria for recording injuries and illnesses are the same as the eligibility criteria for filing workers’ compensation claims. Therefore, they may be less likely to record injuries and illnesses that are not compensable through the workers’ compensation system. In addition, some stakeholders said they thought the lack of understanding among those recording injuries and illnesses was likely worse in smaller companies with fewer resources than larger companies, which have a greater capacity for providing recordkeeping training.

Figure 6: Reported Impact of Misinterpretation of Recordkeeping Requirements on Records Accuracy

What impact does misinterpretation of recordkeeping requirements by company officials have on records accuracy?



Source: GAO analysis of occupational health practitioner survey data.

OSHA provides a number of tools to assist employers in understanding its recordkeeping requirements. For example, the form employers use to record injuries and illnesses—the OSHA injury and illness log—provides examples of which injuries and illness must be recorded and how to record them. OSHA also posts guidance and frequently asked questions about its recordkeeping requirements on its Web site. In addition, OSHA officials told us employers with recordkeeping questions can phone

officials in OSHA headquarters and area offices, or e-mail questions to OSHA via its Web site. They also said they have considered creating an online tool to help employers quickly and easily determine whether to record specific injuries and illnesses on their logs.

Stakeholders also discussed additional factors that may affect the accuracy of employers' data, including weaknesses in OSHA's enforcement efforts and the difficulty of determining whether some illnesses are work related. Several stakeholders pointed to weaknesses in OSHA's enforcement efforts as a reason for inaccuracies in employers' injury and illness data. For example, some stakeholders noted that OSHA's enforcement of recordkeeping practices has diminished in recent years. Two stakeholders said OSHA's enforcement capabilities could be strengthened with additional resources. Another factor a few researchers cited that could affect the accuracy of injury and illnesses data is that illnesses, particularly those with long latency periods, are less likely to be reported by workers and recorded by employers than injuries. They explained that, for many of these illnesses, it is difficult to prove they were caused by work-related activities.

Conclusions

Workers are entitled to safe and healthful workplaces, and it is DOL's responsibility to track the safety and health of the nation's workplaces and ensure that employers take steps to minimize workers' risks of injuries and illnesses. Accurate injury and illness records are important because they assist Congress, researchers, OSHA, BLS, and other agencies in describing the nature and extent of occupational safety and health problems. These records are also vital to helping employers and workers identify and correct safety and health problems in the workplace. In addition, these records help OSHA evaluate programs, allocate resources, and set and enforce safety and health standards. Without accurate records, employers engaged in hazardous activities can avoid inspections because OSHA bases many of its safety inspections on work-related injury and illness rates.

Because injury and illness data are so vital, it is important that OSHA and BLS take steps to ensure that the data are as accurate as possible. First, OSHA inspectors must take advantage of opportunities to verify the accuracy and completeness of employer-provided records by interviewing workers who may be aware of injuries and illness that may not have been recorded by employers. It is also important that OSHA conduct its records audits as soon as possible after it collects employers' injury and illness data to maximize the usefulness of information collected from worker

interviews. In addition, it is imperative that employers understand which injuries and illnesses should be recorded under OSHA's recordkeeping standards. Finally, although BLS has taken steps to improve the quality of the injury and illness data it collects, these actions will not address all of the concerns regarding the accuracy of the injury and illness data that BLS collects and reports. As these data are the only comprehensive source of national data on workers' injuries and illnesses, it will be important for BLS to follow through on its efforts.

Recommendations for Executive Action

To improve OSHA's efforts to verify the accuracy of employer-provided injury and illness data, the Secretary of Labor should direct the Assistant Secretary for OSHA to take the following three actions:

- require inspectors to interview workers during the records audits to obtain information on injuries or illnesses and substitute other workers when those initially selected for interviews are not available;
- minimize the amount of time between the date injuries and illnesses are recorded by employers and the date they are audited by OSHA; and
- update the list of high hazard industries used to select worksites for records audits and target inspections, outreach, and technical assistance.

To improve the accuracy of the data recorded by employers on workers' injuries and illnesses, the Secretary of Labor should direct the Assistant Secretary for OSHA to

- increase education and training provided to employers to help them determine which injuries and illnesses should be recorded under the recordkeeping standards, such as providing assistance to employers via the online tool that OSHA is considering.

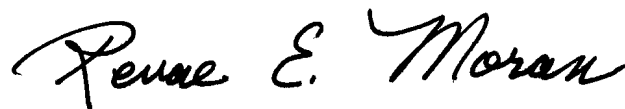
Agency Comments and Our Evaluation

We provided a draft of this report to the Secretary of Labor for comment. We received written comments from the Acting Assistant Secretary for OSHA, which are reproduced in their entirety in appendix VI. OSHA and BLS also provided technical comments, which we incorporated in the report as appropriate.

OSHA agreed with all of our recommendations and stated that it would move forward to implement them. To address the first two recommendations, OSHA stated that it would require inspectors to interview employees during records audits and develop policies to conduct record audits inspections in a timely fashion. For the third recommendation, OSHA stated that it would pursue rulemaking at the earliest possible date to update the industry coverage of the recordkeeping rule from the SIC system to NAICS, which would ensure that records audits include emerging high-risk industries. To address our fourth recommendation, OSHA stated that it would supplement its current educational outreach and develop a Web-based tool to assist employers in meeting the requirements of OSHA's recordkeeping regulations. OSHA also informed us that it implemented a National Emphasis Program (NEP) on Recordkeeping on October 1, 2009. The purpose of the NEP is to identify and correct recordkeeping inaccuracies and complement BLS's efforts to investigate factors accounting for differences in the number of workplace injuries and injuries estimated by BLS and other data sources.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the Secretary of Labor, relevant congressional committees, and other interested parties. In addition, the report will also be available at no charge on GAO's Web site at <http://www.gao.gov>.

A list of related GAO products is included at the end of this report. If you or your staff have questions about this report, please contact me at (202) 512-7215 or moranr@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix VII.



Reva E. Moran
Acting Director, Education, Workforce
and Income Security Issues

List of Requesters

The Honorable Tom Harkin
Chairman
Committee on Health, Education,
Labor, and Pensions
United States Senate

The Honorable Patty Murray
Chair
Subcommittee on Employment and
Workplace Safety
Committee on Health, Education,
Labor, and Pensions
United States Senate

The Honorable George Miller
Chairman
Committee on Education and Labor
House of Representatives

The Honorable Lynn Woolsey
Chairwoman
Subcommittee on Workforce Protections
Committee on Education and Labor
House of Representatives

Appendix I: Scope and Methodology

Review of the Department of Labor's Efforts to Verify the Accuracy of Employer-Reported Injury and Illness Data

To examine whether the Department of Labor (DOL) verifies that employers are accurately recording workers' injuries and illnesses, and, if so, the adequacy of such efforts, we focused on the efforts of DOL's Occupational Safety and Health Administration (OSHA) to verify the data it collects from employers on workers' injuries and illnesses through its annual OSHA Data Initiative (ODI) survey. We analyzed OSHA's policies and procedures and interviewed OSHA officials regarding the agency's employer recordkeeping requirements. In addition, we reviewed the Bureau of Labor Statistics' (BLS) efforts to verify the data it collects for the Survey of Occupational Injuries and Illnesses (SOII).

Analysis of OSHA's Audits of Employer Injury and Illness Records

We analyzed the results of the onsite audits of employers' injury and illness records (records audits) OSHA conducted in 2005, 2006, and 2007 of employers' injury and illness logs for 2003, 2004, and 2005—the most recent period for which data were available. Prior to our analysis, we assessed the reliability of the database OSHA uses to track its records audits—the OSHA Recordkeeping Audit Assistant—by reviewing information obtained from OSHA about the database, interviewing knowledgeable agency officials, and performing electronic testing of the software, among other steps. On the basis of our assessment, we concluded that the data maintained by OSHA in its database were sufficiently reliable for our reporting purposes.

Interviews of OSHA Inspectors Who Audit Employers' Injury and Illness Records

We interviewed selected OSHA inspectors who conducted the records audits in 2005, 2006, and 2007 to learn about (1) the training they received, (2) the extent to which they followed OSHA's procedures for the records audits, and (3) their views on the accuracy of the employers' injury and illness records they reviewed. Although we did not seek to generalize the responses of individual inspectors to the broader group of all inspectors who conducted these audits, we took steps to ensure that we had a mix of inspectors. We interviewed inspectors in states where federal OSHA directly enforces safety and health regulations and standards and those in states that have been approved by OSHA to conduct such activities (state-plan states).¹ These inspectors had a range of experience as determined by the number of audits they conducted in 2005, 2006, and 2007. We selected two inspectors for these interviews in each of OSHA's 10 regions—1

¹In some state-plan states, federal OSHA inspectors conduct these audits and, in others, state inspectors conduct the records audits.

inspector who conducted the greatest number of records audits and 1 who conducted the fewest number. Although we attempted to select 2 inspectors in each region, we were only able to interview 1 inspector in 1 of the regions because only 1 inspector in that region conducted records audits during the 3-year period we reviewed. As a result, we interviewed a total of 19 inspectors, including 12 federal and 7 state inspectors. In each of the 10 regions, we also interviewed other regional staff to obtain their views about the records audits. We interviewed the regional administrator, the deputy regional administrator, or someone designated as representing their views in each region. In addition, we interviewed 8 officials from 6 regions who were area directors, records audit coordinators, or supervisors.

Analysis of the Methods OSHA Uses to Select Worksites for Records Audits Using the ODI Universe

To understand OSHA's process for selecting worksites for records audits, we interviewed federal OSHA officials about the methods they use to select worksites from the ODI universe. We also analyzed the methods they use to compile and update the ODI universe, which is used to select worksites for records audits, and target worksites for safety and health inspections, outreach, and technical assistance.

As part of this work, we examined the methods OSHA uses to define industries as "high hazard," which makes the worksites in these industries eligible to be selected by OSHA for records audits and targeted for safety and health inspections.² In defining the industries to be included in the ODI, OSHA uses industry-level data published by BLS prior to 2002 based on the employer data collected in the Survey of Occupational Injuries and Illnesses (SOII) on the incidence rates of occupational injuries and illnesses resulting in lost work days (referred to as Lost Work Day Injuries and Illnesses [LWDII]) using Standard Industrial Classification (SIC) codes. In 2003, BLS began publishing SOII data using North American Industry Classification System (NAICS) codes to categorize industries instead of SIC codes.

When OSHA last updated its ODI universe, it included manufacturing and industries with an LWDII rate of 5.0 or greater; at that time, 5.0 was twice

²OSHA only verifies the accuracy of employers' injury and illness records for worksites in industries defined by OSHA as being high hazard industries—industries with an average occupational injury and illness rate of 5.0 or higher based on injuries or illnesses that result in lost work days due to injuries and illnesses—based on rates published by BLS prior to 2002.

the national injury and illness rate. Since OSHA has not updated the ODI universe since 2002, it has not yet established a new threshold for inclusion based on the days away, restricted or transferred (DART) rate measurement it now utilizes. Based on our analysis of current BLS data, we determined that a current DART rate of 4.0 was comparable to OSHA's LWDII rate of 5.0 in 2002. In order to determine which industries are high hazard using current data, we first converted the high hazard industries in OSHA's ODI universe from the SIC codes OSHA provided to GAO into the comparable NAICS codes. We then examined the incidence of injuries and illnesses in industries that were not in the ODI universe, and designated as potentially high hazard those that had a DART rate of 4.0 or higher in any year in the 5-year period from 2003 to 2007, which resulted in a list of 33 potentially high hazard industries. We asked OSHA officials to review the list of 33 industries and identify any that were not under their jurisdiction or were otherwise inappropriate for inclusion in the ODI. The officials stated that a DART rate of 4.2—twice the national average—is the threshold they would use to determine which industries are high hazard. After we removed the 8 industries with DART rates below 4.2, we found 26 industries that might be eligible for inclusion in the ODI universe. OSHA officials also told us that they used a 3-year average injury and illness rate to determine eligibility for inclusion in the ODI universe. Of the 26 industries, we found that 12 had average DART rates for 2005 to 2007 that were lower than the 4.2 threshold and were therefore not eligible for inclusion. Five others were not appropriate for inclusion in the ODI because they did not fall under the agency's jurisdiction or were comprised mostly of small employers. One remaining industry of the 26 was already included in the ODI under a different, but related, NAICS code. After obtaining OSHA's input, we identified 8 industries that could be included in the ODI universe if OSHA updated the universe using NAICS codes and current BLS data.

Discussions with Stakeholders of Factors That Affect the Accuracy of Employers' Injury and Illness Records

To examine the factors that may affect the accuracy of employers' injury and illness records, we selected various experts and researchers to interview based on (1) the individual's title, affiliation, and type and depth of experience; (2) the extent to which the individual's published work has been cited by other studies, and by OSHA, BLS, and other relevant organizations; (3) recommendations from other stakeholders; (4) the relevance of the individual's work; and (5) the source of funding of the individual's published work. By reviewing the literature on occupational injury and illness data, and other efforts, we identified 12 experts and researchers for our interviews.³ We vetted this group with (1) the director of safety and health at a major organization representing labor issues and concerns; (2) a BLS official from the Office of Compensation and Working Conditions who published a 2008 article addressing the accuracy of injury and illness data; and (3) a researcher at the National Institute for Occupational Safety and Health (NIOSH) who heads an effort to collect national occupational injury and illness data from a representative sample of emergency departments in the United States.

GAO Survey of Occupational Health Practitioners

We surveyed three categories of occupational health practitioners about how they treat injured or ill workers; the extent of their involvement with OSHA recordkeeping responsibilities; their views on worksite safety incentive programs; and their perspectives on factors that affect the completeness and accuracy of employer records of workplace injuries and illnesses. We surveyed (1) occupational physicians identified on lists compiled by the American Medical Association of all practicing physicians in the United States with a primary specialty of occupational medicine, (2) occupational physician assistants identified on lists compiled by the American Academy of Physician Assistants of all certified physician assistants in the United States who specialize in occupational medicine, and (3) nurse practitioners specializing in occupational health identified on lists compiled by a medical information broker of all nurse practitioners in the United States.

Study Population, Sample Frame, and Sample Design

We designed and implemented a dual mode survey (mail and Web-based) to obtain information from occupational health practitioners. We obtained

³Although we interviewed all 12 of the experts and researchers, we did not include the results from 1 researcher because that individual's responses were not pertinent to our questions.

lists of the occupational health practitioners from Medical Marketing Service, a data management firm providing medical lists to marketers, researchers, and government agencies. We constructed our universe of physicians from the American Medical Association’s Physician Masterfile of all practicing physicians in the United States with a primary specialty of occupational medicine; our universe of physician assistants from the American Academy of Physician Assistants’ list of physician assistants specializing in occupational medicine; and our universe of nurse practitioners from a comprehensive list of nurse practitioners specializing in occupational health. We independently selected a random sample from each of the three groups, resulting in a sample of 409 of the 1,941 physicians; 396 of the 1,246 physician assistants; and 382 of the 861 nurse practitioners, for a sample of 1,187 of the total 4,048 occupational health practitioners. Due to the results of our nonresponse analysis (described below) we restricted our sample of physician assistants to those who were certified, which resulted in a sample size of 340 certified physician assistants. Therefore, our resulting total sample was 1,131 (see table 4).

Out of the sample of 1,131 health practitioners, 504 completed the questionnaires, for a total response rate of 45 percent. This response rate allowed us to generalize our results to the total population of the three groups. All estimates we report from the survey results (including those in this appendix) have a margin of error of plus or minus 7 percentage points or less at the 95 percent confidence level. See table 4 for the disposition of the three separate groups of health practitioners.

Table 4: Disposition of Health Practitioner Sample

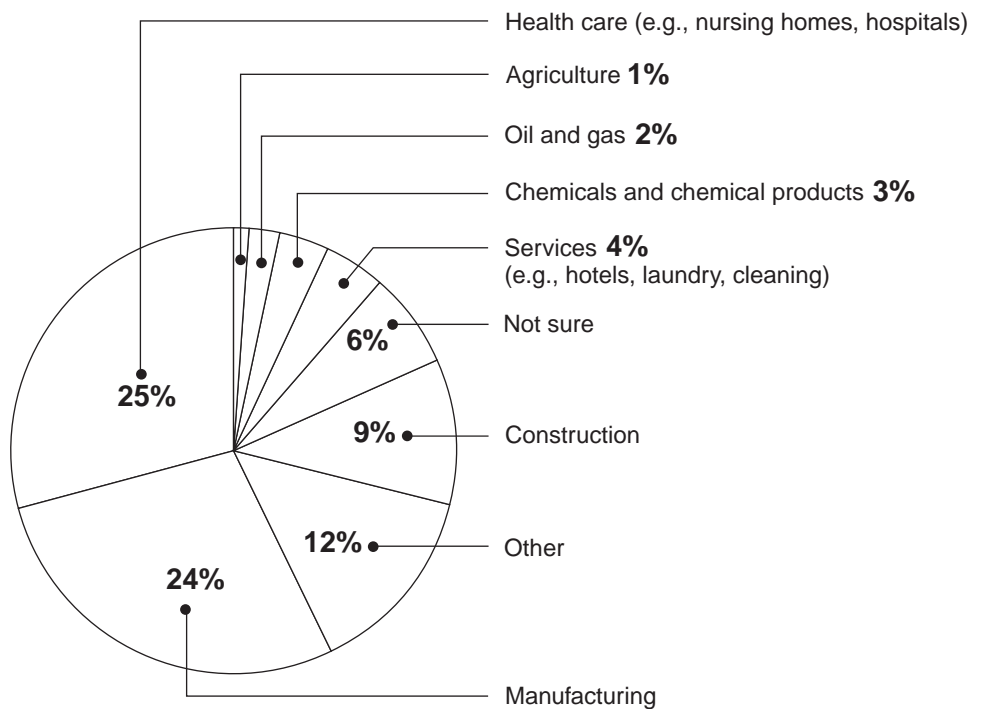
Practitioner group	Sample size	Completed responses	Response rate
Physicians	409	191	47%
Physician Assistants	340	163	48%
Nurse Practitioners	382	150	39%
Total	1,131	504	45%

Source: GAO analysis of occupational health practitioner survey data.

The sample size for each practitioner group was determined to be able to detect a 10 percent difference between the sample estimate and the true population with a significance level of 0.05. We also oversampled from each of the populations to account for practitioners who would not respond to our survey and those we determined to be out of scope, such as practitioners who did not treat workers for occupational injuries or illnesses during 2008.

The respondents treated workers in various industries, and varied in the number of years they had treated workers, but the majority had been treating workers for 10 years or more (see figs. 7 and 8). The majority also treated more than 100 workers in 2008 (see fig. 9).

Figure 7: Industries in Which the Majority of Workers Treated by Practitioner Respondents Were Employed in 2008

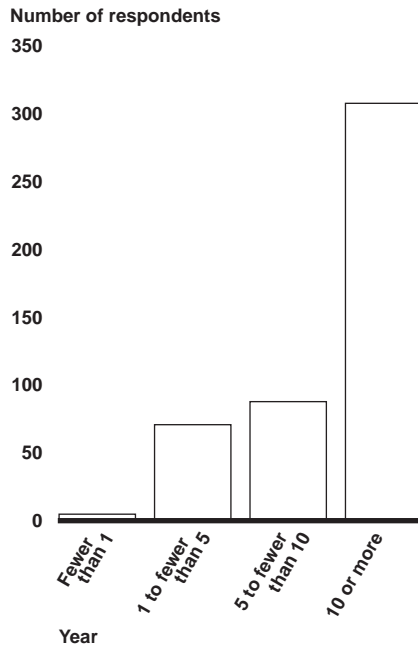


Source: GAO analysis of occupational health practitioner survey data.

Note: Less than 1 percent of respondents reported treating workers in both the meatpacking or poultry and mining industries.

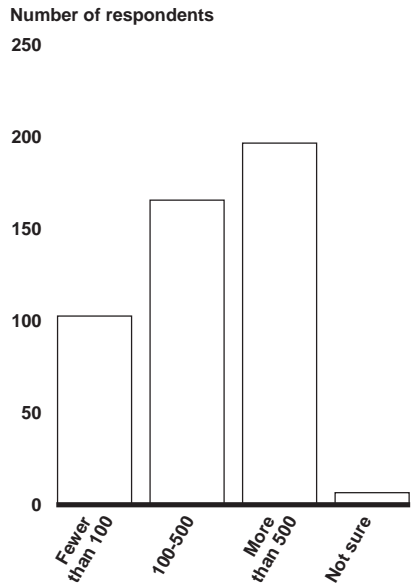
Responses do not add to 100 percent because 14 percent of respondents indicated that the majority of the workers they treated in 2008 were equally divided between two or more industries.

Figure 8: Number of Years Respondents Had Treated Workers



Source: GAO analysis of occupational health practitioner survey data.

Figure 9: Number of Workers Treated by Respondents in 2008



Source: GAO analysis of occupational health practitioner survey data.

Developing the Questionnaire, Content, and Question Wording

To develop survey questions, we drew on information we previously gathered from interviews with occupational safety and health stakeholders, as well as from scholarly studies from the field of occupational safety and health research. Appendix II provides our survey instrument. Two GAO survey specialists designed the questionnaire in collaboration with the analysts staffed to the engagement. We pretested the questionnaire with nine health practitioners who represented the three study populations and made appropriate modifications based on their feedback. Appendix III provides additional selected survey results.

Data Collection and Nonresponse Follow-up

We conducted the survey using a self-administered questionnaire, and offered prospective respondents the option of completing and mailing a hard copy questionnaire or completing the questionnaire online. We offered both options because during our pretests, health practitioners advised us to offer a Web-based option; however, a study of occupational health practitioners showed that, given the choice, 90 percent of respondents chose to respond by mail.⁴ None of our three data sources included e-mail addresses, so we mailed a hard copy of the questionnaire with instructions to either mail the completed paper version in a prepaid envelope or to go to a Web site designated for the survey and use a preassigned login identification and password. To encourage further participation, we mailed a second questionnaire to all those who had not yet responded. We also contracted with a survey research firm to make follow-up phone calls for those who had not responded.

Population Estimates and Sampling Errors for Probability Samples

Weighting Survey Response

Since we drew an independent sample from each occupational practitioner group, each response represented a different number in the population of the group. To enable data from the survey response to represent the combined population of three occupational health practitioner groups, we calculated weights of the responses for the three groups. We calculated the weights as

⁴B. Baker, et al., "Occupational Medicine Physicians in the United States: Demographics and Core Competencies," *Journal of Occupational and Environmental Medicine*, vol. 49, no. 4 (2007).

$$w_h = \frac{N_h}{n_h}$$

where

- w_h denotes the weight for the hth occupational practitioner group,
- N_h denotes the population for the hth occupational practitioner group,
- n_h denotes the total number of survey responses for the hth practitioner group, and
- h denotes practitioner group: 1 = physicians, 2 = physician assistants, and 3 = nurse practitioners.

Population Estimates and Confidence Intervals

We also estimated population statistics for the combined three health practitioner groups by calculating the difference in weights among the groups. We calculated the ratio estimate of the overall population by using the following equation:

$$R = (\sum_h w_h \sum_i y_{hi}) / (\sum_h w_h \sum_i x_{hi})$$

where

- w_h denotes the sample weight for the hth stratum,
- y_{hi} represents the ith response of the variable y response in the hth stratum (for example, $y_{hi} = 1$ if the ith response was ‘Construction’ in Q5, $y_{hi} = 0$ otherwise),
- x_{hi} represents the ith response of the variable x in the hth stratum (for example, $x_{hi} = 1$ if the ith response was ‘LESS THAN 100 WORKERS’ in Q3, $x_{hi} = 0$ otherwise), and
- R denotes a population estimate of the ratio (in this example, the ratio of respondents who treated workers from the construction industry among those who treated less than 100 workers in calendar year 2008).

To assess the precision of our estimates, we calculated confidence intervals for each measure. A confidence interval gives an estimated range of values, calculated from sample data, which is likely to include the true measure of the population. As is commonly done, we calculated 95 percent confidence intervals.⁵ We obtained the 95 percent confidence intervals of our population estimates by using methods detailed in Cochran⁶ and Hansen, Hurwitz, and Madow,⁷ since our estimates were calculated from our survey—that is, from a stratified sample. We estimated the population percentage and the confidence intervals of those percentages using specialized software for survey data analysis—SUDAAN®.⁸

Nonsampling Errors

We took steps in developing the questionnaire, collecting the data, and analyzing the data to minimize the variability in the survey results due to nonsampling errors—such as those resulting from the differences in the way a particular question is interpreted or the sources of information available to respondents. The data collected were analyzed by a data analyst working directly with staff who have subject matter expertise. After the data were analyzed, a second independent data analyst checked all computer programs for accuracy. We contracted with an outside company to enter the data from the paper questionnaires into a database, and we checked a 10 percent sample of the database as a quality control measure. Respondents who completed questionnaires online entered their answers directly.

Nonresponse Bias Analysis

Because only about 45 percent of the health practitioners (47 percent of physicians, 48 percent of physician assistants, and 39 percent of nurse practitioners) provided usable responses to our survey, bias from

⁵If independent samples are taken repeatedly from the same population, and a confidence interval calculated for each sample, then a certain percentage of the intervals will include the unknown population measure. The confidence interval is often calculated so that the percentage is 95 percent.

⁶W.G. Cochran, *Sampling Techniques*, 3rd ed., Wiley Series in Probability and Mathematical Statistics, section 11.7 (New York, N.Y.: John Wiley & Sons, 1977), 303.

⁷M.H. Hansen, W.N. Hurwitz, and W.G. Madow, *Sample Survey Methods and Theory*, vol. I, *Methods and Applications*, Wiley Publications in Statistics, sections 6.6 and 6.7 (New York, N.Y.: John Wiley & Sons, Inc., 1953), 252-259.

⁸B.V. Shah, B.B. Barnwell, and G.S. Bieler, *SUDAAN: User's Manual, Release 7.5*, vols. 1 and 2 (Research Triangle Park, N.C.: Research Triangle Institute, 1997). SUDAAN® is a registered trademark of the Research Triangle Institute.

nonresponse may result. If the views of those who did not respond differed from the views of those who did respond to some survey questions, the estimates made solely from those who did respond would be biased from excluding parts of the population with different characteristics or views. To limit this kind of error, we made several attempts to gain the participation of as many occupational health practitioners as possible, including additional mailings and contracting with a survey firm to call nonrespondents to encourage their participation. To assess the likelihood of significant bias, we collected additional data through the calls made by our contractor concerning reasons why the practitioners did not respond, and by trying to persuade them to answer three key questions from our survey on the phone. We also conducted several analyses of these follow-up data, our survey data, and data we had about the population from which we sampled, to attempt to detect any nonresponse bias.

We analyzed practitioner characteristics that may have been related to what their answers to our survey questions would have been if they had responded. The variables available to us for this analysis differed by practitioner type. For physicians, we used age, gender, number of offices, type of physician (medical doctor or doctor of osteopathic medicine), and geographic region. For physician assistants we used age, gender, years since graduation, and certification status. For nurse practitioners, we used age, gender, and practice setting. Using logistic regression, we compared the characteristics of nonrespondents to respondents to determine if any of these characteristics were more likely to be associated with being a responder. With the exception of one characteristic for one group, we did not detect a significant difference between those who chose to respond and those who did not. We did detect a difference in our sample of physician assistants: those who were certified were more likely to respond to our survey than those who were not. Because we could not be sure if this represented a bias and because we later determined that noncertified physician assistants were likely out of scope, we removed all noncertified physician assistants from our estimates, which resulted in eliminating 13 respondents and 43 nonrespondents from our final data.

Our follow-up calls had several purposes related to our nonresponse analysis. The primary purpose was to attempt to convert nonresponders to responders by persuading them to complete the survey. If after several attempts the respondent indicated that he or she would not complete the survey, our contractor asked the person to answer three key questions from our survey: (1) whether or not any of their worksites had incentive programs, (2) whether they had ever observed or experienced pressure

from workers to downplay injuries or illnesses, and (3) whether they had observed or experienced such pressure from company officials. Because only 14 nonrespondents answered at least one of these questions, we were unable to conduct any statistical analyses to detect whether their responses to these three questions were different, in aggregate, from those of the respondents. Regardless of whether or not the respondents answered these three questions, the respondents were asked why they would not complete the full survey. Sixty-four nonrespondents answered this question. Of these, 53 (83 percent) offered reasons that suggested they were likely out of scope because they had changed careers, were retired, or the survey did not relate to their job. This suggests that nonresponse bias may not be substantial as it is possible that many nonresponders were actually out of scope and would not have been able to complete the survey.

Finally, we analyzed the differences in response patterns between those who answered in the earlier period of the survey timeframe (early responders) and those who responded only after follow-up attempts (late responders). It is possible that the late responders more closely resemble the nonresponders than the early responders. Based on chi-square tests, we detected no significant difference in survey responses to our three key questions between the early and the late groups, which may suggest that actual nonrespondents would not have answered in a substantially different way from those who responded. While the possibility exists that the true results for the entire population might be different from those we estimated in our report, based on these various nonresponse analyses, we believe that nonresponse bias is unlikely.

Statement of Compliance with Generally Accepted Government Auditing Standards

We conducted this performance audit from August 2008 through October 2009 in accordance with generally accepted government auditing standards. These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Survey Instrument for Occupational Health Practitioners



Introduction

This questionnaire asks for information about treatment; actions such as OSHA recordkeeping pertaining to work-related injuries and illnesses; work site safety-incentive programs; and your perspectives on factors that affect the completeness and accuracy of employer records of workplace injuries and illnesses.

Background

The U.S. Government Accountability Office (GAO) is an agency that assists the U.S. Congress in evaluating federal programs. We have been asked to provide Congress with information about the accuracy of the injury and illness records that OSHA requires employers to keep for work-related injuries and illnesses. As a part of this review, we are conducting a survey of occupational physicians who diagnose, treat, and/or care for workers with work-related injuries and illnesses. You were randomly selected from the American Medical Association list of practicing occupational physicians to participate in this survey. It should take you about 15 minutes to complete this questionnaire.

Your individual responses to the survey will be kept *confidential* and we will not release individually identifiable information from this questionnaire unless compelled by law or required to do so by the Congress. In addition, as a part of GAO protocols, any dissemination of data compiled in this survey will be stripped of all personally identifiable information. In reporting the results of this questionnaire, we will only present aggregated data, not information that identifies any individual occupational health provider. We will not identify any individuals, occupational physicians, employers, work sites, or workers.

Because you are part of a statistical sample, your cooperation is critical to providing the Congress complete and balanced information about the perspectives of occupational physicians on factors that may affect the accuracy of injury and illness records. The information you provide will aid in evaluating the safety and health of workers.

Instructions

The questionnaire is structured in five main sections. Most of the questions are short and may be easily answered by checking a box next to the appropriate response. Most questions allow for space to provide additional comments.

There are two ways to complete this questionnaire: (1) You can complete it in paper form, or (2) you can go to our Website to complete the Web version if you prefer.

Paper Version: Please complete and return your questionnaire in the enclosed pre-addressed business reply envelope or by fax within 10 business days of receipt. If you should lose or misplace the envelope, please send the completed questionnaire to

U.S. Government Accountability Office
ATTN: Sara Pelton
Applied Research and Methods
P.O. Box 50654
Washington, DC 20077-0075
Fax: (202) 512-2514

Web Version: If you would prefer to complete the web version of this questionnaire instead of the paper version, please follow the instructions on the postcard enclosed in this envelope.

If you have any questions, please contact

Sara Pelton
Tel: (202) 512-8856
Email: peltons@gao.gov

Thank you for your time and assistance!

ID _____

Section 1:

Your Role in Treating Work-Related Injuries and Illnesses

Instructions: Please check the box next to or below the appropriate response. *If you would prefer to complete the web version of this questionnaire*, please follow the instructions on the postcard enclosed in the envelope.

Q1 In calendar year 2008, did you routinely treat or evaluate workers for occupational injuries in your capacity as an occupational physician? <i>(Check only one answer)</i>		
YES <input type="checkbox"/>	NO <input type="checkbox"/>	NOT SURE <input type="checkbox"/>
Thank you for your cooperation. We do not need any further information from you at this time. Please follow the instructions on the cover sheet to return this questionnaire. <i>It is very important that we get your questionnaire back</i> , even if you only answered this one question.		

Q2 Think about the workers you treated in calendar year 2008. Did any of them work for employers subject to OSHA recordkeeping requirements for recording occupational injuries and illnesses? <i>(Check only one answer)</i>		
YES <input type="checkbox"/>	NOT SURE <input type="checkbox"/>	NO <input type="checkbox"/>
Thank you for your cooperation. We do not need any further information from you at this time. Please follow the instructions on the cover sheet to return this questionnaire. <i>It is very important that we get your questionnaire back</i> , even if you only answered the first two questions.		

Q3 Approximately how long have you treated workers as an occupational physician? <i>(Check only one answer)</i>	
LESS THAN 1 YEAR.....	<input type="checkbox"/>
1 YEAR TO LESS THAN 5 YEARS.....	<input type="checkbox"/>
5 YEARS TO LESS THAN 10 YEARS.....	<input type="checkbox"/>
10 YEARS OR MORE.....	<input type="checkbox"/>
NO RESPONSE.....	<input type="checkbox"/>

Q4 In calendar year 2008, about how many workers did you treat or evaluate for work-related injuries or illnesses? <i>(Check only one answer)</i>	
LESS THAN 100 WORKERS.....	<input type="checkbox"/>
100 TO 500 WORKERS.....	<input type="checkbox"/>
MORE THAN 500 WORKERS.....	<input type="checkbox"/>
NOT SURE.....	<input type="checkbox"/>

**Appendix II: Survey Instrument for
Occupational Health Practitioners**

Q5 In calendar year 2008, in which of the following industries were the workers you treated for work-related injuries and illnesses employed? (Please choose one response for each item)			
	YES	NO	NOT SURE
Construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chemicals and chemical products.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manufacturing.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oil and gas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meatpacking or poultry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Health care (e.g., nursing homes, hospitals).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Services (e.g., hotels, laundry, cleaning)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mining.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agriculture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(If other, please specify)</i> _____			

Q6 In calendar year 2008, in which industry was the majority of workers you treated for work-related injuries and illnesses employed? (Check only one answer)	
Construction	<input type="checkbox"/>
Chemicals and chemical products.....	<input type="checkbox"/>
Manufacturing.....	<input type="checkbox"/>
Oil and gas	<input type="checkbox"/>
Meatpacking or poultry	<input type="checkbox"/>
Health care (e.g., nursing homes, hospitals).....	<input type="checkbox"/>
Services (e.g., hotels, laundry, cleaning)	<input type="checkbox"/>
Mining.....	<input type="checkbox"/>
Agriculture	<input type="checkbox"/>
Equally divided between two or more industries (<i>please specify which below</i>).....	<input type="checkbox"/>
Other (<i>please specify below</i>).....	<input type="checkbox"/>
Not sure	<input type="checkbox"/>
<i>(Other industry or list industries if you chose "Equally divided")</i> _____	

Q7 In calendar year 2008, in what capacity did you treat workers? (Please choose one response for each item)			
	YES	NO	NO RESPONSE
I was a <u>contractor</u>			
at one company.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
at two or more companies.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was an <u>employee</u>			
at one company.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
at two or more companies.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was an <u>employee</u> at one or more occupational health clinics.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(If other capacity, please specify):</i> _____			

**Section 2:
Records and Actions Pertaining to Work-Related Injuries and Illnesses**

Q8 Which of the following types of records do you or your office keep when you treat workers? (Please choose one response for each item)			
	YES	NO	NOT SURE
Log of patients seen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
First aid log.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Patient records.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OSHA 300 Log.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Incident report other than OSHA 300 Log.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(If other record, please specify):</i> _____			

Q9 In calendar year 2008, what interaction, if any, did you have with the OSHA 300 Log for workers you treated with work-related injuries and illnesses? (Please choose one response for each item)			
	YES	NO	NOT SURE
I knew what got entered into the Log for workers I treated on one or more occasions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I provided input on completing the Log on one or more occasions.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was asked to review the Log on one or more occasions.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was the primary person to complete the Log at one or more work sites.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(If other interaction, please specify):</i> _____			

**Appendix II: Survey Instrument for
Occupational Health Practitioners**

Q10 In calendar year 2008, did you treat workers on-site (at workers' employment sites), off-site (medical offices or health clinics), or some combination of both?
(Check only one answer)

ON-SITE ONLY AT ONE OR MORE WORK SITES
 A COMBINATION OF ON-SITE AND OFF-SITE LOCATIONS
 OFF-SITE ONLY AT ONE OR MORE LOCATIONS (Go To Q17) →→→→

Q11 At how many on-site work sites did you treat workers?

(Write number in box)

Q12 Consider the on-site work site(s) you counted in Q11. To the best of your knowledge, how often, if ever, did the following actions occur after a worker reported a work-related injury or illness in calendar year 2008?
*If one or more of these actions took place at multiple worker employment sites, please select only one work site to answer the questions listed below. You will then be asked to provide answers for up to two additional work sites in Q14 and Q16.
(Please choose one response for each item)*

	ON NEVER	FAIRLY OCCASION	VERY OFTEN	VERY OFTEN	ALWAYS	NOT SURE
Drug testing for worker responsible for incident.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work-safety training for the worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meeting between the worker and the health and safety officer..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Incident report is added to worker's personnel file.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker signs an affirmation of responsibility for incident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Light duty (e.g., requiring limited standing, lifting) for workers unable to perform usual work duties.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker is forced to return to regular work even if not physically capable of performing the work duties.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker receives physical therapy.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker receives an official disciplinary warning.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker is fired just for reporting an injury or illness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(If other, please specify) _____</i>						

**Appendix II: Survey Instrument for
Occupational Health Practitioners**

Q13 Did you treat workers at two or more worker employment sites, in your capacity as an occupational physician? <i>(Check only one answer)</i>		
YES <input type="checkbox"/>	NO <input type="checkbox"/>	NOT SURE <input type="checkbox"/>
<i>(Go to Q17) →→→→</i>		

Q14 <i>If you treated workers at two or more worker employment sites, please select a second site about which to answer the questions listed below. To the best of your knowledge, how often, if ever, did the following actions occur in calendar year 2008 after a worker reported a work-related injury or illness? (Please choose one response for each item)</i>						
	ON NEVER	FAIRLY OCCASION	VERY OFTEN	VERY OFTEN	ALWAYS	NOT SURE
Drug testing for worker responsible for incident.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work-safety training for the worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meeting between the worker and the health and safety officer..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Incident report is added to worker's personnel file.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker signs an affirmation of responsibility for incident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Light duty (e.g., requiring limited standing, lifting) for workers unable to perform usual work duties.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker is forced to return to regular work even if not physically capable of performing the work duties.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker receives physical therapy.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker receives an official disciplinary warning.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker is fired just for reporting an injury or illness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(If other, please specify) _____</i>						

Q15 Did you treat workers at three or more worker employment sites, in your capacity as an occupational physician? <i>(Check only one answer)</i>		
YES <input type="checkbox"/>	NO <input type="checkbox"/>	NOT SURE <input type="checkbox"/>
<i>(Go To Q17) →→→→</i>		

Q16 *If you treated workers at three or more worker employment sites, please select a third site to answer the questions below. To the best of your knowledge, how often, if ever, did the following actions occur after a worker reported a work-related injury or illness in calendar year 2008? (Please choose one response for each item)*

	NEVER	ON OCCASION	FAIRLY OFTEN	VERY OFTEN	ALWAYS	NOT SURE
Drug testing for worker responsible for incident.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work-safety training for the worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meeting between the worker and the health and safety officer..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Incident report is added to worker's personnel file.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker signs an affirmation of responsibility for incident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Light duty (e.g., requiring limited standing, lifting) for workers unable to perform usual work duties.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker is forced to return to regular work even if not physically capable of performing the work duties.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker receives physical therapy.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker receives an official disciplinary warning.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker is fired just for reporting an injury or illness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(If other, please specify) _____</i>						

Section 3:

Your Opinions and Experiences with Safety-Incentive Programs

Q17 *Some work sites have incentive programs that reward workers, team leaders, and/or health and safety officers for going a certain amount of time (e.g., 12 months) with few or no work-related injuries or illnesses. Do you disagree or agree with the following statements on worker safety incentive programs? (Please choose one response for each item)*

	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Sure
Done correctly, work site safety-incentive programs provide an effective way to improve work site safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In general, incentive programs motivate workers to work in a safer manner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers sometimes avoid reporting work-related injuries and illnesses at work sites that use incentive programs.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers at work sites that use incentive programs generally prefer occupational health practitioners who provide medical treatment that is not recordable in OSHA Logs.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work site incentive programs are the best way to encourage the proper use of personal protective equipment and behavior that can help avoid accidents.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Appendix II: Survey Instrument for
Occupational Health Practitioners**

Q18 In calendar year 2008, were there any such incentive programs at work sites where any of the workers you treated were employed? <i>(Check only one answer)</i>		
YES <input type="checkbox"/>	NOT SURE <input type="checkbox"/>	NO <input type="checkbox"/>
<i>(Go To Q22) →→→→</i>		

Q19 In calendar year 2008, <u>what kind(s) of rewards</u> were provided to workers for going a period of time with no work-related injuries or illnesses at work site(s) where the workers you treat are employed? <i>(Please check applicable responses for up to three work sites where workers you treated were employed)</i>			
	<u>Work Site #1</u>	<u>Work Site #2</u>	<u>Work Site #3</u>
Cash or gift card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bonus in paycheck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free meals (e.g., steak dinner)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Certificate or plaque	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work benefits (e.g., paid time off, parking).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other type of award	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(If other type of award, please specify) _____</i>			

Q20 In calendar year 2008, <u>who was offered rewards</u> for going a period of time with no work-related injuries or illnesses at work site(s) where the workers you treated were employed? <i>(Please check applicable responses for up to three work sites where workers you treated were employed)</i>			
	<u>Work Site #1</u>	<u>Work Site #2</u>	<u>Work Site #3</u>
All workers in the work site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers in specific work teams or departments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Managers.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Team or group leaders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work site health and safety officers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other category of worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(If other category of worker, please specify) _____</i>			

Q21 In your opinion, what impact, if any, did any of the incentive programs have on decisions you made regarding the treatment of workers under your care in calendar year 2008? *(Please check applicable responses for up to 3 work sites where workers you treated were employed)*

	Work Site #1	Work Site #2	Work Site #3
MAJOR IMPACT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MINOR IMPACT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NO IMPACT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NOT SURE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Please provide additional details about the impact of incentive programs):

Section 4:
Your Experiences With Recordkeeping and Workplace Injury Logs

Q22 In calendar year 2008, how often did you observe or experience the following types of behavior from workers you treated? *(Please choose one response for each item)*

	NEVER IN 2008	1-5 TIMES	6-20 TIMES	21-50 TIMES	51+ TIMES	NOT SURE
Worker requested incident not be recorded in OSHA log	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker discomfort in reporting work site injuries or illnesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker fear of disciplinary action for reporting injuries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker pressured me to downplay injuries or illnesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q23 In calendar year 2008, how often did you observe or experience the following types of behavior from company officials? *(Please choose one response for each item)*

	NEVER IN 2008	1-5 TIMES	6-20 TIMES	21-50 TIMES	51+ TIMES	NOT SURE
Overrecording of injuries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Underrecording of injuries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overrecording of illnesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Underrecording of illnesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Misinterpretation of OSHA recordability rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Willful misrecording of injuries or illnesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pressure on me to downplay injuries or illnesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Appendix II: Survey Instrument for
Occupational Health Practitioners**

Q24 In your experience, do any of the following factors have an impact on whether work-related injuries and illnesses get entered into the OSHA 300 Log accurately?
(Please check one response for each item)

	MAJOR IMPACT	MINOR IMPACT	NO IMPACT	NOT SURE
Work site safety-incentive programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker discomfort in reporting work site injuries or illnesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worker fear of disciplinary action for reporting injuries or illnesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overrecording of injuries or illnesses by company officials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Underrecording of injuries or illnesses by company officials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Misinterpretation of OSHA recordability rules by company officials.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Willful misrecording of injuries or illnesses by company officials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pressure on occupational health practitioners to downplay injuries or illnesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other factor(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(If other factors have an impact on whether injuries and illnesses get entered into the OSHA 300 Log, please specify)

Q25 In calendar year 2008, how often did you experience the following types of requests from workers or company officials?
(Please check one response for each item)

Requests to:	NEVER IN 2008	1-5 TIMES	6-20 TIMES	21-50 TIMES	51+ TIMES
Send workers back to work to avoid recording lost work days	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Send workers home to recover from work injuries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turn treatment of workers over to staff without medical training.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide a less expensive treatment than I would order	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide a treatment that is not recordable in the OSHA 300 Log, but is equivalent (e.g., prescribing over-the-counter pain relievers instead of prescription pain relievers).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide a treatment that is not recordable in the OSHA 300 Log, and is not sufficient to properly treat the injury or illness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other type of request.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(If other types of requests were made of you, please describe)

**Appendix II: Survey Instrument for
Occupational Health Practitioners**

Q26 In calendar year 2008, how often did you experience pressure to follow or obey requests you checked in Q25 from the following categories of people? *(Please check one response for each item)*

Pressure from:	NEVER IN 2008	1-5 TIMES	6-20 TIMES	21-50 TIMES	51+ TIMES
Injured or ill worker seeking treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Team or group leader	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work site health and safety officer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other work site or company official	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(If other people, please describe)

**Section 5:
Final Comments**

Q27 If there are any other issues, details, or information regarding factors affecting the accuracy of employers' injury and illness records that you would like us to know about, please use the space below to provide this information.

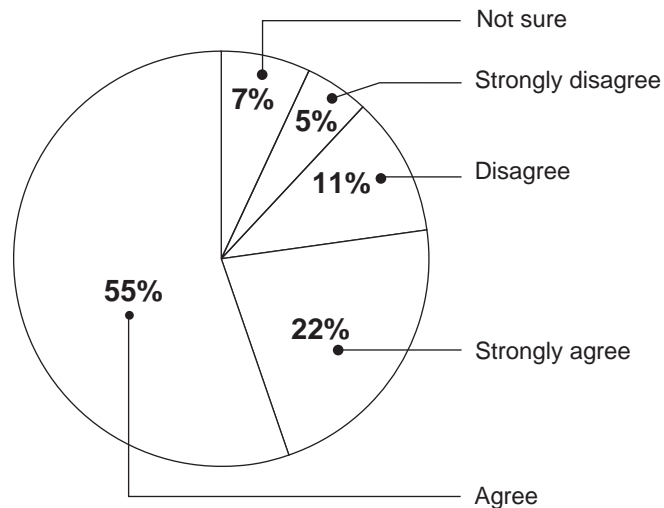
Appendix III: Selected Questionnaire Results

All estimates we report from the survey results have a margin of error of plus or minus 7 percentage points or less at the 95 percent confidence level.

Health practitioners provided their opinions on the efficacy of safety incentive programs (see fig. 10).

Figure 10: Practitioners' Opinions on the Efficacy of Safety Incentive Programs

Done correctly, worksite safety incentive programs provide an effective way to improve worksite safety.

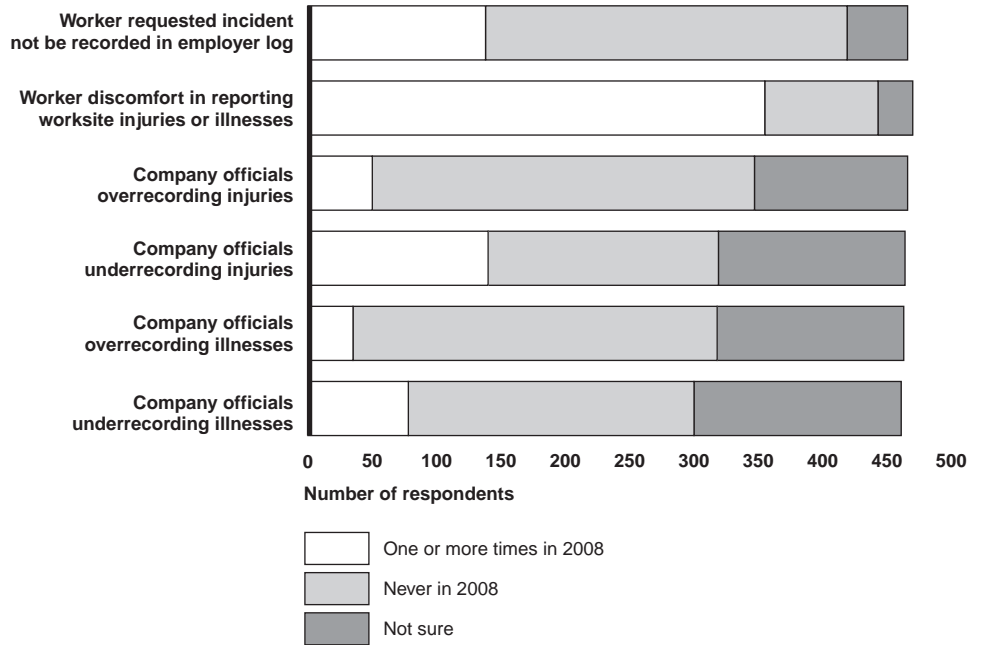


Source: GAO analysis of occupational health practitioner survey data.

In addition to experiencing pressure to downplay injuries and illnesses, respondents also observed behavior by workers and company officials that would result in underrecording (see fig. 11).

Figure 11: Worker and Company Official Behavior Related to Reporting Injuries or Illnesses in 2008

Types of behavior from workers or company officials

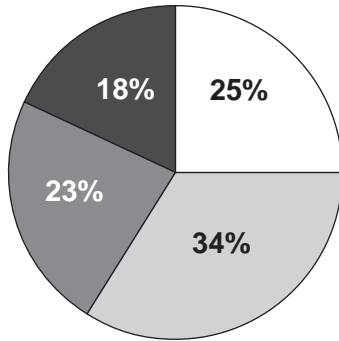


Source: GAO analysis of occupational health practitioner survey data.

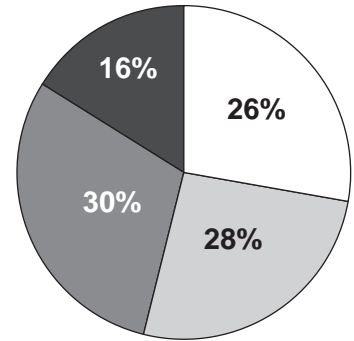
Finally, health practitioners reported the impact they thought various factors had on whether injuries and illnesses are recorded accurately in the employers' log (see fig. 12). They also reported how often they experienced various requests from workers or company officials (see fig. 13).

Figure 12: Impact of Various Factors on Accuracy of Employers' Injury and Illness Logs

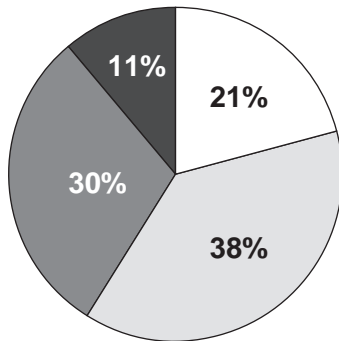
Worksite Safety Incentive Programs



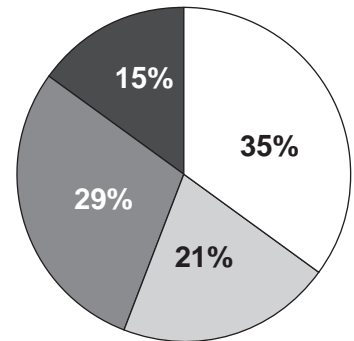
Worker Fear of Disciplinary Actions for Reporting Injuries or Illnesses



Misinterpretation of Recordkeeping Requirements by Company Officials



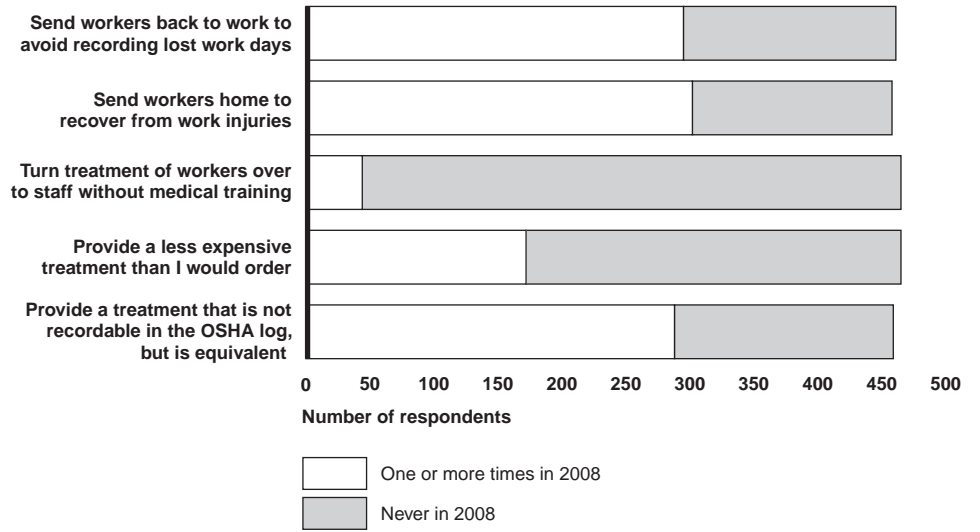
Pressure on Practitioners to Downplay Injuries or Illnesses



Source: GAO analysis of occupational practitioner survey data.

Figure 13: Frequency of Experiencing Various Requests From Workers or Company Officials in 2008

Requests from workers or company officials



Source: GAO analysis of occupational health practitioner survey data.

Appendix IV: OSHA's Forms for Recording Work-Related Injuries and Illnesses

OSHA Forms for Recording Work-Related Injuries and Illnesses

Dear Employer:

This booklet includes the forms needed for maintaining occupational injury and illness records for 2004. These new forms have changed in several important ways from the 2003 recordkeeping forms.

In the December 17, 2003 Federal Register (67 FR 77165-77170), OSHA announced its decision to add an occupational hearing loss column to OSHA's Form 300, Log of Work-Related Injuries and Illnesses. This forms package contains modified Forms 300 and 300A which incorporate the additional column M(5) Hearing Loss. Employers required to complete the injury and illness forms must begin to use these forms on January 1, 2004.

In response to public suggestions, OSHA also has made several changes to the forms package to make the recordkeeping materials clearer and easier to use:

- On Form 300, we've switched the positions of the day count columns. The days "away from work" column now comes before the days "on job transfer or restriction."
- We've clarified the formulas for calculating incidence rates.
- We've added new recording criteria for occupational hearing loss to the "Overview" section.
- On Form 300, we've made the column heading "Classify the Case" more prominent to make it clear that employers should mark only one selection among the four columns offered.

The Occupational Safety and Health Administration shares with you the goal of preventing injuries and illnesses in our nation's workplaces. Accurate injury and illness records will help us achieve that goal.

Occupational Safety and Health Administration
U.S. Department of Labor

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Occupational Safety and Health Administration

What's Inside...

In this package, you'll find everything you need to complete OSHA's Log and the Summary of Work-Related Injuries and Illnesses for the next several years. On the following pages, you'll find:

- ▼ **An Overview: Recording Work-Related Injuries and Illnesses** — General instructions for filling out the forms in this package and definitions of terms you should use when you classify your cases as injuries or illnesses.
- ▼ **How to Fill Out the Log** — An example to guide you in filling out the Log properly.
- ▼ **Log of Work-Related Injuries and Illnesses** — Several pages of the Log (but you may make as many copies of the Log as you need.) Notice that the Log is separate from the Summary.
- ▼ **Summary of Work-Related Injuries and Illnesses** — Removable Summary pages for easy posting at the end of the year. Note that you post the Summary only, not the Log.
- ▼ **Worksheet to Help You Fill Out the Summary** — A worksheet for figuring the average number of employees who worked for your establishment and the total number of hours worked.
- ▼ **OSHA's 301: Injury and Illness Incident Report** — A copy of the OSHA 301 to provide details about the incident. You may make as many copies as you need or use an equivalent form.

Take a few minutes to review this package. If you have any questions, visit us online at www.osha.gov or call your local OSHA office. We'll be happy to help you.

Appendix IV: OSHA's Forms for Recording Work-Related Injuries and Illnesses

An Overview: Recording Work-Related Injuries and Illnesses

The Occupational Safety and Health (OSHA) Act of 1970 requires certain employers to prepare and maintain records of work-related injuries and illnesses. Use these definitions when you classify cases on the Log. OSHA's recordkeeping regulation (see 29 CFR Part 1904) provides more information about the definitions below.

The *Log of Work-Related Injuries and Illnesses* (Form 300) is used to classify work-related injuries and illnesses and to note the extent and severity of each case. When an incident occurs, use the *Log* to record specific details about what happened and how it happened. The *Summary* — a separate form (Form 300A) — shows the totals for the year in each category. At the end of the year, post the *Summary* in a visible location so that your employees are aware of the injuries and illnesses occurring in their workplace.

Employers must keep a *Log* for each establishment or site. If you have more than one establishment, you must keep a separate *Log* and *Summary* for each physical location that is expected to be in operation for one year or longer.

Note that your employees have the right to review your injury and illness records. For more information, see 29 Code of Federal Regulations Part 1904.35, *Employee Involvement*. Cases listed on the *Log of Work-Related Injuries and Illnesses* are not necessarily eligible for workers' compensation or other insurance benefits. Listing a case on the *Log* does not mean that the employer or worker was at fault or that an OSHA standard was violated.

When is an injury or illness considered work-related?

An injury or illness is considered work-related if an event or exposure in the work environment caused or contributed to the condition or significantly aggravated a preexisting condition. Work-relatedness is

presumed for injuries and illnesses resulting from events or exposures occurring in the workplace, unless an exception specifically applies. See 29 CFR Part 1904.5(b)(2) for the exceptions. The work environment includes the establishment and other locations where one or more employees are working or are present as a condition of their employment. See 29 CFR Part 1904.5(b)(1).

Which work-related injuries and illnesses should you record?

Record those work-related injuries and illnesses that result in:

- ▼ death,
- ▼ loss of consciousness,
- ▼ days away from work,
- ▼ restricted work activity or job transfer, or
- ▼ medical treatment beyond first aid.

You must also record work-related injuries and illnesses that are significant (as defined below) or meet any of the additional criteria listed below.

You must record any significant work-related injury or illness that is diagnosed by a physician or other licensed health care professional. You must record any work-related case involving cancer, chronic irreversible disease, a fractured or cracked bone, or a punctured eardrum. See 29 CFR 1904.7.

What are the additional criteria?

You must record the following conditions when they are work-related:

- ▼ any needlestick injury or cut from a sharp object that is contaminated with another person's blood or other potentially infectious material;
- ▼ any case requiring an employee to be medically removed under the requirements of an OSHA health standard;
- ▼ tuberculosis infection as evidenced by a positive skin test or diagnosis by a physician or other licensed health care professional after exposure to a known case of active tuberculosis.
- ▼ an employee's hearing test (audiogram) reveals 1) that the employee has experienced a Standard Threshold Shift (STS) in hearing in one or both ears (averaged at 2000, 3000, and 4000 Hz) and 2) the employee's total hearing level is 25 decibels (dB) or more above audiometric zero (also averaged at 2000, 3000, and 4000 Hz) in the same ear(s) as the STS.

What is medical treatment?

Medical treatment includes managing and caring for a patient for the purpose of combating disease or disorder. The following are not considered medical treatments and are NOT recordable:

- ▼ visits to a doctor or health care professional solely for observation or counseling;

What do you need to do?

1. Within 7 calendar days after you receive information about a case, decide if the case is recordable under the OSHA recordkeeping requirements.
2. Determine whether the incident is a new case or a recurrence of an existing one.
3. Establish whether the case was work-related.
4. If the case is recordable, decide which form you will fill out as the injury and illness incident report.
 - You may use *OSHA's 301: Injury and Illness Incident Report* or an equivalent form. Some state workers compensation, insurance, or other reports may be acceptable substitutes, as long as they provide the same information as the OSHA 301.

How to work with the Log

1. Identify the employee involved unless it is a privacy concern case as described below.
2. Identify when and where the case occurred.
3. Describe the case, as specifically as you can.
4. Classify the seriousness of the case by recording the most serious outcome associated with the case, with column G (Death) being the most serious and column J (Other recordable cases) being the least serious.
5. Identify whether the case is an injury or illness. If the case is an injury, check the injury category. If the case is an illness, check the appropriate illness category.

Appendix IV: OSHA's Forms for Recording Work-Related Injuries and Illnesses

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- ▼ diagnostic procedures, including administering prescription medications that are used solely for diagnostic purposes; and
- ▼ any procedure that can be labeled first aid. (See below for more information about first aid.)

What is first aid?

If the incident required only the following types of treatment, consider it first aid. Do NOT record the case if it involves only:

- ▼ using non-prescription medications at non-prescription strength;
- ▼ administering tetanus immunizations;
- ▼ cleaning, flushing, or soaking wounds on the skin surface;
- ▼ using wound coverings, such as bandages, BandAids™, gauze pads, etc., or using SteriStrips™ or butterfly bandages.
- ▼ using hot or cold therapy;
- ▼ using any totally non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc.;
- ▼ using temporary immobilization devices while transporting an accident victim (splints, slings, neck collars, or back boards).
- ▼ drilling a fingernail or toenail to relieve pressure, or draining fluids from blisters;
- ▼ using eye patches;
- ▼ using simple irrigation or a cotton swab to remove foreign bodies not embedded in or adhered to the eye;
- ▼ using irrigation, tweezers, cotton swab or other simple means to remove splinters or foreign material from areas other than the eye;
- ▼ using finger guards;
- ▼ using massages;
- ▼ drinking fluids to relieve heat stress.

How do you decide if the case involved restricted work?

Restricted work activity occurs when, as the result of a work-related injury or illness, an employer or health care professional keeps, or recommends keeping, an employee from doing the routine functions of his or her job or from working the full workday that the employee would have been scheduled to work before the injury or illness occurred.

How do you count the number of days of restricted work activity or the number of days away from work?

Count the number of calendar days the employee was on restricted work activity or was away from work as a result of the recordable injury or illness. Do not count the day on which the injury or illness occurred in this number. Begin counting days from the day after the incident occurs. If a single injury or illness involved both days away from work and days of restricted work activity, enter the total number of days for each. You may stop counting days of restricted work activity or days away from work once the total of either or the combination of both reaches 180 days.

Under what circumstances should you NOT enter the employee's name on the OSHA Form 300?

You must consider the following types of injuries or illnesses to be privacy concern cases:

- ▼ an injury or illness to an intimate body part or to the reproductive system,
- ▼ an injury or illness resulting from a sexual assault,
- ▼ a mental illness,
- ▼ a case of HIV infection, hepatitis, or tuberculosis,
- ▼ a needlestick injury or cut from a sharp object that is contaminated with blood or other potentially infectious material (see 29 CFR Part 1904.8 for definition), and
- ▼ other illnesses, if the employee independently and voluntarily requests that his or her name not be entered on the log. You must not enter the employee's name on the OSHA 300 Log for these cases. Instead, enter "privacy case" in the space normally used for the employee's name. You must keep a separate, confidential list of the case numbers and employee names for the establishment's privacy concern cases so that you can update the cases and provide information to the government if asked to do so.

If you have a reasonable basis to believe that information describing the privacy concern case may be personally identifiable even though the employee's name has been omitted, you may use discretion in describing the injury or illness on both the OSHA 300 and 301 forms. You must enter enough information to identify the cause of the incident and the general severity of

the injury or illness, but you do not need to include details of an intimate or private nature.

What if the outcome changes after you record the case?

If the outcome or extent of an injury or illness changes after you have recorded the case, simply draw a line through the original entry or, if you wish, delete or white-out the original entry. Then write the new entry where it belongs. Remember, you need to record the most serious outcome for each case.

Classifying injuries

An injury is any wound or damage to the body resulting from an event in the work environment.

Example: Cut, puncture, laceration, abrasion, fracture, bruise, contusion, chipped tooth, amputation, insect bite, electrocution, or a thermal, chemical, electrical, or radiation burn. Sprain and strain injuries to muscles, joints, and connective tissues are classified as injuries when they result from a slip, trip, fall or other similar accidents.

Appendix IV: OSHA's Forms for Recording Work-Related Injuries and Illnesses

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Classifying illnesses

Skin diseases or disorders
Skin diseases or disorders are illnesses involving the worker's skin that are caused by work exposure to chemicals, plants, or other substances.
Examples: Contact dermatitis, eczema, or rash caused by primary irritants and sensitizers or poisonous plants; oil acne; friction blisters, chrome ulcers; inflammation of the skin.

Respiratory conditions
Respiratory conditions are illnesses associated with breathing hazardous biological agents, chemicals, dust, gases, vapors, or fumes at work.
Examples: Silicosis, asbestosis, pneumonitis, pharyngitis, rhinitis or acute congestion; farmer's lung, beryllium disease, tuberculosis, occupational asthma, reactive airways dysfunction syndrome (RADS), chronic obstructive pulmonary disease (COPD), hypersensitivity pneumonitis, toxic inhalation injury, such as metal fume fever, chronic obstructive bronchitis, and other pneumoconioses.

Poisoning
Poisoning includes disorders evidenced by abnormal concentrations of toxic substances in blood, other tissues, other bodily fluids, or the breath that are caused by the ingestion or absorption of toxic substances into the body.
Examples: Poisoning by lead, mercury, cadmium, arsenic, or other metals; poisoning by carbon monoxide, hydrogen sulfide, or other gases; poisoning by benzene, benzol, carbon tetrachloride, or other organic solvents; poisoning by insecticide sprays, such as parathion or lead arsenate; poisoning by other chemicals, such as formaldehyde.

Hearing Loss
Noise-induced hearing loss is defined for recordkeeping purposes as a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more in either ear at 2000, 3000 and 4000 hertz, and the employee's total hearing level is 25 decibels (dB) or more above audiometric zero (also averaged at 2000, 3000, and 4000 hertz) in the same ear(s).

All other illnesses
All other occupational illnesses.
Examples: Heatstroke, sunstroke, heat exhaustion, heat stress and other effects of environmental heat; freezing, frostbite, and other effects of exposure to low temperatures; decompression sickness; effects of ionizing radiation (isotopes, x-rays, radium); effects of nonionizing radiation (welding flash, ultra-violet rays, lasers); anthrax; bloodborne pathogenic diseases, such as AIDS, HIV, hepatitis B or hepatitis C; brucellosis; malignant or benign tumors; histoplasmosis; coccidioidomycosis.

When must you post the Summary?
You must post the Summary only — not the Log — by February 1 of the year following the year covered by the form and keep it posted until April 30 of that year.

How long must you keep the Log and Summary on file?
You must keep the Log and Summary for 5 years following the year to which they pertain.

Do you have to send these forms to OSHA at the end of the year?
No. You do not have to send the completed forms to OSHA unless specifically asked to do so.

How can we help you?
If you have a question about how to fill out the Log,
 visit us online at www.osha.gov or
 call your local OSHA office.

Appendix IV: OSHA's Forms for Recording Work-Related Injuries and Illnesses

Optional

Calculating Injury and Illness Incidence Rates

What is an incidence rate?

An incidence rate is the number of recordable injuries and illnesses occurring among a given number of full-time workers (usually 100 full-time workers) over a given period of time (usually one year). To evaluate your firm's injury and illness experience over time or to compare your firm's experience with that of your industry as a whole, you need to compute your incidence rate. Because a specific number of workers and a specific period of time are involved, these rates can help you identify problems in your workplace and/or progress you may have made in preventing work-related injuries and illnesses.

How do you calculate an incidence rate?

You can compute an occupational injury and illness incidence rate for all recordable cases or for cases that involved days away from work for your firm quickly and easily. The formula requires that you follow instructions in paragraph (a) below for the total recordable cases or those in paragraph (b) for cases that involved days away from work, and for both rates the instructions in paragraph (c).

(a) To find out the total number of recordable injuries and illnesses that occurred during the year, count the number of line entries on your OSHA Form 300, or refer to the OSHA Form 300A and sum the entries for columns (C), (H), (I), and (J).

(b) To find out the number of injuries and illnesses that involved days away from work, count the number of line entries on your OSHA Form 300 that received a check mark in column (H), or refer to the entry for column

(H) on the OSHA Form 300A.

(c) The number of hours all employees actually worked during the year. Refer to OSHA Form 300A and optional worksheet to calculate this number.

You can compute the incidence rate for all recordable cases of injuries and illnesses using the following formula:

$$\text{Total number of injuries and illnesses} \times 200,000 \div \text{Number of hours worked by all employees} = \text{Total recordable case rate}$$

(The 200,000 figure in the formula represents the number of hours 100 employees working 40 hours per week, 50 weeks per year would work, and provides the standard base for calculating incidence rates.)

You can compute the incidence rate for recordable cases involving days away from work, days of restricted work activity or job transfer (DART) using the following formula:

$$\text{Number of entries in column H} + \text{Number of entries in column I} \times 200,000 \div \text{Number of hours worked by all employees} = \text{DART incidence rate}$$

You can use the same formula to calculate incidence rates for other variables such as cases involving restricted work activity (column (I) on Form 300A), cases involving skin disorders (column (M-2) on Form 300A), etc. Just substitute the appropriate total for these cases, from Form 300A, into the formula in place of the total number of injuries and illnesses.

What can I compare my incidence rate to?

The Bureau of Labor Statistics (BLS) conducts a survey of occupational injuries and illnesses each year and publishes incidence rate data by

various classifications (e.g., by industry, by employer size, etc.). You can obtain these published data at www.bls.gov/iif or by calling a BLS Regional Office.

Worksheet

Total number of injuries and illnesses	X	200,000	÷	Number of hours worked by all employees	=	Total recordable case rate

Number of entries in Column H + Column I	X	200,000	÷	Number of hours worked by all employees	=	DART incidence rate

Appendix IV: OSHA's Forms for Recording Work-Related Injuries and Illnesses

How to Fill Out the Log

The *Log of Work-Related Injuries and Illnesses* is used to classify work-related injuries and illnesses and to note the extent and severity of each case. When an incident occurs, use the *Log* to record specific details about what happened and how it happened.

If your company has more than one establishment or site, you must keep separate records for each physical location that is expected to remain in operation for one year or longer.

We have given you several copies of the *Log* in this package. If you need more than we provided, you may photocopy and use as many as you need.

The *Summary* — a separate form — shows the work-related injury and illness totals for the year in each category. At the end of the year, count the number of incidents in each category and transfer the totals from the *Log* to the *Summary*. Then post the *Summary* in a visible location so that your employees are aware of injuries and illnesses occurring in their workplace.

You don't post the Log. You post only the Summary at the end of the year.

OSHA's Form 300 (Rev. 01/2004)
Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 20

U.S. Department of Labor
Occupational Safety and Health Administration

Establishment No.

City, State, and Zip

Identify the person		Describe the case			Classify the case												
(A) Case No.	(B) Employee name	(C) Job title (e.g. Miller)	(D) Date of injury or onset of illness	(E) When the event occurred (e.g. Loading dock work end)	(F) Describe the injury or illness, parts of body affected, and explain conditions that directly injured or caused illness (e.g. Second degree burn on right forearm from explosion heat)	(G) Injury or illness classification											
						Injury		Illness		Lost workdays		Job transfer		Medical treatment		Days away from work	
						Death	Loss of consciousness	Loss of consciousness	Loss of consciousness	Loss of consciousness	Loss of consciousness	Loss of consciousness	Loss of consciousness	Loss of consciousness	Loss of consciousness	Loss of consciousness	Loss of consciousness
1	Mark Dagit	Welder	5 / 23	10:00 AM	burns on right arm and left leg, 45 from ladder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Shane Alexander	Ironworker	7 / 2	10:00 AM	cutting deck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Sam Sander	Electrician	8 / 15	10:00 AM	2nd floor, installation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Ralph Bando	Laborer	8 / 17	10:00 AM	packaging dept.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Jared Daniels	Machinist	10 / 23	10:00 AM	production dept.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Be as specific as possible. You can use two lines if you need more room.

Rank the log if the injury or illness progresses and the outcome is more serious than you originally recorded for the case. Cross out, erase, or white-out the original entry.

Classify each case of every injury or illness. Classify the case by recording the most serious outcome of the year, with column G (Death) being the most serious and column J (Other recordable cases) being the least serious.

Mark whether the case involves an injury or an illness.

U.S. Department of Labor
Occupational Safety and Health Administration

Appendix IV: OSHA's Forms for Recording Work-Related Injuries and Illnesses

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

You must record information about every work-related death and about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR Part 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an Injury and Illness Incident Report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.



Establishment name _____
City _____ State _____

Identify the person		Describe the case			Classify the case				Enter the number of days the injured or ill worker was:		Check the "type" of injury or illness and type of restriction							
(A) Case no.	(B) Employee's name	(C) Job title (e.g., Welder)	(D) Date of injury or onset of illness	(E) Where the event occurred (e.g., Loading dock north end)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g., Second degree burns on right forearm from acetylene torch)	CHECK ONLY ONE box for each case based on the most serious outcome for that case.				Away from work (K)	On job transfer or restriction (L)	(1)	(2)	(3)	(4)	(5)		
						Result of Illness												
						Death (G)	Days away from work (H)	Job transfer or restriction (I)	Other loss of consciousness (J)									
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			monday			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Page totals >																		

Public reporting burden for this collection of information is estimated to average 14 minutes per response, including time to review the instructions, search existing data sources, gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any other aspect of this data collection, contact L3 Department of Labor, OSHA Office of National Analysis, Room H-2644, 200 Constitution Avenue, N.W., Washington, DC 20310. Do not send the completed forms to this office.

Page ____ of ____

**Appendix IV: OSHA's Forms for Recording
Work-Related Injuries and Illnesses**

OSHA's Form 300A (Rev. 01/2004)
Summary of Work-Related Injuries and Illnesses

Year 20____
U.S. Department of Labor
Occupational Safety and Health Administration
Form approved OMB no. 1218-0025

All establishments covered by Part 1904 must complete this Summary page, even if no work-related injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete and accurate before completing this summary.
Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the Log. If you had no cases, write "0."
Employees, former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR Part 1904.35, in OSHA's recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
_____	_____	_____	_____
(3)	(4)	(5)	(6)

Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
_____	_____
(7)	(8)

Injury and Illness Types

Total number of . . .			
(9)			
(1) Injuries	_____	(4) Poisonings	_____
(2) Skin disorders	_____	(5) Hearing loss	_____
(3) Respiratory conditions	_____	(6) All other illnesses	_____

Post this Summary page from February 1 to April 30 of the year following the year covered by the form.
Public reporting burden for this collection of information is estimated to average 58 minutes per response, including time to review the instructions, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about this estimate or any other aspect of this data collection, contact: US Department of Labor, OSHA Office of Statistical Analysis, Room N-3644, 200 Constitution Avenue, NW, Washington, DC 20205. Do not send the completed forms to this office.

Establishment Information

Your establishment name _____
Street _____
City _____ State _____ ZIP _____
Industry description (e.g., *Manufacturer of motor truck trailers*) _____
Standard Industrial Classification (SIC), if known (e.g., 3713) _____
OR
North American Industrial Classification (NAICS), if known (e.g., 336212) _____

Employment Information (If you don't have these figures, use the Worksheet on the back of this page to estimate.)
Annual average number of employees _____
Total hours worked by all employees last year _____

Sign here
Knowingly falsifying this document may result in a fine.
I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.
Company executive _____ Title _____
Date _____ / _____ / _____

Appendix IV: OSHA's Forms for Recording Work-Related Injuries and Illnesses

Optional

Worksheet to Help You Fill Out the Summary

At the end of the year, OSHA requires you to enter the average number of employees and the total hours worked by your employees on the summary. If you don't have these figures, you can use the information on this page to estimate the numbers you will need to enter on the Summary page at the end of the year.

How to figure the average number of employees who worked for your establishment during the year:

- 1 **Add** the total number of employees your establishment paid in all pay periods during the year. Include all employees: full-time, part-time, temporary, seasonal, salaried, and hourly.

The number of employees paid in all pay periods =

- 2 **Count** the number of pay periods your establishment had during the year. Be sure to include any pay periods when you had no employees.

The number of pay periods during the year =

- 3 **Divide** the number of employees by the number of pay periods.

$\frac{\bullet}{\bullet} = \bullet$

- 4 **Round the answer** to the next highest whole number. Write the rounded number in the blank marked *Annual average number of employees*.

The number rounded =

For example, Acme Construction figured its average employment this way:

For pay period...	Acme add this number of employees...	Number of employees paid = 800
1	10	
2	0	
3	15	Number of pay periods = 26
4	30	
5	40	$800 = 31.92$
6	20	26
24	20	31.92 rounds to 32
25	15	
26	+10	32 is the annual average number of employees
	800	

How to figure the total hours worked by all employees:

Include hours worked by salaried, hourly, part-time and seasonal workers, as well as hours worked by other workers subject to day to day supervision by your establishment (e.g., temporary help services workers).

Do not include vacation, sick leave, holidays, or any other non-work time, even if employees were paid for it. If your establishment keeps records of only the hours paid or if you have employees who are not paid by the hour, please estimate the hours that the employees actually worked.

If this number isn't available, you can use this optional worksheet to estimate it.

Optional Worksheet

- Find the number of full-time employees in your establishment for the year.

- X** _____ **Multiply** by the number of work hours for a full-time employee in a year.

- This is the number of full-time hours worked.

- +** _____ **Add** the number of any overtime hours as well as the hours worked by other employees (part-time, temporary, seasonal)

- Round** the answer to the next highest whole number. Write the rounded number in the blank marked *Total hours worked by all employees last year*.

**Appendix IV: OSHA's Forms for Recording
Work-Related Injuries and Illnesses**

**OSHA's Form 301
Injury and Illness Incident Report**

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.



This *Injury and Illness Incident Report* is one of the first forms you must fill out when a recordable work-related injury or illness has occurred. Together with the *Log of Work-Related Injuries and Illnesses* and the accompanying *Summary*, these forms help the employer and OSHA develop a picture of the extent and severity of work-related incidents.

Within 7 calendar days after you receive information that a recordable work-related injury or illness has occurred, you must fill out this form or an equivalent. Some state workers' compensation, insurance, or other reports may be acceptable substitutes. To be considered an equivalent form, any substitute must contain all the information asked for on this form.

According to Public Law 91-596 and 29 CFR 1904, OSHA's recordkeeping rule, you must keep this form on file for 5 years following the year to which it pertains.

If you need additional copies of this form, you may photocopy and use as many as you need.

Information about the employee

- 1) Full name _____
- 2) Street _____
City _____ State _____ ZIP _____
- 3) Date of birth ____/____/____
- 4) Date hired ____/____/____
- 5) Male
 Female

Information about the physician or other health care professional

- 6) Name of physician or other health care professional _____
- 7) If treatment was given away from the workplace, where was it given?
Facility _____
Street _____
City _____ State _____ ZIP _____

- 8) Was employee treated in an emergency room?
 Yes
 No
- 9) Was employee hospitalized overnight as an in-patient?
 Yes
 No

Information about the case

- 10) Case number from the Log _____ (Transfer the case number from the Log after you record the case.)
- 11) Date of injury or illness ____/____/____
- 12) Time employee began work _____ AM / PM
- 13) Time of event _____ AM / PM Check if time cannot be determined
- 14) What was the employee doing just before the incident occurred? Describe the activity, as well as the tools, equipment, or material the employee was using. Be specific. Example: "climbing a ladder while carrying roofing materials"; "spraying chlorine from hand sprayer"; "daily computer key-entry."
- 15) What happened? Tell us how the injury occurred. Example: "When ladder slipped on wet floor, worker fell 20 feet"; "Worker was sprayed with chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time."
- 16) What was the injury or illness? Tell us the part of the body that was affected and how it was affected; be more specific than "hurt," "pain," or "sore." Example: "strained back"; "chemical burn, hand"; "carpal tunnel syndrome."
- 17) What object or substance directly harmed the employee? Example: "concrete floor"; "chlorine"; "radial arm saw." If this question does not apply to the incident, leave it blank.
- 18) If the employee died, when did death occur? Date of death ____/____/____

Completed by _____
Title _____
Phone (____) _____ Date ____/____/____

Public reporting burden for this collection of information is estimated to average 22 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Persons are not required to respond to the collection of information unless it displays a current valid OMB control number. If you have any comments about this estimate or any other aspect of this data collection, including suggestions for reducing this burden, contact: U.S. Department of Labor, OSHA, Office of Statistical Analysis, Room N-3644, 200 Constitution Avenue, NW, Washington, DC 20210. Do not send the completed form to this office.

**Appendix IV: OSHA's Forms for Recording
Work-Related Injuries and Illnesses**

If You Need Help...

If you need help deciding whether a case is recordable, or if you have questions about the information in this package, feel free to contact us. We'll gladly answer any questions you have.

▼ Visit us online at www.osha.gov

▼ Call your OSHA Regional office and ask for the recordkeeping coordinator

or

▼ Call your State Plan office

Federal Jurisdiction

Region 1 - 617 / 565-9860
Connecticut; Massachusetts; Maine; New Hampshire; Rhode Island

Region 2 - 212 / 337-2378
New York; New Jersey

Region 3 - 215 / 861-4900
DC; Delaware; Pennsylvania; West Virginia

Region 4 - 404 / 562-2300
Alabama; Florida; Georgia; Mississippi

Region 5 - 312 / 353-2220
Illinois; Ohio; Wisconsin

Region 6 - 214 / 767-4731
Arkansas; Louisiana; Oklahoma; Texas

Region 7 - 816 / 426-5861
Kansas; Missouri; Nebraska

Region 8 - 303 / 844-1600
Colorado; Montana; North Dakota; South Dakota

Region 9 - 415 / 975-4310

Region 10 - 206 / 553-5930
Idaho

State Plan States

Alaska - 907 / 269-4957

Arizona - 602 / 542-5795

California - 415 / 703-5100

*Connecticut - 860 / 566-4380

Hawaii - 808 / 586-9100

Indiana - 317 / 232-2688

Iowa - 515 / 281-3661

Kentucky - 502 / 564-3070

Maryland - 410 / 767-2371

Michigan - 517 / 322-1848

Minnesota - 651 / 284-5050

Nevada - 702 / 486-9020

*New Jersey - 609 / 984-1389

New Mexico - 505 / 827-4230

*New York - 518 / 457-2574

North Carolina - 919 / 807-2875

Oregon - 503 / 378-3272

Puerto Rico - 787 / 754-2172

South Carolina - 803 / 734-9669

Tennessee - 615 / 741-2793

Utah - 801 / 530-6901

Vermont - 802 / 828-2765

Virginia - 804 / 786-6613

Virgin Islands - 340 / 772-1315

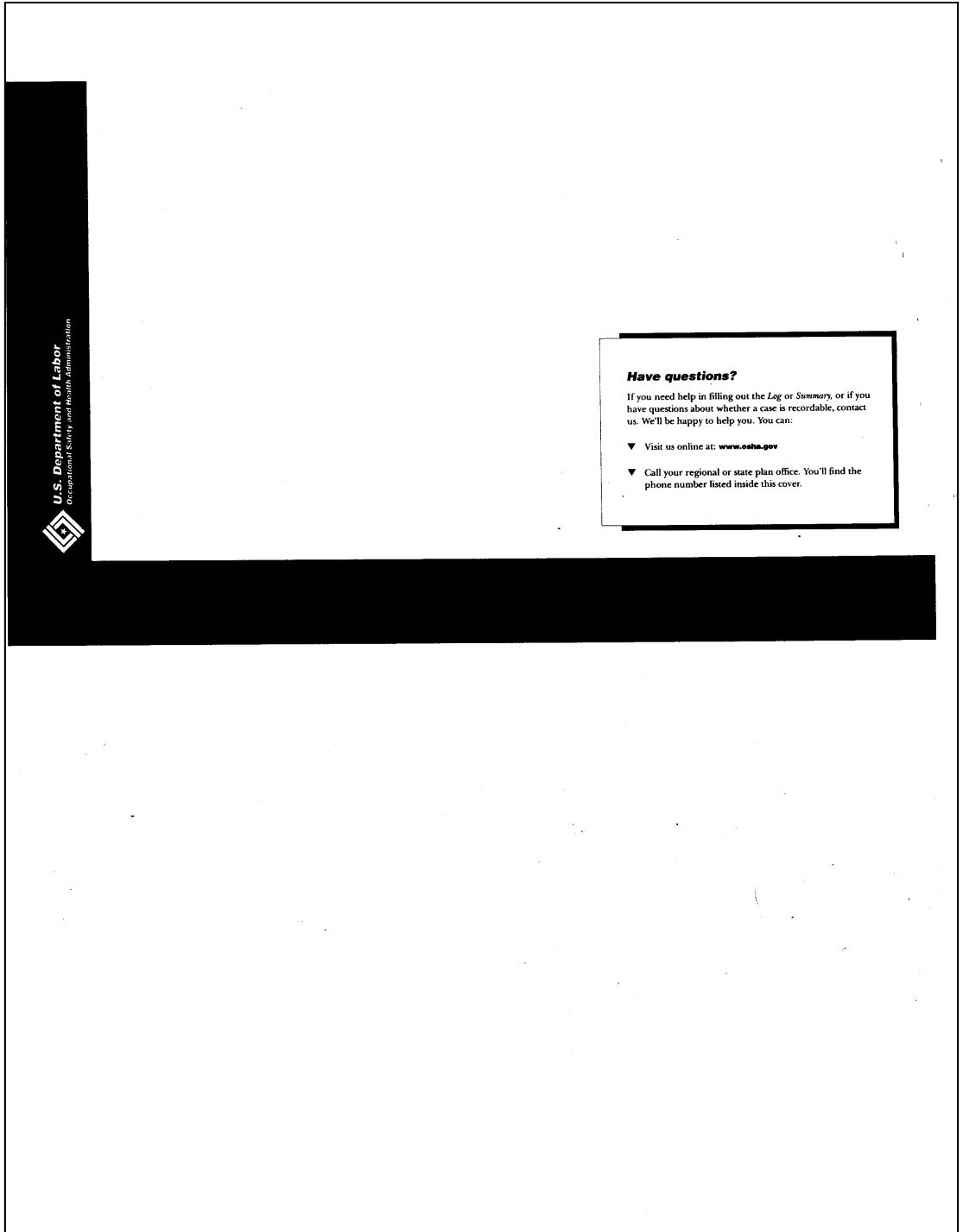
Washington - 360 / 902-5601

Wyoming - 307 / 777-7786

*Public Sector only



**Appendix IV: OSHA's Forms for Recording
Work-Related Injuries and Illnesses**



Appendix V: High Hazard Industries Included in ODI Universe as of August 2009

SIC	Industry	SIC	Industry
0181	Ornamental Floriculture and Nursery Products	4513	Air Courier Services
0182	Food Crops Grown Under Cover	4581	Airports, Flying Fields, and Airport Terminal Services
0211	Beef Cattle Feedlots	4783	Packing and Crating
0212	Beef Cattle, Except Feedlots	4953	Refuse Systems
0213	Hogs	5012	Automobiles and Other Motor Vehicles
0214	Sheep and Goats	5013	Motor Vehicle Supplies and New Parts
0219	General Livestock, Except Dairy and Poultry	5014	Tires and Tubes
0241	Dairy Farms	5015	Motor Vehicle Parts, Used
0251	Broiler, Fryer, and Roaster Chickens	5031	Lumber, Plywood, Millwork, and Wood Panels
0252	Chicken Eggs	5032	Brick, Stone, and Related Construction Materials
0253	Turkeys and Turkey Eggs	5033	Roofing, Siding, and Insulation Materials
0254	Poultry Hatcheries	5039	Construction Materials, Not Elsewhere Classified
0259	Poultry and Eggs, Not Elsewhere Classified	5051	Metals Service Centers and Offices
0291	General Farms, Primarily Livestock and Animal Specialties	5052	Coal and Other Minerals and Ores
0783	Ornamental Shrub and Tree Services	5093	Scrap and Waste Materials
4212	Local Trucking Without Storage	5141	Groceries, General Line
4213	Trucking, Except Local	5142	Packaged Frozen Foods
4214	Local Trucking With Storage	5143	Dairy Products, Except Dried or Canned
4215	Courier Services, Except by Air	5144	Poultry and Poultry Products
4221	Farm Product Warehousing and Storage	5145	Confectionery
4222	Refrigerated Warehousing and Storage	5146	Fish and Seafoods
4225	General Warehousing and Storage	5147	Meats and Meat Products
4226	Special Warehousing and Storage, Not Elsewhere Classified	5148	Fresh Fruits and Vegetables
4231	Trucking and Joint Terminal Maintenance Facilities for Motor Freight Transportation	5149	Groceries and Related Products, Not Elsewhere Classified
4491	Marine Cargo Handling	5181	Beer and Ale
4492	Towing and Tugboat Service	5182	Wine and Distilled Alcoholic Beverages
4493	Marinas	5211	Lumber and Other Building Materials Dealers
4499	Water Transportation Services, Not Elsewhere Classified	8051	Skilled Nursing Care Facilities
4512	Air Transportation, Scheduled	8052	Intermediate Care Facilities
		8059	Nursing and Personal Care Facilities, Not Elsewhere Classified

Source: OSHA.

Appendix VI: Comments from the Department of Labor

U.S. Department of Labor

Occupational Safety and Health Administration
U.S. Department of Labor
Washington, DC 20341



OCT 2 2009

Revae Moran
Director
Education, Workforce, and Income Security Issues
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Ms. Moran:

Thank you for the opportunity to comment on the Government Accountability Office's (GAO) proposed report, *Enhancing OSHA's Records Audit Process Could Improve the Accuracy of Worker Injury and Illness Data*. OSHA welcomes GAO's analysis and suggestions for improving the accuracy of the occupational injury and illness data.

The Occupational Safety and Health Act of 1970 mandates that both regulatory and non-regulatory measures be taken for assuring workplace safety and health. Accurate injury and illness records are vital to achieving this mandate. The Agency uses these records to allocate both enforcement and outreach resources, evaluate the effectiveness of its programs, and set standards development priorities. Furthermore, these records are used by Congress, researchers, employers, and employees to evaluate the nature and extent of occupational safety and health problems in individual worksites and in the Nation as a whole. GAO's analysis makes clear that there is a need to improve the accuracy of employer-provided injury and illness data.

GAO made the following recommendations to OSHA: 1) require inspectors to interview workers during record audits and interview replacements when selected workers are unavailable; 2) minimize the time between the date injuries and illnesses are recorded by employers and the date they are audited by OSHA; 3) update the list of high hazard industries used to select worksites for records audits and other purposes; and 4) increase education and training to help employers better understand the recordkeeping requirements.

The Agency shares the concerns raised in the GAO's report and will move forward to implement GAO's recommendations as follows. To address the first recommendation, OSHA will require inspectors to interview employees during record audits. Regarding the second recommendation, OSHA will develop policies to conduct record audits inspections in a timely fashion. With respect to the third recommendation, OSHA agrees that it is necessary to pursue rulemaking at the earliest possible date to update the industry coverage of the recordkeeping rule from SIC to NAICS. This will allow the Agency to use current BLS data to redefine the scope of the ODI and

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the recordkeeping audits to include emerging high risk industries. Finally, to fulfill the last recommendation, the Agency will supplement its current educational outreach, and will develop a web based tool to assist employers in meeting the requirements of OSHA's recordkeeping regulation.

I would also like to inform you that OSHA implemented its National Emphasis Program on Recordkeeping effective October 1, 2009. You will be able access the compliance directive from OSHA's website. If you have questions concerning this response, or if we can be of further assistance, please do not hesitate to contact me.

Sincerely,



Jordan Barab
Acting Assistant Secretary

Appendix VII: GAO Contact and Staff Acknowledgments

GAO Contact

Revae Moran, Acting Director, (202) 512-3863 or moranr@gao.gov

Staff Acknowledgments

In addition to the contact named above, Gretta L. Goodwin, Assistant Director, and Mary A. Crenshaw, Analyst in Charge, managed all aspects of this assignment and Sara Pelton, Analyst, and Tanya Doriss, Analyst, made significant contributions to all phases of the work. Shana B. Wallace, Pamela R. Davidson, Dae B. Park, Catherine M. Hurley, Amanda K. Miller, and Carl M. Ramirez provided assistance in developing and applying the methodologies and analyzing the data. James M. Rebbe provided legal assistance, Susan L. Aschoff assisted with message and report development, and Mimi Nguyen and James E. Bennett drafted the report's graphics.

Related GAO Products

OSHA's Voluntary Protection Programs: Improved Oversight and Controls Would Better Ensure Program Quality. [GAO-09-395](#). Washington, D.C.: May 20, 2009.

Workplace Safety and Health: Safety in the Meat and Poultry, While Improving, Could Be Further Strengthened. [GAO-05-96](#). Washington, D.C.: January 12, 2005.

Occupational Safety and Health: Efforts to Obtain Establishment-Specific Data on Injuries and Illnesses. [GAO-98-122](#). Washington, D.C.: May 22, 1998.

Occupational Safety and Health: Changes Needed in the Combined Federal and State Approach. [GAO/HEHS-94-10](#). Washington, D.C.: February 28, 1994.

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