

**Information Collection Request for:  
“OCCUPATIONAL HEALTH SAFETY NETWORK (OHSN)”  
Supporting Statement B**

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## Table of Contents

### **Section B. Data Collection Procedures**

- B1. Respondent Population and Selection of Respondents
- B2. Procedures for the Collection of Information
- B3. Methods to Maximize Response Rates and Deal with Nonresponse
- B4. Tests of Procedures or Methods to be Undertaken
- B5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or References

## **B. Collections of Information Employing Statistical Methods**

### **1. Respondent Universe and Sampling Methods**

Data included in OHSN is submitted by health care facilities that have volunteered to participate in the program. The respondent universe for OHSN could potentially include all inpatient hospitals and outpatient clinics belonging to hospitals in the United States. According to American Hospital Association annual survey <http://www.aha.org/research/rc/stat-studies/fast-facts.shtml>, in 2013 there were 5,686 U.S. Registered hospitals. Because NIOSH cannot control which hospital will agree to participate, the data collected cannot be considered representative of either a segment of or the entire population of hospital workers in the U.S. We will not be generating aggregate summary information from this network other than to describe how many hospitals are involved and the characteristics of those hospitals. However, the data from participating hospitals may provide insights into health and safety issues relevant to other hospital settings – that is, if a problem is present in some hospitals, we might surmise that some other hospitals also have this problem, though we would not be able to provide insight regarding the expected prevalence of the problem or the characteristics of hospitals likely to that that problem. Thus the information from participating hospitals provides conceptual explanations of the topic being surveyed for a given healthcare facility, in the manner of case studies. We are hoping that 300 hospitals will enroll over the next three years. As of October 2015, there are 116 hospitals enrolled in OHSN. Of these, 110 are general medical/surgical hospitals, 2 are children’s hospitals, 2 are long-term acute care hospitals, 1 is an alcoholism/chemical dependency hospital and 1 is an adult specialty hospital. We anticipate that many more hospitals will join OHSN after the launch of a new module which will collect data and analyze data on needle sticks for participating facilities. Hospitals and hospital systems are mainly recruited through the OHSN website and informational seminars at conferences attended by occupational safety and health practitioners.

Currently, independent doctors’ offices and other health care facilities such as dialysis centers and nursing homes that do not belong to hospitals are not able to participate in OHSN.

### **2. Procedures for the Collection of Information**

Participation in OHSN is open to all U.S. health care facilities. Participating facilities have complete autonomy when choosing the modules to which they submit data to OHSN. Health care facilities interested in participating in OHSN complete the enrollment form, which contains identifying and contact information, and sign the Data Use Agreement (DUA), which means that they agree to collect and report data using OHSN protocols. The DUA was reviewed and cleared by CDC NIOSH General Counsel.

OHSN currently consists of three modules that collect exiting information from the following sources of employee injuries: patient handling and movement; slips, trips and falls; and workplace violence. (See Appendix G for data submitted to OHSN). Occupational health professionals (mostly occupational nurses) from participating hospitals upload de-identified data on these three types of occupational injury to the respective OHSN modules on a monthly basis. Once received, these data undergo quality control processes, including edit and range checks. Uploaded data include injury counts as well as comprehensive information on the timing, location, and surrounding circumstances of each event. The modules went live in 2013 and health care facilities can upload historical data from 2012.

Facilities access the OHSN web portal to track trends of employee injuries and benchmark their internal rates and trends against aggregate data from similar workplaces. Through OHSN, participating facilities are also able to assess the impact of prevention efforts on occupational health and safety over time using integrated data analysis and visualization tools (charts and graphs).

### 3. Methods to Maximize Response Rates and Deal with Non response

Methods to address non-response do not apply to OHSN because participation is voluntary and the network is not intended to be generalized to any segment of the US healthcare system, nor facilitate comparisons of outcomes between different facilities reporting to the network. OHSN does not sample from a specified respondent universe nor attempt a census of a specified respondent universe. However, the OHSN team makes every effort to ensure that health care facilities nationwide have the opportunity to participate in OHSN. OHSN has been recruiting hospitals through a communication campaign. This campaign includes: personal communication; brochure; NIOSH blog; CDC press release; testimonial videos, town hall meetings in relevant national occupational health professional conferences such as AOHC and AOHP; hospitals and professional associations visits; publications; and webinars.

As of October 2016, OHSN has 123 participating hospitals that cover a broad range of hospitals characteristics relevant to hospitals workers' safety and health. Participating hospitals have the following characteristics:

1. Located in 20 states and in all census regions: mid-west, south, northeast, and west.
2. Include small, medium, and large beds size hospitals
3. Include teaching and non-teaching hospitals
4. Cover more than 180 thousand workers in all hospital job categories and departments
5. Included all types of hospitals: general medical and surgical, children, acute long term care, and others

Going forward, to reach our goal of 300 participants, a special outreach will target the following hospitals:

1. Small bed size hospitals in rural and metropolitan area especially in the west region
2. Hospitals that are not affiliated with medical schools (non-teaching hospitals)

OHSN is a voluntary system open to all U.S. hospitals and participants are self-selected. Statistical methods will not be used to sample hospitals to OHSN. OHSN will not exclude any U.S. hospitals that want to participate but purposive recruiting strategies will be used to ensure that OHSN gets a group of participating hospitals as similar as possible to US hospitals overall. Special recruitment efforts will target hospitals in underrepresented categories such as region, hospital type, or hospital size.

Table 1. Hospitals by be Census region, OHSN versus US hospitals

Census region	OHSN		United States	
	# of Hospitals	% of Hospitals	# of Hospitals	% of Hospitals
South	39	31.7%	2507	40.6%
Midwest	64	52.0%	1704	27.6%
West	6	4.9%	1159	18.8%
Northeast	14	11.4%	804	13.0%
Total	123	100%	6174	100%

Source: AHA Hospital Statistics 2014 edition.

Table 2. Hospitals by beds size and location categories, OHSN versus US hospitals

Beds per facility	Location	OHSN		United States	
		# of Hospitals	% of Hospitals	# of Hospitals	% of Hospitals
<b>Small =&lt; 200</b>	<b>Metropolitan</b>	49	39.8%	3272	53.0%
<b>Small =&lt; 200</b>	<b>Rural</b>	12	9.8%	1159	18.8%
Medium 200-499	Metropolitan	41	33.3%	1291	20.9%
Medium 200-49	Rural	2	1.6%	15	0.2%
<b>Large &gt; 500</b>	<b>Metropolitan</b>	19	15.4%	435	7.0
<b>Large &gt; 500</b>	<b>Rural</b>	<b>0.0</b>	<b>0.0%</b>	2	0.03
Total		123	100%	6174	100%

Table 3. Hospitals by teaching and non-teaching category, OHSN versus US hospitals

Type	OHSN		United States	
	# of Hospitals	% of Hospitals	# of Hospitals	% of Hospitals
Affiliated with medical school	55	44.7%	1611	26.1%
Not affiliated with medical school	68	55.3%	4563	73.9%
Total	123	100%	6174	100%

Source: AHA Hospital Statistics 2014 edition.

OHSN is used for occupational health monitoring purposes, including estimates of occupational injury counts in individual facilities, monitoring occupational injury in individual facilities, facilitating intra-facility comparisons, and assisting health care facilities with occupational injury prevention efforts. These purposes, along with other purposes of OHSN, are listed comprehensively in the section titled Purpose and Use of Data of the Supporting Statement Part A.

#### 4. Tests of Procedures or Methods to be Undertaken

OHSN conducted internal testing (alpha testing, within NIOSH, by IT specialists, and web software developers) and external testing (beta testing, by 5 selected stakeholders who subsequently became OHSN participants).

#### 5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

CDC NIOSH DSHEFS staff is responsible for the management and analysis of data submitted to OHSN. Participating health care facilities are also able to analyze their data for their own purposes.