

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

PROGRAM OFFICIAL/PROJECT OFFICER NAME: Ahmed E. Gomaa, MD, ScD, MSPH
TITLE: Medical Officer
PHONE NUMBER: 513.841.4337
EMAIL ADDRESS: agomaa@cdc.gov
FAX NUMBER: 513.841.4489
DATE: 11-01-2016

Table of Contents

A. JUSTIFICATION.....3

1. **Circumstances Making the Collection of Information Necessary.....3**

2. **Purpose and Use of the Information Collection.....6**

3. **Use of Improved Information Technology and Burden Reduction.....6**

4. **Efforts to Identify Duplication and Use of Similar Information.....9**

5. **Impact on Small Businesses or Other Small Entities.....14**

6. **Consequences of Collecting the Information Less Frequently.....14**

7. **Special Circumstances Relating to the Guidelines of 5 CFR 1320.5.....14**

8. **Comments in Response to the Federal Register Notice
and Efforts to Consult Outside the Agency.....9**

9. **Explanation of Any Payment or Gift to Respondents.....15**

10. **Protection of the Privacy and Confidentiality of Information Provided by
Respondents15**

11. **Institutional Review Board (IRB) and Justification for Sensitive Questions 16**

12. **Estimates of Annualized Burden Hours and CostsError! Bookmark not defined.**

13. **Estimates of Other Total Annual Cost Burden to Respondents
and Record Keepers.....17**

14. **Annualized Cost to the Federal Government.....18**

15. **Explanation for Program Changes or Adjustments.....18**

16. **Plans for Tabulation and Publication and Project Time Schedule.....18**

17. **Reason(s) Display of OMB Expiration Date is Inappropriate.....19**

18. **Exceptions to Certification for Paperwork Reduction Act Submissions.....19**

List of Attachments

- Attachment A – Authorizing Legislation
- Attachment B – 60 Day Federal Register Notice
- Attachment C – OHSN Data Use Agreement
- Attachment D – OHSN Enrollment Form
- Attachment E – OHSN Data Elements Definitions
- Attachment F – OHSN Standard Occupational Data Architecture (SODA)
- Attachment G – OHSN Screen Shots
- Attachment H- IRB determination Form

Goal of the study: The goal of the study is to provide participating inpatient healthcare facilities with data needed to identify problem areas and work practices, evaluate the effectiveness of prevention efforts, and ultimately minimize or eliminate occupational injury among healthcare personnel working in hospitals or other U.S. healthcare facilities that report to the Occupational Health Safety Network. The OHSN is a free, innovative injury monitoring system for healthcare facilities. This web-based system was developed by NIOSH and enables

A. JUSTIFICATION

1. Circumstances Making the Collection of Information Necessary

This information collection request (ICR) is a new request for approval to collect data. This collection request describes data collection tasks under the project entitled “Occupational

Health Safety Network (OHSN)”. This collection is being conducted by the National Institute for Occupational Safety and Health (NIOSH).

NIOSH collects this data under the authority granted in Section 20(a) (1) of the Occupational Safety and Health Act 29 U.S.C.669, (Attachment A). The broad, long term objective of this proposed project is to improve the working conditions of healthcare workers by improving the monitoring and prevention of injuries among healthcare personnel using OHSN so that healthcare facilities can collect and use data to establish and evaluate prevention activities for common occupational health problems among their personnel.

Healthcare (NAICS codes 621-623) is a growing industry with a substantial burden of occupational injuries and illnesses. An estimated 19 million workers are employed in the healthcare industry, with more than 5.7 million employed in hospitals. A large proportion of these workers are exposed to; chemical, physical, ergonomic, infectious, psychological, and a wide variety of other occupational hazards. According to the Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses (SOII), general medical and surgical hospitals (NAICS 6221) had more recordable injuries and illnesses than any other industry in 2006—approximately 264,300 cases. In 2013, one in five workers in the healthcare and social assistance industry reported a nonfatal job-related injury. This is the highest number of non-fatal injuries reported among all private industries

OHSN was developed after many stakeholders continuously expressed the need for a system to analyze and chart facility-specific data and offers healthcare facilities the ability to: 1) systematically examine and track employee injury rates by injury and employee type, location over time by facility and other risk factors; 2) faster analysis of data through monthly data submissions; and 3) target prevention activities; and, 4) evaluate interventions to reduce the occurrence of occupational injury among healthcare personnel.

These concerns were voiced during professional meetings and conferences, such as the annual Association of Occupational Health Professionals in Healthcare (AOHP) national conference and the American Occupational Health Conference (AOHC). NIOSH has been collaborating with many stakeholders since the inception the project, during testing and implementation, and will continue consultation into the future. OHSN involves stakeholders such as; occupational health nurses, occupational health physicians, hospital occupational safety managers, OSHA representatives, joint commission representatives, state health department representatives, academic institutions representatives, and representatives from CDC and other institutions. Stakeholders concluded that existing surveillance efforts have significant gaps in targeting prevention efforts among healthcare workers.

The OHSN is an interactive, internet-based system established in 2013 by NIOSH to electronically link and integrate a wide variety of ongoing occupational health activities and facilitate more accurate and timely prevention strategies, while meeting data security requirements (Appendix G). OHSN is a voluntary reporting system developed specifically for the healthcare environment, to enhance healthcare facility capacity to use existing data collected by healthcare facilities. OHSN is a free, and secure electronic occupational safety and health system that provides U.S. healthcare facilities the ability to efficiently analyze their own occupational injury data <http://www.cdc.gov/niosh/topics/ohsn/how.html>.

OHSN currently consists of three modules that collect exiting information on the following sources of employee injuries: patient handling and movement; slips, trips and falls; and workplace violence. 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. The data is routinely collected in healthcare facilities for administrative and regulatory purposes. The data that facilities upload 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 healthcare facilities could upload historical data from 2012. In 2016, OHSN plans to add two additional modules to track sharps injuries and other types of blood and body fluid exposures.

Participating facilities access the OHSN web portal to track trends of employee injuries within their hospitals. 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).

OHSN collects information needed to identify the causes of injuries and illnesses among healthcare personnel to empower individual healthcare facilities to track worker health and safety and pursue targeted interventions. Given the current low response rate, it is not possible to conduct nationwide analyses of aggregate injury data to track workplace injuries in healthcare workers. It is our hope that this resource will serve as a potential data source for individual healthcare facilities and health and safety researchers. OHSN will not be able to use this system to estimate the national burden of adverse occupational events among healthcare personnel unless participation rates increase substantially, and are representative of the hospital facilities on which it wishes to make estimates. Data from the current system, however, may be useful in facilitating recognition of preventable injuries in specific health care settings.

OSHA develops and enforces standards to keep records of injury and illness in the general industry. BLS collects a nationally representative sample of injuries by U.S industry, including the healthcare sector, as well as by facility type (e.g. ambulatory healthcare services, hospitals, nursing and residential care facilities, and social assistance facilities) every year and publishes these rates approximately 2 years later. OHSN was designed to be a smaller, interactive system between NIOSH and select participating hospitals. OHSN collects the same data from participating hospitals on injuries that are submitted to BLS for the SOII and the OSHA 300 logs plus additional data, when available, specific to worker injury or illness events, such as use of specialized safety equipment. (See section 4 for additional detail.)

However unlike the OSHA and BLS, the purpose of OHSN is to analyze and chart facility-specific data and offers healthcare facilities the ability to: 1) systematically examine and track employee injury rates by injury and employee type, location over time by facility and other risk factors; 2) faster analysis of data through monthly data submissions; and 3) target prevention activities; and, 4) evaluate interventions to reduce the occurrence of occupational injury among healthcare personnel.

NIOSH as a public health agency works directly within the healthcare industry through OHSN to prevent occupational injuries and illness. OHSN empowers local healthcare facilities to develop and monitor prevention efforts. OHSN analyzes for participating healthcare facilities,

the specific information necessary to identify the root causes of injuries and illnesses among healthcare workers in local healthcare facilities. Individual facilities often collect this information, but they do not analyze the data or use the information for prevention due to lack of data standardization and user friendly surveillance systems. While BLS and OSHA collect nationally representative data on work-related injuries in healthcare facilities, they do not provide the mechanisms for direct analysis of data for individual hospitals and hospital systems to monitor workplace injury data or the risk factors leading to these injuries.

2. Purpose and Use of the Information Collection

The data is collected by occupational health professionals at the healthcare facility level and submitted monthly to OHSN. OHSN currently consists of three modules that collect exiting information on the following sources of employee injuries: patient handling and movement; slips, trips and falls; and workplace violence. Participating hospitals upload de-identified data on these three types of occupational injury to the respective OHSN modules on a monthly basis. The data is already collected by healthcare facilities for administrative and regulatory purposes (See Section 4). The data that facilities upload include injury counts as well as comprehensive information on the timing, location, and surrounding circumstances of each event.

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). In 2016, OHSN will add additional two modules to track sharps injuries and other types of blood and body fluid exposures.

The data collected by OHSN is used by the facility and NIOSH to:

- Enhance healthcare facilities' ability to make use of existing federally mandated data to evaluate injury trends, identify risk factors associated with the injuries and track success of prevention programs while complying with OSHA requirements for recording and reporting occupational injuries using the OSHA 300 (see section No 4 for more details).
- Identify what, where, to whom, and how injuries are occurring most frequently each month and over time at a given facility that reports to OHSN.
- Monitor work-related injury among healthcare personnel working in a specific hospital.
- Facilitate intra-facility trend analysis that can be used for prevention activities.
- Provide timely and customized reports and information needed to meet OSHA regulatory and Joint Commission accreditation requirements (see section No 4 for more details).
- Apply up-to-date web-based information for prevention methods.
- Produce output reports that visually show facilities' progress in addressing its most prominent workplace safety and health concerns.

3. Use of Improved Information Technology and Burden Reduction

OHSN created new informatics tools to help healthcare facilities and systems reordering work-related injuries.

Before developing OHSN, NIOSH determined that hospitals and healthcare systems collected worker injury data in a myriad of formats; and, named employee positions, facility departments, event types, severity, and work risk factors that lead to injury differently. For example OHSN Inpatient-Adult Wards can be called locally as 3 south, med one, Med-surge, 7 north, neuro ward, etc., or in one hospital nurses are classified a Nurse 1, Nurse 2 whereas another facility classifies nurses as OR Nurse, Staff Nurse. These variations prevent both inter-facility and intra-facility comparisons.

To enable comparison of injury data within a participating hospital, NIOSH, in partnership with healthcare partners, created the NIOSH Standard Occupational Data Architecture (SODA) (Appendix F) establishing defined standard data elements or variables (OHSN format.) To create the standard data elements within SODA, NIOSH also developed a standard definitions for each variable in SODA, using existing standard definitions when available, e.g. for gender or body parts when available (Appendix E.). These standard data elements will also facilitate inter hospital comparisons if the participating facilities wish to compare their data with similar hospital types. This information is available to participating hospitals within OHSN.

The NIOSH Standard Occupational Data Architecture (SODA) document also guides developers of commercial and noncommercial occupational health software on methods to incorporate OHSN data requirements into their existing applications (Appendix F.)

In addition, to help facilities convert worker injury data to SODA, NIOSH also created an application called the Conversion Tool. The Conversion Tool assists users to “map” or match local terms to OHSN data elements and prepares the data for import into OHSN. The Conversion Tool also performs data validation, giving users immediate feedback on any data issues. NIOSH has also been collaborating with vendors of commercial occupational health software programs to adapt these programs to create OHSN-compatible files.

With these tools OHSN transforms the existing data into a standard format and, thus, such data may have the potential to be aggregated and benchmarked in the future pending increased participation in the network by hospitals across the US. In addition, through OHSN, both the SODA and the Conversion Tool application have the unanticipated benefit to health care facilities currently expanding through acquisition, tools to examine injury rates among all hospitals within their system. These standard programs and the information within, may also be applied to analysis of worker compensation data as well as to other data sources healthcare facilities might create for occupational health and injury purposes.

How facilities submit data to OHSN

All (100%) of the data for OHSN are collected via a secure internet application developed by NIOSH. OHSN offers facilities two options for electronic data submission depending on whether or not the facility collects worker injury data electronically. For facilities without electronic data collection procedures or even the ones with electronic data collection, NIOSH developed a MS Excel template with the defined standard data elements to assist facilities that would like to participate in OHSN but cannot afford to buy readily available software. These facilities may

download the MS Excel file and directly enter injury data and other data using drop-down options within the spreadsheet (Attachment G). Once the data is entered into the MS Excel file, facilities may use the OHSN-provided Conversion Tool to convert the MS Excel file into the OHSN format and upload the file into OHSN via the web portal (Attachment F). NIOSH has been told by participating facilities that this simple process has reduced the data entry time for facilities that traditionally did not use electronic data entry methods.

Facilities that use a commercial or locally-developed software product to electronically capture injury data use the following procedure: 1) export files to MS Excel; 2) map local data elements using standard definitions; and 3) transmit data files to OHSN after mapping data elements to the OHSN format using the OHSN-provided Conversion Tool.

Quality control checks on each data upload are performed including range and valid code checks.

The unique design of OHSN brings significant benefits both to healthcare facilities that wish to reduce injury rates among their workers (data reporters) and to NIOSH/CDC. The OHSN system addresses several existing challenges to monitor workplace injuries.

	Traditional Monitoring Systems	OHSN
Getting data into the surveillance system	Data reporters enter their data into the format required by the surveillance system, which may require duplication of effort already made to record the data in their internal system/s, as required by OSHA.	OHSN provides tools so facilities can electronically convert already-entered data into the required OHSN format, “mapping” their local terms into the “common language” provided by OHSN.
Timeliness of reports	Data is collected by data reporters over months/years, submitted to surveillance agency annually, and analyzed by surveillance agency. Report from surveillance agency is issued 1-2 years later.	Data is uploaded by the healthcare facility monthly or quarterly; this new data are available for analysis and benchmarking by facility within 7-10 days. Previously submitted data is available continuously.
Flexibility of reports	The format of the surveillance report and the examined event variables are selected by surveillance agency. The healthcare facility cannot customize the agency report to their local prevention needs.	Analysis tools are available to healthcare facilities so they can choose their individual variables of interest. Facilities can also select the denominator for calculating rates: FTEs, bed size, or number of monthly admissions.
Real time up-to-date output	Output is frequently available in a single-printing hard copy format only.	Output is available on secure website 24/7, customized and up-to-date.

OHSN standard definitions for injury and worker types, location of injury and circumstances provide added value by helping participating facilities to identify trends of the most common injuries in healthcare facilities so facilities can implement targeted injury prevention programs. Without OHSN healthcare facilities will not be able to assess occupational injuries with standard definitions, perform timely and appropriate interventions, and objectively measure intervention impact.

4. Efforts to Identify Duplication and Use of Similar Information

OHSN does not propose to expand or change actual OSHA requirements or procedures. Rather it is the intention of NIOSH to use the same data required by OSHA for recording of injuries and illnesses. The following background on OSHA requirements is provided to further the understanding of the data collection gap that exists between the current OSHA requirements and the proposed OHSN modules. OSHA recordkeeping requirements are part of the Code of Federal Regulations (29 CFR 1904), available at:

https://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=STANDARDS&p_toc_level=1&p_keyvalue=1904

Workplaces are required to record work-related injuries and illnesses on an OSHA 300 log unless they have 10 or fewer employees or are in a low hazard industry (hospitals are not a low hazard industry). The records provide the base data for the Bureau of Labor Statistics (BLS)'s annual survey of occupational injuries and illnesses, the Nation's primary source of occupational injury and illness statistics <http://www.bls.gov/iif/oshsum1.htm> . The records are also used by employers and employees to manage safety and health programs at individual workplaces. Recording an injury or illness does not have any effect on workers' compensation nor prove violation of an OSHA rule. A case must be recorded on the OSHA 300 log if it is work-related, if it is a new case, if it meets the general recording criteria, and if it meets special criteria for a specific injury/illness type.

The OSHA recordkeeping rule requires employers to keep 3 forms: a 300 Log, a 300A Summary form, and a 301 Incident Report (See <http://www.osha.gov/recordkeeping/RKforms.html>). Employers can keep their records on equivalent forms, on a computer, or at a central location provided that they can get information into the system within 7 calendar days after an injury or illness occurs, and they can produce the data at the establishment when required. Many employers use a Worker's Compensation Report, a First Report of Injury or a Company Accident Report as an equivalent form. They just need to make sure that their form includes all of the same data that is found on the 301 form or can be supplemented so that that data is attached to it. The 301 form captures data on each injury and illness (the length of service, what time the injury occurred, what time the employee started work, etc.). The questions about how the person was injured or became ill are identical to the BLS survey questions, which makes it easier for employers to complete the survey forms if/when they receive them.

Employers are instructed to 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. They must also record any significant work related injury or

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

Fields on OSHA 300 log (line list summary of all cases):

- Case number
- Employee name
- Job title
- Date of injury or onset of illness
- Where event occurred
- Description of injury or illness, parts of body affected, and object/substance that directly injured or made person ill
 - Classification checkboxes
 - o Death
 - o Days away from work (column H)
 - o Job transfer or restriction (column I)
 - o Other recordable cases
 - Number of days the injured or ill worker was:
 - o Away from work
 - o On job transfer or restriction
 - Injury or illness type checkboxes
 - o Injury
 - o Skin disorder
 - o Respiratory condition
 - o Poisoning
 - o Hearing loss
 - o All other illnesses

The OSHA forms give instructions on how to compute an occupational injury and illness incidence rate for all recordable cases and for cases that involve days away from work:

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

2. $\text{Total number of cases in columns H and I} \times 200,000 / \text{number of hours worked by all}$

employees = DART incidence rate

DART= recordable cases involving days away from work, days of restricted work activity or job transfer

(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.)

Information recorded about each case in the OSHA 301 Incident Report:

- Information about the employee
 - o Full name
 - o Address
 - o Date of birth
 - o Date hired
 - o Sex
- Information about the physician or other healthcare professional
 - o Name of physician or other healthcare professional
 - o If treatment was given away from the worksite, where was it given?
 - o Was employee treated in an emergency room?
 - o Was employee hospitalized overnight as an in-patient?
- Information about the case
 - o Case number from the OSHA 300 Log
 - o Date of injury or illness
 - o Time employee began work
 - o Time of event
 - o 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. Examples: “climbing a ladder while carrying roofing materials”; “spraying chlorine from hand sprayer”; “daily computer key-entry.”

- o What happened?

Tell us how the injury occurred. Examples: “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.”

- o 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.” Examples: “strained back”; “chemical burn, hand”; “carpal tunnel syndrome.”

- o What object or substance directly harmed the employee?
Examples: “concrete floor”; “chlorine”; “radial arm saw.”
- o If the employee died, when did death occur?

When the Bureau of Labor Statistics reports statistics based on OSHA recordkeeping rules, text responses are coded according to the Occupational Injury and Illness Classification System (OIICS) (See <http://www.bls.gov/iif/oshoiics.htm>).

The major code structures of that system are:

- Nature of injury or illness, or the principal physical characteristic of the worker's injury or illness;
- Part of the body directly affected by the injury or illness;
- Source of injury or illness, that is, the object, substance, bodily motion, or work environment which directly produced or inflicted the injury/illness;
- Event or exposure, or the manner in which the injury or illness was inflicted or produced; and
- Secondary source, or the object, substance, or person that generated the source of injury or illness or that contributed to the event/exposure.

HOW THE OHSN INJURIES AND ILLNESSES MODULE RELATES TO OSHA RECORDKEEPING REQUIREMENTS

As described above, OSHA records provide the base data for the Bureau of Labor Statistics (BLS)’s annual survey of occupational injuries and illnesses (SOII), and are also used by employers and employees to manage safety and health programs at individual workplaces. The modules for the OHSN injuries and illnesses are not meant to replace OSHA-mandated records, but rather to supplement the required data collection activities with data that is specifically designed to directly address important and unique causes of injuries and illnesses among healthcare personnel.

Current occupational surveillance or tracking systems, including OSHA records, are not designed to collect the specific information needed to identify the causes of injuries and illnesses among healthcare personnel. Data which describe facility-based occupational injury and illness patterns are especially lacking. There is a critical need for ongoing occupational injury monitoring in the healthcare industry that is easily accessible and user-friendly. These processes must provide timely feedback on exposures, risks, and outcomes; and accommodate the myriad of known and newly emerging hazards present in healthcare facilities.

Data collection through the proposed injury OHSN modules is built on a backbone of the

data elements required by OSHA so that reports equivalent to the OSHA 300 recordkeeping forms can be generated electronically through OHSN. Thus data required by OSHA will not have to be entered into a separate data collection system by the hospital.

Data collected through the OHSN go beyond OSHA requirements in that there will be a focus on health outcomes that are especially common in the healthcare sector (e.g., injuries and musculoskeletal disorders due to patient handling); there will be a focus on modifiable risk factors and the presence or lack of preventive measures (e.g., patient lift equipment); and the system will have functionality to empower individual facilities to quickly calculate rates of specific health outcomes using standard definitions, and compare their own rates overtime and to other participating facilities. An individual facility or hospital system has access to these reports 24/7 from their desk at secure internet OHSN environment. These reports can be generated within minutes to illustrate to enforcement representatives from OSHA, accreditation representatives from the Joint Commission, and local management/ members of safety committees the following information:

- Prevention opportunities such as targeting nurses and nursing assistants to reduce work place violence injuries in emergency room or psychiatric department targeting their local risk factors
 - How scarce resources are targeting high risk workers and departments for prevention,
 - Impact of prevention effort such as lifting equipment, training, or safety devices,
 - Awareness of the local risks and corresponding efforts to prevent them, and
 - Objectively measure impact of prevention over time.

Individual facilities need this information more frequently than BLS annual reports and may want summary statistics about their own facility instead of aggregate data from all US hospitals in BLS reports, which may or may not apply to the local establishment. OHSN is an analysis tool designed by occupational health professionals specifically for their hospital occupational safety. OHSN provides a user friendly system, easy customized analyses report and graphs, timely reporting 24/7, proven preventive tools ready to use and scale down to local use, and unique venue of collaboration for both hospitals and NIOSH (national leader of occupational safety health) to prevent occupational injuries among hospital workers on a daily basis.

The Bureau of Labor Statistics (BLS) in the Department of Labor (DOL) collects data on occupational injury and illness from a large probability sample of employers, including healthcare facilities, each year via the Survey of Occupational Injuries and Illnesses (SOII). SOII annually publishes aggregated data of injuries among healthcare workers. Facility specific data is not published through SOII. While leveraging the BLS sampling frame and collection processes, may be an obvious mechanism, the BLS/SOII data collection and reporting processes, requirements of facility anonymity, lack of feedback to hospitals participating in SOII and other restrictions do not give hospitals (and NIOSH stakeholders) the type of information they need to mitigate and prevent injuries among their workers. Thus, the use of a supplement to the SOII, instead of OHSN, does not respond to the request of the hospital stakeholders.

OHSN uses the same injury data collected for the SOII, however unlike SOII, OHSN specializes in providing monthly, facility-specific feedback to participating contributors.

Specifically, OHSN offers healthcare facilities the ability to: 1) systematically examine employee injury rates by injury and employee type, location over time by facility and other risk factors; and 2) faster analysis of data through monthly data submissions.

5. Impact on Small Businesses or Other Small Entities

None of the currently participating hospitals in OHSN are considered small businesses. There are several commercial software vendors, some of which may be considered small businesses, which sell occupational health software products, some of which may have similar capabilities similar to OHSN. However, participation in OHSN is voluntary and does not preclude hospitals from using these products. While OHSN provides an MS Excel spreadsheet for data collection for facilities that do not use an occupational health software product (which may be the case for smaller healthcare facilities), it also provides tools for facilities that use commercial software and gives them the ability to export, convert and upload data files from those software systems into OHSN.

It is possible that some facilities participating in OHSN may opt to use the free MS Excel spreadsheet developed by CDC NIOSH for data collection and storage rather than purchasing an occupational health software product. In order to minimize any negative impact on vendors (i.e. loss of market share), NIOSH has been collaborating with vendors of commercial occupational health software programs to adapt these programs to create OHSN-compatible files.

6. Consequences of Collecting the Information Less Frequently

It is in the best interest of healthcare facilities to conduct routine, prospective monitoring in an ongoing manner to quickly identify increases in the rates or changes in the patterns of occupational injuries. Participating facilities upload injury data monthly that they normally collect on an ongoing basis, for other purposes, to OHSN.

To be useful, data must be timely enough to allow healthcare facility managers to detect and respond to changes in injury patterns and rates as soon as possible after they occur. Collecting the data sporadically or less often than required by OHSN could result in the inability to detect important changes in patterns of workplace injury and delays in implementation of interventions and prevention measures, potentially resulting in the unnecessary occurrence of additional injuries and resulting costs.

7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

Participating facilities are reporting data to OHSN more often than on a quarterly basis. They report on a monthly basis. Healthcare facilities collect occupational injury data in an ongoing manner to meet regulatory and administrative requirement regardless of their participation in OHSN. Entry of this data into the computer, whether using the OHSN-provided Excel file or a commercial software product, usually occurs in near real time on a per event basis. Monthly transmission of these data to NIOSH will not cause undue burden in most facilities. OHSN provides tools for the efficient conversion of files to facilitate electronic transmission to NIOSH via the OHSN web portal.

8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency

A. A 60-day Federal Register Notice was published in the *Federal Register* on November 10, 2015, vol. 80, No. 217/, pp. 69681-69683 (Attachment B). There were no public comments.

B. OHSN conducted multiple stakeholder meetings and town hall discussions regarding strategies for surveillance and prevention of occupational injuries associated with healthcare personnel in the United States. Hospitals participating in OHSN are invited to make suggestions on how OHSN can help them more effectively use their own and national surveillance data. Member meetings for OHSN users are held each year in conjunction with annual professional meeting such as the Association of Occupational Health Professionals (AOHP).

9. Explanation of Any Payment or Gift to Respondents

No monetary incentive is provided to OHSN participants.

10. Protection of the Privacy and Confidentiality of Information Provided by Respondents

NIOSH’s Information Systems Security Officer has reviewed this submission and determined that the Privacy Act does not apply. OHSN activities do not involve the collection of individually identifiable information.

In terms of physical controls, the completed data collection instruments will be stored in a locked file cabinet at NIOSH’s Office of Division of Surveillance, Hazard Evaluations and Field Studies (DSHEFS) Cincinnati. This is a secure, gated facility with 24-hour security guard service. Only personnel with proper identification badges are allowed access to the site. All of the data will be entered and combined into data files that will be stored with technical safeguards in a secure, password-protected location on the CDC/NIOSH computer network. This computer network is only accessible to NIOSH employees. All networks at NIOSH are firewall protected and utilize a virtual private network. Access to this information will be restricted to researchers directly involved with the study and those who need to view the data. A training session will be conducted for all researchers about collection of data and how the data will be stored. At this training session, all researchers will be made aware of their responsibilities for protecting information being collected and maintained.

Technical Controls	Physical Controls	Administrative Controls
Passwords	Security Guards	Access to data limited to researchers directly associated with task
Firewall	Identification Badges	Training Session

Virtual (VPN)	Private Network	Office and File Locks	Cabinet
---------------	-----------------	-----------------------	---------

11. Institutional Review Board (IRB) and Justification for Sensitive Questions

IRB Approval

For the participating healthcare institutions, data is collected in this system for the purposes of local surveillance and program evaluation. Data submitted to the CDC NIOSH are stripped of personally identifiable information (i.e., name, full birthdate). CDC/NIOSH aggregates the data for national surveillance and public health practice evaluation purposes. This is a public health surveillance system with no primary research conducted as part of this data collection effort and no worker consent forms used. Although this is not a research project, this protocol was submitted to the CDC/NIOSH Human Subjects Review Board (HSRB) and was approved (# HSRB 16-DSHEFS-NR01, effective 01/26/2016) (see attachment H). Specifically, the HSRB “do not consider this activity research as defined by DHHS. 45 CFR 46.102(d) defines research as “a systematic investigation, including research development, testing and evaluation, designed to contribute to generalizable knowledge. Additionally, CDC Guidelines for Defining Public Health Research and Public Health Non-Research state that ‘if the evaluation is conducted to provide information on how to tailor a proven-effective intervention, service, or program in a specific setting or context, the evaluation is not research.’ Your activity will evaluate prevention activities in healthcare facilities with the intention of improving them.” The HSRB also “determined that this activity is non-research and not subject to review by the NIOSH HSRB.”

Sensitive Questions

No sensitive questions will be asked during the data collection process. Health care institutions will not be asked to share any information they consider to be proprietary.

1. Estimates of Annualized Burden Hours and Costs

A. The annualized burden rate is based on participating facilities providing OHSN a onetime enrollment form, the requested information is already publicly available from The American Hospital Association. This enrollment process is estimated to take one (1) minute. OHSN data upload file (in XML format) is estimate to take three (3) minutes. Burden estimates were derived using the estimated number of facilities participating in OHSN for each facility type and form. OSHA reporting mandates were taken into account when estimating the number of facilities (participants) and the annual number of responses per facility. OHSN has been operating continuously and receiving voluntary monthly reports from participating facilities since 2012 and is proposing to enroll a total of 300 facilities within the next three years. There is no cost to respondents other than their time.

Sample Size

Let X denote the incidence rates for a given occupational health outcome (e.g., patient handling injury) reported by participating healthcare facilities, and assume X follows a normal distribution with mean μ and variance σ^2 . In this study, we will be testing the null hypothesis

$H_0: \mu = \mu_0$ (Facility A's incidence rate is equal to the mean incidence rate for all facilities) versus the alternative hypothesis $H_1: \mu \neq \mu_0$ (Facility A's incidence rate is *not* equal to the mean incidence rate for all facilities). The sample size of facilities needed to conduct a two-sided test with significance level α and power $1 - \beta$ can be calculated from the formula

$$N = \frac{\sigma^2 (z_{\alpha/2} + z_{\beta})^2}{d^2}$$
, where d is the desired precision of μ_0 . At the standard deviation (STD) of 3, a power of 0.8, and $\alpha = 0.05$ would be achieved if 300 facilities participated in OHSN.

OHSN started in August 2013 recruited 62 hospitals in the first year added 40 new hospitals in 2014. Currently we have 120 hospitals in OHSN and 20 hospital awaiting the new sharps injury and blood and body fluids exposure module. Sharps injury and blood and body fluids exposure is perceived by hospital workers as the most threatening to their health and their careers and expected to increase OHSN participation significantly. The OHSN team recruited only for 14 months operating under the OMB waiver and stopped all recruiting efforts awaiting OMB approval since October 2015 when notified by NIOSH that the OHSN needed a new ICR request.

Type of Respondents	Form Name	No. of Respondents	No. of Responses per Respondent	Avg. Burden per Response (in hrs.)	Total Burden (in hrs.)
U.S. healthcare facilities	OHSN Enrollment Form	300	1	1/60	5
U.S. healthcare facilities	OHSN data upload file (in XML format)	300	12	3/60	180
Total Estimated Annual Burden (Hours)					185

12. Estimates of Other Total Annual Cost Burden to Respondents and Record Keepers

There will be no additional cost for record keeping because the OHSN participants are already collecting the data and maintaining records as required by OSHA. The enrollment and monthly submission is performed by occupational health professionals which are typically occupational registered nurses. The cost per person-hour is based on the mean hourly wage of registered nurse in General Medical and Surgical Hospitals from the U.S. Department of Labor at http://www.bls.gov/oes/current/oes_nat.htm # 29-1141, accessed on November 30, 2015

12a. Estimated Annualized Burden Costs

Type of Respondent	Form name	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs Responses Per Respondent
Registered Nurses	OHSN enrollment and OHSN data upload	185	\$ 34.44	\$6,371.40

13. Annualized Cost to the Federal Government

A total of 5 FTE/contractor personnel are actively involved in the enhancement and maintenance of the OHSN. The estimated cost to the government of this OMB approval of OHSN is based on expenses incurred in the following categories: personnel and programming contracts. The items and their costs relevant to the proposed approval to OHSN are shown in the table below. The total cost to the government in 2016 is estimated to be \$342, 608.

OHSN Estimated Annual Cost to the Government

Expense Item	Description	Estimated Annual Cost
Personnel	The personnel categories and their FTE contributions are as follows:	FTE annual compensation in FY 2016 will be \$342, 608
	Medical Epidemiologist	1
	Information Technology specialist	0.10
	Epidemiologist	0.40
	Informatics fellow	0.50
	ORISE fellow	1
Programming contracts	Design, develop, and deploy enhancements to OHSN	\$143,480
Total		\$ 342, 608

14. Explanation for Program Changes or Adjustments

This is an existing collection in use without an OMB control number.

15. Plans for Tabulation and Publication and Project Time Schedule

OHSN is an ongoing system that regularly collects data on a rolling monthly basis and therefore, does not have an annual timeline. The data is reported on a monthly basis by participating health care institutions and aggregated by CDC/NIOSH into a single occupational health database that is analyzed for the following purposes: to describe the occupational injuries and illnesses among workers in a given U.S. health care facility. OHSN participants are

able to access their own data at any time and analyze it through a web interface.

Due to the limitations inherent in the rate of participation in this network and the collection methods (i.e., participating hospitals will participate on a voluntary basis and no sampling methodology will be employed during recruitment of hospitals)—the information collected will not be representative of healthcare facilities throughout the US or any segment thereof. This will subsequently not permit for inter-facility comparisons of data. Any reports, presentations, or MMWR publications of the data collected will clearly specify that the OHSN is not a nationally or otherwise representative network of hospitals.

16. Reason(s) Display of OMB Expiration Date is Inappropriate

The display of the OMB expiration date is not inappropriate.

17. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification.