



# U.S. Environmental Protection Agency

## Emergency Responder Health and Safety Manual

### Chapter 1: Medical Surveillance Program Implementation Plan

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## **LIST OF ACRONYMS**

ACIP	Advisory Committee on Immunization Practices
ALT	Alanine aminotransferase
AST	Asparatate aminotransferase
BUN	Blood urea nitrogen
CAS	Chemical Abstract Service
CFR	Code of Federal Regulation
EPA	U.S. Environmental Protection Agency
ERT	Environmental Response Team
HAZWOPER	Hazardous Waste Operations and Emergency Response
HDL	High density lipid
LDH	Lactate dehydrogenase
LDL	Low density lipid
MCH	Mean corpuscular hemoglobin
MCHC	Mean corpuscular hemoglobin concentration
MCV	Mean corpuscular volume
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
PPE	Personal protective equipment
RDW	Red cell distribution width
SGOT	Serum glutamic oxalacetic transaminase
SGPT	Serum glutamic pyruvic transaminase
SHEM	Safety, Health, and Environmental Management
SHEMD	Safety, Health, and Environmental Management Division
SHEMP	Safety, Health, and Environmental Management Program

## 1.0 INTRODUCTION

In 2002, representatives from the U.S. Environmental Protection Agency (EPA) identified the need to develop a health and safety manual that specifically addresses the activities of EPA emergency response personnel. People in this group include EPA On-Scene Coordinators (OSCs)—a group that performs work in the field under both emergency and non-emergency scenarios—and members of EPA’s Environmental Response Team (ERT). In an effort to protect these workers, EPA is developing an Emergency Responder Health and Safety Manual, the objectives of which are to (1) give EPA emergency response personnel the tools they require to perform field work in a safe manner; (2) promote a consistent approach to health and safety across the entire Agency so that emergency responders from different regions are interchangeable; and (3) equip EPA emergency response personnel with the tools they need to write accurate, complete, and effective site-specific Health and Safety Plans.

The *Medical Surveillance Program Implementation Plan* serves as one of the “bricks” in the foundation of EPA’s Emergency Responder Health and Safety Manual. This Implementation Plan was developed by a Medical Monitoring Workgroup, which was represented by people from a variety of backgrounds, including health professionals, OSCs, Removal Managers, and other key EPA employees.

### 1.1 Scope and Purpose of this Implementation Plan

In June 1996, EPA issued EPA Order 1460.1, a document that outlines the objectives (see Text Box 1) for the Agency’s national Occupational Medical Surveillance Program. As stated in the EPA Order, implementation of EPA’s medical surveillance program is decentralized, and each region is responsible for executing its own program. In December 2002, the Medical Monitoring Workgroup (mentioned above) reviewed the medical surveillance programs that have been developed across the 10 EPA regions.

During the evaluation, the regional programs were compared against each other and evaluated against (1) the standards listed in EPA Order 1460.1; (2) applicable Occupational Safety and Health Administration (OSHA) guidelines; and (3) existing guidelines and recommendations put forth by medical groups and other agencies, such as the National Enforcement Investigations Center and the National Fire Protection Association. The objective of the evaluation was to identify omissions and elements of the medical monitoring programs that required adjustment.

After performing the analysis, the Medical Monitoring Workgroup identified a set of recommendations designed to (1) improve upon the Agency’s medical surveillance program, (2) promote consistency in the way the program is implemented across the nation, and (3) provide better medical monitoring support for EPA personnel whose job duties require them to enter hazardous materials sites or perform physically-demanding duties. The Workgroup’s recommendations, which are outlined in this Implementation Plan, support the goals of EPA Order 1460.1 and provide concrete information on:

#### **Text Box 1: Main Objectives of EPA Order 1460.1 Occupational Medical Surveillance Program**

- Detect deviations from the employee’s health status. Determine if the deviation relates to exposure to occupational stressors. If it does, notify appropriate officials so that corrective action can be taken.
- Ensure that employees assigned physically demanding work have the physical capacity to perform their regularly assigned duties and tasks without endangering their own safety and health, or that of their co-workers or the general public.
- Accumulate, analyze, interpret, and disseminate information, when appropriate, on trends in disease and injury incidence and/or prevalence as they relate to specific hazardous exposures or to defined position descriptions. This data will prompt hazard identification and mitigation efforts, work process analysis, and/or effect improved work practices including the use of product substitution, engineering controls, administrative controls, and protective equipment.

- The steps that should be taken to ensure that the medical surveillance program is consistent with [OSHA's 29 CFR 1910.120](#) (the Hazardous Waste Operations and Emergency Response [HAZWOPER] standard) and [29 CFR 1910.134](#) (the Respiratory Protection standard).
- The specific elements that should be included in medical examinations. (The document lists basic medical tests recommended for all EPA emergency response personnel. It also provides information about chemical-specific monitoring requirements for individuals who have the potential to be exposed to specific substances regulated under [OSHA Standards 29 CFR 1910.1001 through 1052](#).)
- Steps that should be taken to support voluntary immunization programs and blood storage programs.
- Specific recordkeeping procedures associated with the medical surveillance program.
- The steps that should be taken to audit a medical surveillance program and to evaluate whether the program is operating effectively.

## 1.2 Using this Implementation Plan

This Implementation Plan contains information on the steps that should be taken to implement a nationally consistent medical surveillance program. However, to be relevant at the local level, the Plan must be customized to include current regional/local information such as the names of the individuals who have specific designated responsibilities under the program. Each region is expected to produce a customized version of the Implementation Plan. To accomplish this, those who will play a role in implementing their region's medical surveillance program should meet to fill in the region-specific information that is requested in Appendices A and B.

The Implementation Plan is designed to be user-friendly and easy to navigate. Toward this end, hyperlinks have been incorporated throughout the text so that users can access detailed information on a particular topic by simply clicking on key words highlighted in blue. In addition, several tools, such as task charts, checklists, and standardized forms, are included in the document's appendices. For example, Appendix B presents a checklist that is designed to help emergency response personnel gain a better understanding of what is expected of them under the medical surveillance program, as well as the emergency procedures that they should follow if they find themselves confronting a non-life threatening exposure situation.

## 2.0 BASIS OF IMPLEMENTATION PLAN

EPA Order 1460.1, which provides guidelines for EPA's Occupational Medical Surveillance Program, serves as the basis for this Implementation Plan. In addition, several OSHA standards apply to emergency response personnel and impact the frequency and elements of the medical surveillance program. OSHA standards that shaped the content of this Implementation Plan include:

- [29 CFR 1910.120 \(the HAZWOPER standard\)](#). This standard lists requirements for medical surveillance programs in section 29 CFR 1910.120(f). For example, it establishes specific requirements on the frequency and content of medical examinations.
- [29 CFR 1910.134 \(the Respiratory Protection Standard\)](#).
- [29 CFR 1910.1030 \(the Bloodborne Pathogen Standard\)](#).
- [29 CFR 1910.95 \(the Occupational Noise Exposure Standard\)](#).

In addition, depending on which chemicals are present at a site, OSHA standards [29 CFR 1910.1001 through 29 CFR 1910.1052](#) might be applicable. These chemical-specific standards are triggered based on an employee's specific exposures. OSHA standards related to radiation exposures also apply, but are covered in a separate chapter of this manual.

### 3.0 NATIONAL MINIMUM STANDARDS

The Medical Monitoring Workgroup has identified a set of minimum standards that must be met to achieve a basic level of standardization in medical monitoring and physician care across all the EPA regions. These minimum standards, which thread throughout this Implementation Plan, have been established in an effort to achieve the following objectives:

- Ensure that nationally-consistent medical examinations are provided to all emergency response personnel who might be expected to respond to incidents involving hazardous substances and oil, chemical, biological, radiological weapons, or other hazardous materials.
- Track the immunization status of EPA employees and offer vaccinations to any unprotected worker who desires to be vaccinated in accordance with guidelines established by the Advisory Committee on Immunization Practices (ACIP).
- Establish blood storage programs for Headquarters and each EPA region and encourage emergency response personnel to participate in these non-mandatory programs.
- Ensure that emergency response personnel receive awareness training, the goal of which is to ensure that personnel understand which tests should be included in medical examinations and which reporting and monitoring procedures should be followed in the event of exposure.
- Ensure that nationally-consistent recordkeeping practices are implemented and that readily-accessible medical monitoring records are maintained.
- Ensure that audits and program evaluations are performed to assess how well the program is working and to determine whether any measures need to be taken to address deficiencies.

### 4.0 ROLES AND RESPONSIBILITIES

Extensive coordination is required to implement a medical surveillance program that effectively monitors the health and tracks possible work-related exposures of emergency response personnel. Within each region, key personnel will be expected to embrace a specific set of responsibilities. This section of the document outlines roles and responsibilities (as they relate to medical surveillance) for:

- *The Removal Manager.* The Removal Manager is responsible for the health and safety of all personnel who work within his/her section or branch. He/she must determine whether all the elements described in this *Medical Surveillance Program Implementation Plan* are being met within his/her section or branch. This includes ensuring that his/her employees are participating in the medical surveillance program as appropriate. Along with the Safety, Health, and Environmental Management Program (SHEMP)

Manager, the Removal Manager is responsible for the overall administration of the medical surveillance program within his/her section or branch.

- *SHEMP Manager.* The SHEMP Manager is the primary person responsible for overall worker health and safety for an EPA region. In that role, the SHEMP Manager (in coordination with the Removal Manager) must ensure that the medical surveillance program is being implemented in accordance with this Implementation Plan. He/she must confirm that the appropriate personnel are enrolled in the Agency's medical surveillance program and that baseline, annual, and exit examinations are conducted as outlined in this plan. The SHEMP Manager also is responsible for coordinating training and obtaining exposure reports from emergency response personnel. Based on routine review of each element of the medical surveillance program within his/her region, the SHEMP Manager determines whether any program modification or improvement is needed.
- *The Health and Safety Program Contact.* The Health and Safety Program Contact will serve as a technical contact for emergency response personnel. He/she will also serve as a liaison between the Removal Manager and the SHEMP Manager to facilitate overall program adherence. The Health and Safety Program Contact will be responsible for ensuring that periodic exposure data are being recorded by emergency response personnel and submitted to the SHEMP Manager.
- *Physicians.* The physician administering the medical examinations of emergency response personnel will adhere to the minimum requirements of this Plan and recommend additional testing based on case-specific circumstances. Based on the findings, the physician will develop an opinion regarding whether workers are medically cleared to conduct their assigned duties. The physician will submit his/her opinion to EPA's Medical Review Officer, who in turn, will issue an official *Medical Clearance Statement* to the SHEMP Manager. The physician will also inform employees of the findings from the medical examination and any conditions that might require further attention.
- *Emergency Response Personnel.* The primary responsibilities that the employee has relative to the medical surveillance program include providing accurate and timely information regarding physical conditions and potential exposures encountered as part of his/her duties, and participating in annual medical examinations. Response personnel must also participate in initial awareness training prior to entering the Agency's medical surveillance program.

[Table 1](#) provides an overview of the tasks that the abovementioned positions are expected to perform. A more detailed task chart is included in [Appendix A](#); each region is expected to customize this chart by filling in the blank spaces (highlighted in yellow) and making other region-specific changes where appropriate. As explained in the appendix, if the regions wish to delegate a task to someone other than the person the Medical Monitoring Workgroup assigned it to, the regions can do so when they go through the process of customizing Appendix A.



**TABLE 1:  
BROAD OVERVIEW OF ROLES AND RESPONSIBILITIES—IMPLEMENTING THE MEDICAL SURVEILLANCE PROGRAM**

Activities	Roles				
	Removal Manager	SHEMP Manager	Health and Safety Program Contact	Physicians	EPA Emergency Response Personnel (e.g., OSCs and other emergency responders)
<b>Medical Examinations</b>	<ul style="list-style-type: none"> <li>■ Ensure personnel have completed required medical exams and obtained medical clearance forms before allowing them to participate in response activities.</li> <li>■ Assist SHEMP Manager and physician in determining what level of medical monitoring is necessary for a particular employee.</li> </ul>	<ul style="list-style-type: none"> <li>■ Assist the Removal Manager in ensuring that emergency response personnel receive medical exams. Assist in scheduling them if necessary.</li> <li>■ Provide necessary background documentation to physicians regarding an employee's duties, likely exposures, etc.</li> <li>■ Retain copies of completed <i>Medical Clearance Statements</i> and communicate with employees if their work load requires modification.</li> </ul>	<ul style="list-style-type: none"> <li>■ Assist the SHEMP Manager in scheduling medical examinations for emergency response personnel if necessary.</li> <li>■ Serve as liaison between employees and the SHEMP Manager in addressing special requests for medical examinations or testing.</li> </ul>	<ul style="list-style-type: none"> <li>■ Perform medical examinations on EPA emergency responders. Ensure that the basic exam elements listed in <a href="#">Table 2</a> and <a href="#">Table 3</a> are addressed. Recommend additional testing if warranted.</li> <li>■ Inform employees of exam findings and any necessary followup.</li> <li>■ Determine whether employees are medically cleared to perform their duties or if it is necessary to restrict their activities.</li> </ul>	<ul style="list-style-type: none"> <li>■ Participate in medical exams.</li> <li>■ Give physician accurate information about medical history, exposure profile, and occupational history.</li> <li>■ Retain copies of completed <i>Medical Clearance Statements</i>.</li> <li>■ Comply with medical restrictions if necessary.</li> </ul>
<b>Immunization Program</b>		Keep records of employee immunization status and ensure that EPA-recommended vaccines (see <a href="#">Table 5</a> ) are made available to emergency responders.	Provide information to emergency response personnel about which vaccines EPA will make available to them.	<ul style="list-style-type: none"> <li>■ Record and certify employee immunization records.</li> <li>■ Administer vaccines following ACIP guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>■ Provide information to physicians about past vaccinations.</li> <li>■ Decide whether to receive the EPA-recommended vaccines listed in <a href="#">Table 5</a>.</li> <li>■ Carry <i>CDC Vaccination Cards</i> to work sites.</li> </ul>

Activities	Roles				
	Removal Manager	SHEMP Manager	Health and Safety Program Contact	Physicians	EPA Emergency Response Personnel (e.g., OSCs and other emergency responders)
<b>Blood Storage Program</b>		Develop and coordinate a regional blood storage program. (This involves identifying a blood storage facility, obtaining [or developing] appropriate written documentation and informational sheets, ensuring that physicians know that a blood storage program exists, and encouraging employees to participate in this non-mandatory program.)	Provide assistance to the SHEMP Manager in developing and coordinating a blood storage program.	<ul style="list-style-type: none"> <li>■ Draw blood from emergency responders who have chosen to participate in the blood storage program and send the blood to designated storage facilities.</li> <li>■ Determine whether the blood samples need to be taken out of storage to perform laboratory tests upon them.</li> </ul>	Decide whether to participate in a blood storage program. If so, sign the appropriate permission sheets.
<b>Medical Surveillance Awareness Training for Emergency Response Personnel</b>	Ensure that employees have participated in medical surveillance awareness training before allowing them to participate in response activities.	<ul style="list-style-type: none"> <li>■ Deliver awareness training to emergency response personnel.</li> <li>■ Issue training certification letters.</li> <li>■ Keep track of who has received training and let the Removal Manager know who has not.</li> </ul>	Assist the SHEMP Manager in organizing, delivering, and tracking the medical surveillance awareness training.		Attend medical surveillance awareness training upon entering the Agency's medical surveillance program.

Activities	Roles				
	Removal Manager	SHEMP Manager	Health and Safety Program Contact	Physicians	EPA Emergency Response Personnel (e.g., OSCs and other emergency responders)
<b>Recordkeeping</b>	Support recordkeeping efforts by identifying deadlines for employees to submit <i>Exposure, Injury, and Dosimetry Tracking Forms</i> .	Retain records of: <ul style="list-style-type: none"> <li>■ Medical Clearance Statements</li> <li>■ Exposure, Injury, and Dosimetry Tracking Forms</li> <li>■ Occupational exposure/injury reports</li> <li>■ Training certification letters</li> <li>■ Records of employee immunization status</li> <li>■ Medical Surveillance Audit Form</li> </ul>	Distribute <i>Exposure, Injury, and Dosimetry Tracking Forms</i> to emergency response personnel, make sure they understand the reporting requirements, and make sure they submit their forms to SHEMP Managers on a quarterly basis.	<ul style="list-style-type: none"> <li>■ Complete and retain copies of the <i>EPA Medical Evaluation Form</i>.</li> <li>■ Record, certify, and retain records of employee immunization status.</li> </ul>	<ul style="list-style-type: none"> <li>■ Retain copies of completed <i>Medical Clearance Statements</i>.</li> <li>■ Carry <i>CDC Vaccination Cards</i> to work sites.</li> <li>■ Fill out <i>Accident/Illness Reports</i> as needed and submit to supervisor.</li> <li>■ Fill out the <i>Exposure, Injury, and Dosimetry Tracking Form</i> and submit to SHEMP Manager quarterly.</li> </ul>
<b>Audits/ Program Evaluation</b>	<ul style="list-style-type: none"> <li>■ Assist the SHEMP Manager with internal program evaluation and auditing efforts.</li> <li>■ Take action to address deficiencies identified in the program.</li> <li>■ Upon request, provide appropriate information to Core ER program evaluation teams.</li> </ul>	<ul style="list-style-type: none"> <li>■ Fill out the <i>Annual Medical Surveillance Audit Form</i> and keep copies of this form on file.</li> <li>■ Evaluate program performance.</li> <li>■ Take action to identify any program deficiencies that are identified.</li> <li>■ Upon request, provide appropriate information to Core ER program evaluation teams.</li> </ul>	<ul style="list-style-type: none"> <li>■ Assist the SHEMP Manager with internal program evaluation and auditing efforts.</li> <li>■ Upon request, provide appropriate information to Core ER program evaluation teams.</li> </ul>	Upon request, provide appropriate information to assist EPA managers and Core ER auditors with program evaluation and auditing efforts.	<ul style="list-style-type: none"> <li>■ Assist the SHEMP Manager with internal program evaluation and auditing efforts.</li> <li>■ Upon request, provide appropriate information to Core ER program evaluation teams.</li> </ul>

## 5.0 MEDICAL EXAMINATIONS

EPA emergency response personnel are required to participate in the medical surveillance program which includes undergoing required medical examinations. Their direct-line supervisors are responsible for making sure these examinations occur. SHEMP Managers (as well as Health and Safety Program Contacts) should assist the Removal Manager in ensuring personnel receive required examinations and, if necessary, in scheduling the examinations. Medical examinations are performed to establish baseline data on an employee's health status and to determine whether the employee's health status changes over time as a result of occupational exposures. In addition, medical examinations are used to determine whether an employee is capable of performing his or her duties while wearing personal protective equipment (PPE) under conditions (e.g., temperature extremes) that might be expected at a work site. Examinations are to be performed by or under the supervision of a physician, who (at a minimum) is licensed in medicine and possesses specific training or expertise in occupational medicine and has experience performing medical surveillance examinations.

This section of the Implementation Plan establishes the national minimum standards that should be followed when performing medical examinations for emergency response personnel. For example, this section provides information on (1) the type of background material that should be provided to physicians prior to an examination, (2) the frequency with which medical examinations should be performed, and (3) the elements that should be included in medical examinations. In addition, this section describes the procedures that physicians should use to report their findings and, if appropriate, sign medical release forms or recommend modifications to a worker's activities.

### 5.1 Collecting Background Information Prior To Performing Medical Examinations

Working with the Removal Manager and SHEMP Manager, physicians are required to evaluate what level of medical testing is necessary to monitor an employee's health. To assist with the process, the SHEMP Manager is required to provide the physician with the following:

- A copy of the HAZWOPER standard (29 CFR 1910.120) and its appendices.
- A description of the employee's duties and how these duties might lead to potential exposures. (Text Box 2 provides an example of the type of information that a physician would be provided.)
- Information on the employee's exposure levels or anticipated exposure levels.

#### Text Box 2: Job Description for OSC

According to the EPA On-Scene Coordinator position description GS-401/819/1301-13 (9/30/02), emergency response personnel must be able to respond to sudden and unexpected or intentional releases of oil or hazardous substances, including releases of biological, chemical, and radiological agents, and they will be expected to perform under the following conditions:

- **Physical Demands.** The work requires overnight travel, extended work shifts (e.g., 12 to 18 hours, or more) during major emergency response or removal operations. The work requires a large amount of walking, climbing, running, bending, stooping, and the employee may be required to perform such physical activities while wearing a variety of protective clothing which can include respiratory protection or self-contained breathing apparatus.
- **Work Environment.** Work is both in an office and in remote field settings. While on-site in the field, the employee may be exposed to unfavorable weather conditions and rough terrain. The work may involve regular and recurring exposure to moderate risks or discomforts that require special safety precautions particularly where there is risk of exposure to hazardous and toxic substances, radioactive materials, or other pollutants. The employee is required to use protective clothing and equipment (i.e., gloves and face masks) and may occasionally be required to use fully encapsulating suits and supplied air (Level A & B).

- A description of any PPE that the employee has used or plans to use in the future. (For example, as described in a separate chapter of this manual, health providers must be given information about the type and weight of the respirator that an employee is expected to wear, along with information on how long and how frequently the employee is expected to use the respirator. See Section 4.4.3 of the *Respiratory Protection Program* chapter for additional details.)
- Information from an employee's previous medical examinations if such information is not readily available to the examining physician.

## 5.2 Frequency of Medical Examinations

EPA must offer medical surveillance to all employees who are exposed to hazardous substances at or above established exposure levels for 30 days or more a year and/or those who might be required to wear approved respirators. As indicated under 29 CFR 1910.120(f)(3), for any employee who falls into this category, EPA must ensure that medical examinations and consultations with physicians are available:

- Prior to assignment.
- At least once every twelve months thereafter.<sup>1</sup>
- At termination of employment or reassignment to an area where the employee would no longer be required to participate in the medical surveillance program. (*Note: In such cases an examination would be required if the employee had not received an exam within the last 6 months.*)
- As soon as possible upon notification by an employee that the employee has developed signs or symptoms indicating possible overexposure to hazardous substances or health hazards, or that the employee has been injured or exposed above the permissible exposure limits or published exposure levels in an emergency situation.
- At more frequent times, if the examining physician determines that an increased frequency of examination is medically necessary.

## 5.3 The Content of Medical Examinations and Consultations

As noted above, the Medical Monitoring Workgroup has completed a review of all of EPA's regional medical surveillance programs. During this review, the regional programs were compared against each other and evaluated against the standards listed in (1) EPA Order 1460.1, (2) applicable OSHA guidelines, and (3) other existing guidelines and recommendations put forth by medical groups and other agencies. The primary purpose of performing this exercise was to identify deficiencies and inconsistencies associated with the medical examinations that are currently provided to EPA emergency response personnel across the regions, Headquarters, and ERT. This analysis enabled the Medical Monitoring Workgroup to establish a list of the elements (or national minimum standards) that should be included in medical examinations that are performed on EPA emergency response workers. These recommendations are presented in [Section 5.3.1 \(Basic Medical Monitoring\)](#) and [Section 5.3.2 \(Chemical-Specific Monitoring\)](#).

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<sup>1</sup> Although 29 CFR 1910.120 indicates that attending physicians have the discretion to allow for longer intervals between exams (not greater than biennially though), EPA Order 1460.1 Section 8(C)(4)(a) indicates that EPA's emergency personnel should receive examinations on an annual basis.

### 5.3.1 Basic Medical Monitoring

As part of a basic medical examination, physicians are expected to obtain a medical and work history (or to obtain an update if this history is already included in the employee's file) and to perform physical examinations and laboratory tests. The content of examinations must be consistent with the national minimum standards presented in Table 2 and Table 3, and should also include any other tests that an attending physician deems necessary based on an individual's medical and exposure history. Tables 2 and 3 list the elements that should be covered as part of basic medical monitoring and indicate how frequently specific medical tests should be performed. *(Note: Requirements associated with radiation exposure monitoring are not included in the tables because physicians who administer medical exams are not necessarily involved with radiation exposure monitoring. Details about radiation exposure monitoring are described in a separate chapter of this manual. Information regarding an employee's radiation exposure must, however, be included in his/her work history.)*

As indicated in Table 2, there are three types of medical examinations:

- **Baseline exams.** These exams are performed to characterize the health of an employee before the Agency sends him or her into the field.
- **Periodic exams.** EPA Order 1460.1 indicates that emergency responders should receive followup medical exams on an annual basis. This does not mean, however, that each of the tests listed in Table 2 must be repeated during each and every annual examination. For example, chest x-rays do not need to be performed during periodic followup exams unless: (1) there is concern that an employee has been exposed to a hazardous substance, like asbestos (in which case the employee would be required to obtain a chest x-ray once every 3 to 5 years), or (2) if the employee has developed problematic symptoms (i.e., shortness of breath, coughing, or chest tightness) that indicate a need for further evaluation. On the other hand, some tests provide useful information regarding an employee's ongoing health status and his/her ability to perform job functions while wearing PPE. Tests that fall into this category, such as hearing tests, pulmonary function tests, and cardiovascular surveillance, should be performed with set periodicity. For example, some tests should be repeated during each annual exam.
- **Exit exams.** These exams are performed at the termination of employment or reassignment to an area where the employee would no longer be required to be in the medical surveillance program. While exit exams may often have a different purpose than ongoing medical surveillance exams, such exams are required under EPA Order 1460.1 (and required by OSHA) as a component of the medical program. Exit exams should include the elements of the baseline medical exam and any additional tests that might be indicated based on an individual's work history and exposure reports.

**TABLE 2:  
ELEMENTS THAT SHOULD BE INCLUDED IN BASIC MEDICAL EXAMINATIONS ADMINISTERED TO EPA'S  
EMERGENCY RESPONSE PERSONNEL**

Exam Element	Frequency <sup>1</sup>	Additional Comments
<i>Medical History</i>	<ul style="list-style-type: none"><li>• Filled out at baseline exam.</li><li>• Updated at annual exams.</li><li>• Updated at exit exam.</li></ul>	To promote consistency across the nation, doctors should use the official <i>EPA Medical Evaluation Form</i> (presented in <a href="#">Appendix C</a> ) to track the medical history of EPA emergency response personnel and to record the results of physical examinations.
<i>Physical Examination</i>	<ul style="list-style-type: none"><li>• Performed during baseline exam.</li><li>• Performed during annual exams.</li><li>• Performed during exit exam.</li></ul>	

Exam Element	Frequency <sup>1</sup>	Additional Comments
<i>PPD Test for Tuberculosis</i>	<ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed during subsequent followup exams if indicated.</li> <li>Performed during exit exam.</li> </ul>	
<i>Eye Exams:</i>		
Visual acuity testing (with and without corrective lenses)  Visual field testing  Intraocular pressure  Color vision	<ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed during all subsequent annual exams.</li> <li>Performed during exit exam.</li> </ul> <ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed once every 5 years thereafter.</li> <li>Performed during exit exam.</li> </ul> <ul style="list-style-type: none"> <li>Performed annually for employees over the age of 40.</li> </ul> <ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed during exit exam.</li> </ul>	Patient's near and distance vision should be tested.
<i>Hearing Tests</i>	<ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed during all subsequent annual exams.</li> <li>Performed during exit exam.</li> </ul>	Testing should be provided for the following frequencies: 500 hertz (Hz), 1000Hz, 2000 Hz, 3000Hz, 4000Hz, 6000Hz, and 8000 Hz.
<i>Chest x-ray</i>	<ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed during subsequent followup exams if indicated.</li> <li>Performed during exit exam.</li> </ul>	X-rays should be taken of: <ul style="list-style-type: none"> <li>Posterior-Anterior (PA)</li> <li>Left lateral</li> <li>Right lateral</li> </ul>
<i>The 12-lead resting electrocardiogram (ECG) test</i>	<ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed during subsequent followup exams if indicated.</li> <li>Performed during exit exam.</li> </ul>	
<i>Exercise Capacity Test</i>  OR  <i>Cardiac Exercise Stress Test</i>	<ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed once every 2 years thereafter.</li> <li>Performed during exit exam.</li> </ul>	EPA recommends initiating <b>cardiac exercise stress testing</b> <sup>2</sup> at age 40 and repeating this testing at least once every two years. Prior to age 40, an <b>exercise capacity test</b> (performed at least biennially) should be sufficient to determine whether an employee meets the physical demands of his/her job. (Note: Unlike a "cardiac exercise stress test," the more simplified "exercise capacity test" does not require as much medical testing to be performed while the employee is engaging in exercise.)
<i>Respiratory Protection Evaluation</i>	<ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed during annual exams.</li> </ul>	As indicated in <a href="#">OSHA's 29 CFR 1910.134(e)</a> , all of the questions found on <a href="#">OSHA's Respirator Medical Evaluation Questionnaire</a> must be addressed for employees who wear respirators. (See Section 4.4.2 of the <i>Respiratory Protection Program</i> chapter [included as part of EPA's <i>Emergency Responder Health and Safety Manual</i> ] for details.)
<i>Pulmonary Function Tests</i> <sup>3</sup> :		

Exam Element	Frequency <sup>1</sup>	Additional Comments
Simple spirometry test	<ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed once every 2 years thereafter.</li> <li>Performed during exit exam.</li> </ul>	
Volume measurements	<ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed during subsequent followup exams if indicated.</li> <li>Performed during exit exam.</li> </ul>	
Diffusion capacity	<ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed during subsequent followup exams if indicated.</li> <li>Performed during exit exam.</li> </ul>	
<i>Laboratory Testing:</i> Urinalysis Complete Blood Counts (CBC) Blood Chemistry	All of these tests should be: <ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed during all subsequent annual exams.</li> <li>Performed during exit exam.</li> </ul>	The list of analytes that should be evaluated are presented in <a href="#">Table 3</a> of this document. (The same set of analytes should be evaluated during the baseline, annual, and exit exams.)
<i>Special Tests:</i>		
Acetylcholinesterase Heavy Metal Screen Polychlorinated Biphenyls	All of these tests should be: <ul style="list-style-type: none"> <li>Performed during baseline exam.</li> <li>Performed during followup exams if there is reason to believe an employee has been exposed to these specific contaminants.</li> <li>Performed during exit exam.</li> </ul>	
Specific OSHA-regulated contaminants	See <a href="#">Section 5.3.2</a> for more information.	
Other (non-OSHA-regulated) chemicals	See <a href="#">Section 5.3.2</a> for more information.	

<sup>1</sup> The frequencies listed represent the minimum recommendations. Attending physicians have the discretion to increase the frequency of testing if they believe an employee has risk factors that warrant a more aggressive monitoring schedule.

<sup>2</sup> EPA emergency response personnel are expected to perform activities that are consistent with the U.S. Department of Labor's physical demand level classifications of "medium" to "heavy" workloads—categories that require oxygen consumption ranging from about 0.8 to 1.8 liter per minutes and energy expenditures ranging from about 3.6 to 7.5 METS. Such requirements are consistent with the range of physical demands expected of firefighters. With respect to firefighters, the National Fire Protection Association recommends conducting cardiac exercise stress testing using a treadmill, bicycle, or stair-climber, that allows for an attainment of 85 percent of predicted maximal heart rate. Other federal agencies, such as the Federal Aviation Administration, commonly require employees to demonstrate a minimum functional capacity equivalent to completion of stage III of the Standard Bruce Treadmill Protocol.

<sup>3</sup> Physicians should follow the recommendations put forth by the American College of Occupational and Environmental Medicine.



**TABLE 3:**  
**BLOOD AND URINE ANALYTICAL REQUIREMENTS**  
**TESTS TO BE PERFORMED DURING BASELINE, ANNUAL, AND EXIT EXAMINATIONS**

Analytes	Analytes
<ul style="list-style-type: none"> <li>• Lipid Panel</li> <li>• Triglycerides</li> <li>• Cholesterol, total</li> <li>• HDL-Cholesterol</li> <li>• LDL-Cholesterol</li> <li>• Chol/HDL Ratio</li> <li>• Bilirubin, Direct</li> <li>• Lymphocytes</li> <li>• Gamma Glutamyl Absolute Monocytes</li> <li>• Transferase Monocytes</li> <li>• Gamma Glutamyl Absolute Eosinophiles</li> <li>• Lactate Dehydrogenase (LDH), total</li> <li>• Alanine Transaminase</li> <li>• ALT (SGPT)</li> <li>• Comprehensive Metabolic Panel without CO<sub>2</sub></li> <li>• Glucose</li> <li>• Blood Urea Nitrogen (BUN)</li> <li>• Creatinine</li> <li>• Sodium</li> <li>• Potassium</li> <li>• Chloride</li> </ul>	<ul style="list-style-type: none"> <li>• Calcium</li> <li>• Protein, total</li> <li>• Albumin/Globulin Ratio</li> <li>• Bilirubin, total</li> <li>• Alkaline Phosphatase</li> <li>• AST (SGOT)</li> <li>• Complete Blood Count (includes DIFF/PLT)</li> <li>• White Blood Cell Count</li> <li>• Red Blood Cell Count</li> <li>• Hemoglobin</li> <li>• Hematocrit</li> <li>• Mean Corpuscular Volume (MCV)</li> <li>• Mean Corpuscular Hemoglobin (MCH)</li> <li>• Mean Corpuscular Hemoglobin Concentration (MCHC)</li> <li>• Red Cell Distribution Width (RDW)</li> <li>• Platelet Count</li> <li>• Absolute Neutrophils</li> <li>• Neutrophils</li> <li>• Absolute Lymphocytes</li> </ul>

### 5.3.2 Chemical-Specific Monitoring

As noted in the last rows of Table 2, additional medical evaluations might be warranted if there is concern that an employee has been exposed to a specific contaminant while working at an EPA site. For example, additional medical evaluation might be necessary if an emergency responder enters a site at which an OSHA-regulated substance is present. Medical surveillance provisions for such substances are listed in OSHA Standards 29 CFR 1910.1001 through 1052. This series of OSHA standards presents a wide range of physical examination and medical testing requirements, which are largely dependent on length of exposure and health status of the individual employee. For example, testing might only be required if exposure duration is more than 30 days. Therefore, the exam and test elements will be triggered by the exposure situation and left to the discretion and judgment of the attending physician based on individual health status. [Table 4](#) lists the chemicals currently regulated by OSHA, the relevant paragraph and appendices in the standard, and whether any medical evaluation is specified within the standard. EPA workers also have the potential to be exposed to chemicals that are not currently covered under these chemical-specific OSHA standards. In such cases, the SEMP Manager and the attending physician should determine if medical tests have been developed to assess the possibility of exposure to that chemical and whether an evaluation should be performed for a specific individual.

**TABLE 4:**  
**CHEMICAL-SPECIFIC EXAMINATION AND MONITORING REQUIREMENTS**  
**FOR CHEMICALS COVERED UNDER OSHA STANDARDS 29 CFR 1910.1001 THROUGH 1052\***

Chemical Name	OSHA Citation (29 CFR)	Testing/Exam Elements Specified
2-Acetylaminofluorene	1910.1014 and 1910.1003(g)(1)**	
Acrylonitrile	1910.1045(n); Appendix C	✓
4-Aminodiphenyl	1910.1011 and 1910.1003(g)(1)**	
Arsenic-Inorganic	1910.1018(n)	✓
Asbestos	1910.1001(l)	✓
Benzene	1910.1028(I); Appendix C	✓
Benzidine	1910.1010 and 1910.1003(g)(1)**	
1,3-Butadiene	1910.1051(k); Appendix C	✓
Cadmium	1910.1027(l); Appendix D; Appendix F	✓
Bis-chloromethyl ether	1910.1008 and 1910.1003(g)(1)**	
Coke Oven Emissions	1910.1029(j); Appendix B	✓
1,2-Dibromo-3-chloropropane	1910.1044(m); Appendix C	✓
3,3'-Dichlorobenzidine	1910.1007 and 1910.1003(g)(1)**	
4-Dimethylaminoazobenzene	1910.1015 and 1910.1003(g)(1)**	
Ethyleneimine	1910.1012 and 1910.1003(g)(1)**	
Ethylene Oxide	1910.1047(I); Appendix C	✓
Formaldehyde (50-00-0)	1910.1048(l); Appendix C	✓
Lead (74-39-1)	1910.1025(j); Appendix C	✓
Methylenedianiline	1910.1050(m); Appendix C	✓
Methyl chloromethyl ether	1910.1006 and 1910.1003(g)(1)**	
Methylene chloride	1910.1052(j); Appendix B	✓
alpha-Naphthylamine	1910.1004 and 1910.1003(g)(1)**	
beta-Naphthylamine	1910.1009 and 1910.1003(g)(1)**	
4-Nitrobiphenyl	1910.1003(g)(1)	✓
N-Nitroso-dimethylamine	1910.1016 and 1910.1003(g)(1)**	
beta-Propiolactone	1910.1013 and 1910.1003(g)(1)**	
Vinyl chloride	1910.1017(k); Appendix A	✓

\*Specific requirements triggered by exposure duration and individual health status. Standards also address medical requirements related to respirator use, which are covered in the Respiratory Protection chapter of this manual.

\*\*Medical surveillance specified under OSHA standards for “13 Carcinogens” (1910.1003[g][1]); no testing specified but additional risk factors to be considered by examining physician.

#### **5.4 Reporting the Results and Giving Employees Clearance To Perform Their Duties**

After completing a medical examination, a physician must develop an opinion regarding whether the employee is medically cleared to perform his or her job tasks. To do so, the physician must fill out the information requested on page 9 of the official *EPA Medical Evaluation Form* (see [Appendix C](#)) and submit this information to EPA's Medical Review Officer, who will in turn, complete a *Medical Clearance Statement* (i.e., page 10 of the official *EPA Medical Evaluation Form*) and submit it to the SHEMP Manager. Using this form, the Medical Review Officer will let the SHEMP Manager know if an employee's health status puts him or her at an increased risk of experiencing adverse health effects from working in hazardous waste operations or emergency response situations or from using a respirator. If the Medical Review Officer does have such concerns, he or she should recommend placing limitations upon the employee's assigned work. The Medical Review Officer should only provide his or her bottom line opinion about whether employees are cleared for their duties. Care should be taken to ensure that no medically confidential information is disclosed on the *Medical Clearance Statement*.

## **6.0 OTHER COMPONENTS OF THE MEDICAL MONITORING PROGRAM—IMMUNIZATION AND BLOOD STORAGE PROGRAMS**

### **6.1 Immunization Program**

The Medical Monitoring Workgroup recommends implementing an immunization program in each EPA region and at EPA Headquarters. The program should have two objectives: (1) tracking the immunization status of EPA's emergency response personnel, and (2) offering vaccinations to any unprotected workers who desire to be vaccinated in accordance with [ACIP's recommendations](#). Although the OSHA General Industry standards (29 CFR 1910) do not require employees to receive vaccinations, the Medical Monitoring Workgroup believes it is important (from a readiness perspective) to support efforts that protect workers from biological hazards or infectious agents that they might encounter in the field. Text Box 3 provides more information about the benefits associated with immunization programs. While employees should be encouraged to participate in the immunization program, EPA cannot force its employees to receive vaccines. The decision about whether or not to receive a vaccine will be made on an individual basis, in view of potential exposures, and in consultation with a physician.

Upon entering EPA's Medical Surveillance Program, emergency response personnel must provide adequate documentation of childhood and other previous vaccinations. Providers should only accept written, dated records as evidence of vaccination. If records cannot be found, employees should attempt to locate missing records by contacting previous health care providers. If individual records cannot be located, these persons should be considered susceptible and started on the age-appropriate vaccination schedule. As an alternative, information concerning a worker's immunization status to certain antigens (e.g., measles, mumps, rubella, varicella, tetanus, diphtheria, hepatitis A, hepatitis B, and poliovirus) can be obtained through simple blood tests. As will be described in [Section 8.3](#) of this document, the

#### **Text Box 3: Benefits Associated with Immunization Programs**

The objective of EPA's immunization program is to ensure that the Agency has an emergency response work force that is available and ready to respond to a wide variety of situations when needed, including those which may involve potential exposures to common contagious illnesses, such as the mumps, measles, and varicella. While EPA workers are less likely to have direct and close encounters with patient populations than health care providers do, the protection and viability of the Agency's workforce remains a concern. Knowledge and documentation of past vaccinations and tracking of any newly administered vaccines will assist EPA in protecting emergency response personnel and evaluating risks from exposures should they occur.

SHEMP Manager, the attending physician, and individual emergency responders are all expected to play a role in maintaining immunization records.

Table 5 provides information about vaccines that EPA recommends for its emergency response personnel.<sup>2</sup> If an employee lacks a recommended vaccine, the Health and Safety Program Contact and the SHEMP Manager should ensure that the employee understands that the vaccine can be made available to him or her. Again, the Agency only has the ability to offer recommendations; it does not have the authority to force an employee to receive a vaccination. Physicians should record and track immunizations that they administer on a Vaccine Administration Record (see [Appendix D](#) and [Section 8.3](#) for more details.)

**TABLE 5:  
VACCINATION RECOMMENDATIONS FOR EPA'S EMERGENCY RESPONSE PERSONNEL**

Vaccination	Recommended	Required	Provided by EPA
Influenza A	Yes	No	Yes
Hepatitis A	Yes	No	Yes
Hepatitis B	Yes	No	Yes
Tetanus-diphtheria	Yes	No	Yes
Anthrax*	No	No	No
Smallpox	No	No	No
Plague	No	No	No
Hantavirus	No	No	No

\* See *Epidemiology and Prevention of Vaccine-Preventable Diseases* (8<sup>th</sup> edition; dated January 2004) for recent recommendations about the use of anthrax vaccines among civilian response ranks.

## 6.2 Blood Storage Program

The Medical Monitoring Workgroup recommends implementing blood storage programs across the Agency. Such programs involve collecting pre-employment serum samples and banking them in case they are needed for future diagnostic purposes. Although not listed as a requirement under the OSHA General Industry standards (29 CFR 1910), blood storage programs offer important benefits to employees because they provide a means for obtaining valuable baseline data on chemical and biological agents that might be encountered in the field, but which are not tested for as part of a basic baseline medical examination. See [Text Box 4](#) for a more in-depth explanation of the benefits associated with blood storage programs. The Medical Monitoring Workgroup recommends making blood storage programs available to all EPA emergency response personnel. The decision about whether to participate, however, should reside with the individual worker; the Agency

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<sup>2</sup> Requirements specific to other bloodborne pathogens, such as HIV, are discussed in a separate chapter of this manual.

cannot force its employees to participate in a blood storage program. Employees who do agree to participate must provide written consent.

Blood storage programs should be established for EPA Headquarters and each of the Agency's regions. The SHEMP Manager is responsible for developing and coordinating the program. It is his or her responsibility to do the following:

- Identify and contact a suitable blood storage facility within his/her region. (Note: Available facilities will likely vary from region to region and will need to be selected on a case-by-case basis.)
  - Obtain policies and procedures from the blood storage facility on its practices for blood storage and disposal, and for recordkeeping.
  - Develop information and permission sheets that clearly document how serum samples will be collected and stored in a manner that provides employees the appropriate assurances of the uses, security, and final disposition of the samples(s).
- Text Box 4: Why Consider Blood Storage?**

EPA emergency response personnel could potentially be exposed to a myriad of chemical and biological substances when working in the field. Often times, the interpretation of blood tests to determine if an employee actually received a biologically significant exposure to a given agent requires comparison to a baseline measurement. Depending on the persistence of the agent in the human body, accurate baseline measurements cannot always be obtained after the exposure. In these instances, frozen blood/serum samples provide a critical means of obtaining baseline data to help assess if an exposure has occurred, the magnitude of that exposure, and the possible relationship of that exposure to other health indices.
- Encourage employees to participate in a blood collection and storage program when they enter into the medical surveillance program. (If necessary, additional samples can be collected periodically.)
  - Ensure that the physicians, occupational health centers, or clinics that serve EPA employees have been informed of the policies and procedures associated with the blood storage program.

The attending physician, occupational health center, or clinic will encourage employees to participate in the blood storage program, and will be responsible for drawing blood and sending serum samples to designated regional storage facilities following appropriate specimen-handling and chain-of-custody procedures. The attending physician will determine (based on information submitted about possible exposures) whether it is necessary to take serum samples out of storage to perform medical evaluations upon them.

## 7.0 TRAINING

EPA emergency response personnel are required to participate in *Medical Surveillance Awareness Training*. This training, which will be about 1-hour in length, should provide information about the medical surveillance program to ensure that employees have an understanding of the basic tests that are required under the program, the circumstances under which additional special testing might be warranted, the vaccinations<sup>3</sup> that EPA makes available under the program, the benefits of participating in the Agency's nonmandatory blood

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<sup>3</sup> Blood borne pathogen program training is covered separately in this manual. Though the blood borne pathogen program is separate from the medical surveillance program, the requirements for vaccinations (e.g., Hepatitis B) do overlap.

storage program, the procedures that should be followed if exposures or injuries occur, and the recordkeeping requirements that should be met to support the medical surveillance program. As part of the initial awareness training, EPA personnel will be reminded of the importance of maintaining their physical fitness.<sup>4</sup>

Each region and EPA Headquarters will be expected to offer the awareness training. It should be provided to each worker before, or at the time of, his or her enrollment into the medical surveillance program. Also, because the medical surveillance program has undergone some changes, those workers who are currently enrolled in the medical surveillance program should also receive the awareness training. Participants will not be tested at the conclusion of the training. Also, they will not be expected to take an annual refresher course specifically devoted to medical-surveillance-related topics. If any changes are implemented to the medical surveillance program after an employee has taken the awareness training, this will be communicated to them as part of their annual 8-hour HAZWOPER health and safety refresher course.

Working together, the SHEMP Manager and the Health and Safety Program Contact will do the following to support the training effort:

- Organize and deliver the awareness training and ensure that it is made available to all emergency response personnel.
- Keep track of who has (or has not) met the training requirements. (The SHEMP Manager should contact those who have not attended the training to let them know that they need to attend the next available training session. In addition, the SHEMP Manager should alert the Removal Manager if an employee is lacking a training requirement since it is ultimately the Removal Manager's responsibility to make sure that his/her employees have participated in the awareness training before allowing them to engage in response activities.
- Issue training certification letters (see [Appendix E](#)) to those who have attended the medical awareness training and make sure the letters are retained in the SHEMP Manager's files.

## **8.0 RECORDKEEPING**

Table 6 summarizes the recordkeeping requirements associated with EPA's medical surveillance program. Proper recordkeeping is essential to enable medical care providers to be informed about emergency response workers' previous and current exposures and to provide documentation of compliance with the national standard for medical surveillance. The goal is to ensure that nationally consistent, readily accessible records are maintained in each region to document the results of medical examinations, employee medical clearance status, vaccination histories, training certification, and occupational exposure data. As explained in detail below, some of these records are considered private medical information, and as such, must be treated as confidential records in accordance with the procedures outlined in EPA Order 1460.1 Section 8(C)(6). (It should be noted that this Implementation Plan is not introducing any changes with regards to who has access to an employee's confidential medical records.)

**TABLE 6:  
MEDICAL SURVEILLANCE RECORD RETENTION REQUIREMENTS**

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<sup>4</sup> Given the fact that EPA emergency responders could be required to don Level A PPE in the field, the Medical Monitoring Workgroup recommends that EPA personnel have access to an Agency-sponsored fitness program.

Required Record	Specified Form	Completed By	Retained By
Medical History/ Examination Results/Other Medical Records	<ul style="list-style-type: none"> <li>• Pages 1–9 of the official <i>EPA Medical Evaluation Form</i> (see <a href="#">Appendix C</a>)</li> <li>• Other information collected during exam (e.g., <a href="#">OSHA’s Respirator Medical Evaluation Questionnaire</a>)</li> </ul>	<ul style="list-style-type: none"> <li>• Physician</li> <li>• Employee</li> </ul>	Physician*
Medical Clearance Statement/ Identification of Limitations	Page 10 of 10 of the official <i>EPA Medical Evaluation Form</i> (see <a href="#">Appendix C</a> )	EPA Medical Review Officer	<ul style="list-style-type: none"> <li>• EPA Medical Review Officer</li> <li>• SHEMP Manager</li> <li>• Employee</li> </ul>
Vaccinations	Vaccine Administration Record (see <a href="#">Appendix D</a> )	Physician	Physician
	CDC Vaccination Card (HHS Form PHS 731)	Physician	<ul style="list-style-type: none"> <li>• Physician</li> <li>• SHEMP Manager</li> <li>• Employee</li> </ul>
Training Certification	Letter (see <a href="#">Appendix E</a> )	SHEMP Manager	<ul style="list-style-type: none"> <li>• SHEMP Manager</li> <li>• Employee</li> </ul>
Occupational Exposures	Exposure, Injury, and Dosimetry Tracking Form (see <a href="#">Appendix F</a> )	Employee	<ul style="list-style-type: none"> <li>• SHEMP Manager</li> <li>• Employee</li> </ul>
	Supervisor’s Report of Accident/Illness (cover memo and EPA Form 1440-9) (see <a href="#">Appendix G</a> )	<ul style="list-style-type: none"> <li>• Employee</li> <li>• Supervisor</li> </ul>	<ul style="list-style-type: none"> <li>• Employee</li> <li>• Supervisor</li> <li>• SHEMP Manager</li> </ul>
Medical Surveillance Program Audit Form	Checklist (see <a href="#">Appendix H</a> )	SHEMP Manager (with assistance of Removal Manager and Health and Safety Program Contact)	SHEMP Manager

\* Medical data may be released to the SHEMP Manager or his/her designee to support program evaluation efforts, but personal identifiers need to be removed prior to data release.

Storage and access to relevant medical records by employees and their designated representatives will be conducted in accordance with [OSHA 29 CFR 1910.1020](#) (“*Access to employee exposure and medical records*”) or other standards as applicable, and are not detailed in this Implementation Plan.

## 8.1 Medical History, Examination Results, or Other Medical Information

For each medical examination performed, emergency response personnel and the physician will work together to complete the official *EPA Medical Evaluation Form* (see [Appendix C](#)), which asks for information on medical history, exposure information, and diagnostic results. In addition, completed versions of the [OSHA Respirator Medical Evaluation Questionnaire](#), the physician will keep this on file as well. The physician and occupational health center will maintain the baseline and subsequent examination records, as they are considered confidential medical records and subject to customary patient-physician confidentiality restrictions. The SHEMP Manager will *not* have access to completed medical examination forms. As discussed in Section 8.2, only the *Medical Clearance Statement* (which appears as page 10 of 10 of the *EPA Medical Evaluation Form*) will be provided to the SHEMP Manager.



## 8.2 Medical Clearance Statements/Identification of Limitations

After completion of baseline, annual, or other needed medical examinations, the physician will communicate an opinion regarding whether an employee is medically cleared to perform his/her duties by filling out the information requested on page 9 of the official *EPA Medical Evaluation Form* (see [Appendix C](#)). This information will be sent to EPA's Medical Review Officer, who will in turn, prepare a *Medical Clearance Statement* (i.e., page 10 of the *EPA Medical Evaluation Form*) and submit it to the SHEMP Manager. The SHEMP Manager will retain copies of these forms for each emergency response worker in the region and provide copies to individual employees upon receipt. These records will not include specific medical information; the results and recommendations on the clearance form should be expressed in general terms and not include diagnostic information.

## 8.3 Vaccination Records

Whenever a physician administers a vaccine to an emergency responder, the physician will document this event on a *Vaccine Administration Record* (see [Appendix D](#)) that will be retained in the physician's files. In addition, a complete record of an individual's vaccination history will also be recorded on the standard CDC Vaccination Card (HHS Form PHS 731), which will be updated and certified by the medical provider annually or as appropriate. A copy of this card will be kept on file with the medical provider and the SHEMP Manager, but also retained by the employee and carried to work sites. (*Note: CDC Vaccination Cards can be purchased online at <http://bookstore.gpo.gov> or by calling 202-512-1708.*)

## 8.4 Training Certification

When a worker completes the medical surveillance awareness training course, the SHEMP Manager or the Health and Safety Program Contact will provide a written certification letter to the worker ([Appendix E](#) provides an example of a training certification letter). A copy of the letter should be retained by the SHEMP Manager and the individual employee.

## 8.5 Tracking Occupational Exposures

Quarterly recording of potential exposures may improve the accuracy and effectiveness of tracking potential exposures for response personnel, versus what might be recalled and reported at the annual medical examination. As such, emergency response personnel will be required to complete the *Exposure, Injury, and Dosimetry Tracking Form* ([Appendix F](#)) and provide copies to the SHEMP Manager on a quarterly basis. The Health and Safety Program Contact will assist with this effort by providing the tracking forms to employees, communicating the reporting requirements to them, and making sure that emergency response personnel are indeed submitting their forms on a quarterly basis. The data presented on the exposure forms is not considered medically confidential. By allowing the SHEMP Manager to have access to this information, he or she will be in a better position to evaluate exposure reports and coordinate with the employee and the physician about which type of testing might be warranted during an employee's medical examination. The exposure forms that an employee completes over the course of a year can be submitted to the physician during the employee's medical examination, in lieu of completing the exposure history section of the *EPA Medical Evaluation Form*.

Emergency response personnel who receive any type of occupational exposure must report the exposure immediately to their direct supervisor. Procedures that emergency responders should follow when they encounter non-life threatening exposures are summarized in [Appendix B](#); workers should ensure that they have a copy of these procedures with them when working in the field on assignment. In addition, when



exposures or injuries occur, the worker must also submit the following two forms to their supervisors: (1) Cover Memo to EPA Form 1440-9, “Supervisor’s Report of Accident/Illness,” and (2) EPA Form 1440-9, “Supervisor’s Report of Accident/Illness.” Both of these forms are included in [Appendix G](#). The worker’s supervisor will complete the forms and provide copies to the SHEMP Manager, who in turn will ensure that any other required forms are filled out and that any other necessary parties are notified (as required) of the occupational exposure. In addition, the SHEMP Manager will investigate any reported accidents, injuries, or illnesses and followup with an independent report.

If a worker reports an accident or illness, it is that worker’s responsibility to consult the SHEMP Manager for advice and to inform the supervisor if he or she wants or needs follow-up medical evaluation, treatment, or time off from work. The SHEMP Manager (with the assistance of the Health and Safety Program Contact) shall initiate procedures for follow-up care or worker’s compensation as warranted. The worker’s supervisor shall retain approval authority in worker’s compensation and follow-up medical care cases. In an emergency situation in which immediate medical care is warranted, the appropriate forms may be submitted after the emergency medical care has been provided.

## **8.6 Audit Form**

As described in Section 9 of this Implementation Plan, the SHEMP Manager (with the assistance of the Removal Manager and the Health and Safety Program Contact) is expected to complete the *Medical Surveillance Program Audit Form* ([Appendix H](#)) on an annual basis and to keep a copy of the completed form in his or her files.

## **9.0 AUDITS AND PROGRAM EVALUATION**

Evaluations should be performed to ensure that EPA’s medical surveillance program is being implemented consistently across the nation and that the program is performing adequately. Toward this end, the Medical Monitoring Workgroup recommends performing internal, as well as external audits, on an annual basis.

### **9.1 Internal Audit/Program Evaluation**

The Removal Manager, SHEMP Manager, and the Health and Safety Program Contact should work together to evaluate their region’s medical surveillance program on an annual basis. The goal of the evaluation will be two-fold: (1) ensure that the medical surveillance program is being implemented in accordance with the national minimum standards identified in this Implementation Plan, and (2) determine whether the medical surveillance program is meeting its ultimate objective, which is to provide the means of detecting deviations in employee health status, ensure that employees are capable of performing job duties, and evaluate trends in disease and injury incidence.

[Table 7](#) summarizes the questions that the SHEMP Manager (with assistance from the Removal Manager and the Health and Safety Program Contact) should evaluate during the audit and program evaluation process. The first activity listed in the table—which involves evaluating program implementation—can be accomplished by filling out the checklist included as [Appendix H](#). (This checklist should be filled out annually and kept on file with the SHEMP Manager.) After completing the checklist, each region should be able to assess whether its medical surveillance program is consistent with the national minimum standards outlined in this Implementation Plan. If deficiencies are identified during the audit process, the SHEMP Manager will take measures to fix these deficiencies so as to comply with EPA’s national minimum standards.

As for the last three activities listed in Table 7, all of which involve assessing program performance, the SHEMP Manager will be expected to perform a broad analysis (as opposed to a rigid scientific statistical evaluation) of the data presented in employee *Exposure, Injury, and Dosimetry Tracking Forms, Illness/Injury Reports, and Medical Clearance Statements*. Such analyses will help the SHEMP Manager determine whether there are deviations in workforce health status and whether trends are related to occupational exposures. If so, he or she will be expected to advocate for corrective actions that can be taken to better protect EPA emergency response personnel.

**TABLE 7:  
FRAMEWORK FOR INTERNAL AUDITS AND PROGRAM EVALUATIONS**

Activity/Goal	Sample Evaluation Questions
Ensure that the medical surveillance program is being implemented in accordance with the national minimum standards identified in this <i>Medical Surveillance Program Implementation Plan</i>	<a href="#">Appendix H</a> provides a list of questions that should be answered to determine whether the procedures outlined in this Implementation Plan are being followed.
Detect deviations in employee health status	<ul style="list-style-type: none"> <li>• Is the region receiving adequate data to identify deviations?</li> <li>• Are appropriate follow-up actions being taken based on the findings of the medical examination?</li> </ul>
Determine ability to safely perform assigned tasks	<ul style="list-style-type: none"> <li>• Are <i>Medical Clearance Statements</i> submitted in a consistent way and on a timely basis?</li> <li>• Is the region following up appropriately based on physician opinion?</li> </ul>
Evaluate trends in disease and injury incidence and identify needed intervention	<ul style="list-style-type: none"> <li>• Are reported diseases/injuries correlated with exposures?</li> <li>• Were illnesses or injuries properly investigated to determine causes and to make necessary changes to the program?</li> <li>• Did reported exposures, disease, or injuries trigger appropriate follow-up action or testing?</li> <li>• Do emerging trends suggest need for program modification?</li> <li>• Are mechanisms in place to develop a plan of action to follow up on the trend and decide if changes need to be made to the program?</li> </ul>

## 9.2 External Evaluations

Once a year, representatives from the Core ER team visit each EPA region to examine the elements of the region's health and safety program. As part of this effort, Core ER representatives will be expected to evaluate each region's medical surveillance program and to pay specific attention to whether the program is being implemented in a consistent fashion across the nation. The Removal Manager, SHEMP Manager, and Health and Safety Program Contact will work with the Core ER representatives to ensure that they have the information they need to perform an evaluation.

## **APPENDIX A:**

### **Designation of Roles and Responsibilities To Support EPA's Medical Surveillance Program Implementation Plan**

### **Background Information:**

The table presented in this appendix (i.e., Table A-1) presents a list of tasks that should be performed to ensure the smooth operation of a medical surveillance program.

The tasks are listed in rows. EPA position titles (e.g., the Removal Manager or the Health and Safety Program Contact) are listed in columns. Check marks are used to assign each task to a specific individual. The Medical Monitoring Workgroup has assigned each task to a specific position title. (For some of the tasks, a check mark has been placed in two or more columns to indicate that more than one individual bears some responsibility for that task.) **Please note that regional representatives can move the pre-filled check marks to re-delegate tasks if doing so makes sense for a particular region.**

### **Instructions:**

The major stakeholders who are responsible for implementing their region's medical surveillance program are expected to review and complete Table A-1 on a regular basis. When doing so, care should be taken to:

1. Fill in the background information that is requested at the top of the page on page A-3. For example, indicate when the table is being updated and who is doing the updating.
2. Fill in actual names under the position titles.
3. Add columns to include additional key players (if necessary).
4. Determine whether any of the recommended task assignments should be delegated to another person. (If so, move the checkmarks to re-assign the task.)
5. Ensure that each task has indeed been assigned to a specific person in the region.

**TABLE A-1: TASK CHART FOR IMPLEMENTING REGIONAL MEDICAL SURVEILLANCE PROGRAMS**

Region           

Last Updated on: Month Day, Year.

Updated by   .

ROLES ▶	Who is Responsible for Each Task or Action?							
	Removal Manager	SHEMP Manager	Health and Safety Program Contact	Physicians	Emergency Response Personnel	Supervisors	Other individuals with specially designated responsibilities (EPA employees, contractors, etc.)	
	<span style="background-color: yellow;">(Name)</span>	<span style="background-color: yellow;">(Name)</span>	<span style="background-color: yellow;">(Name)</span>	<span style="background-color: yellow;">(Names)</span>	<span style="background-color: yellow;">(Names)</span>	<span style="background-color: yellow;">(Names)</span>	<span style="background-color: yellow;">(Name)</span>	<span style="background-color: yellow;">(Name)</span>
General Managerial Tasks Performed to Support the Medical Surveillance Program								
1. Ensure that the <i>Medical Surveillance Program Implementation Plan</i> is customized with region-specific information. For example, fill region-specific information into the yellow-highlighted blank spaces that appear in <a href="#">Appendix B</a> . In addition, ensure that all of the tasks listed in Table A-1 are assigned to specific individuals.		✓						
2. On a regular basis, call together the major stakeholders involved in implementing the region's medical surveillance program to discuss the status of the program and to determine whether it is necessary to update the region-specific information that appears in the <i>Medical Surveillance Program Implementation Plan</i> . If updates are made, ensure that customized versions of the Plan are distributed to relevant regional stakeholders. In addition, ensure that any other written procedures that relate to the Medical Surveillance Program are kept current and that copies are provided to the appropriate individuals/organizations.		✓						
3. Administer the medical surveillance program in accordance with the national minimum standards outlined in this <i>Medical Surveillance Program Implementation Plan</i> .	✓	✓						
4. Ensure that EPA emergency response personnel are enrolled in the medical surveillance program. Also, ensure that they all receive a laminated copy of <i>Quick Reference Guide (Relating to Medical Surveillance)</i> for EPA Emergency	✓	✓						

ROLES ▶	Who is Responsible for Each Task or Action?							
	Removal Manager	SHEMP Manager	Health and Safety Program Contact	Physicians	Emergency Response Personnel	Supervisors	Other individuals with specially designated responsibilities (EPA employees, contractors, etc.)	
	(Name)	(Name)	(Name)	(Names)	(Names)	(Names)	(Name)	(Name)
<i>Response Personnel.</i> (Note: This guide is included as <a href="#">Appendix B.</a> )								
5. Serve as the regional point of contact on all medical-surveillance-related issues for emergency responders. (Facilitate and coordinate communication between the managers who administer the medical surveillance program and the emergency responders who are subjected to the program.)			✓					
<b>Tasks Associated With Medical Examinations</b>								
6. Participate in baseline, periodic, and exit medical examinations. Provide information about your medical history and exposure profile to physicians.					✓			
7. Ensure that emergency response personnel receive baseline, periodic, and exit examinations. Assist in setting up the examinations if necessary.	✓	✓	✓					
8. Serve as liaison (if necessary) between employees and the SHEMP Manager in addressing special requests for medical examinations or testing.			✓					
9. Provide the following to physicians: (1) a copy of the HAZWOPER standard, (2) a description of the employee's duties and how these duties might lead to potential exposures, (3) information on the employee's exposure levels or anticipated exposure levels, (4) a description of the PPE that the employee has used or plans to use in the future, and (5) information from an employee's previous medical examinations if such information is not readily available to the examining physician.		✓						
10. Determine what level of medical monitoring is necessary to evaluate an employee's health based on his or her medical history and exposure profile.	✓	✓		✓				

ROLES ▶	Who is Responsible for Each Task or Action?							
	Removal Manager	SHEMP Manager	Health and Safety Program Contact	Physicians	Emergency Response Personnel	Supervisors	Other individuals with specially designated responsibilities (EPA employees, contractors, etc.)	
	(Name)	(Name)	(Name)	(Names)	(Names)	(Names)	(Name)	(Name)
11. Perform medical examinations on EPA emergency response personnel. Ensure that the basic examination elements (see <a href="#">Table 2</a> and <a href="#">Table 3</a> of this Implementation Plan) are covered during the examinations and that chemical-specific monitoring is performed if there is concern that a worker has been exposed to a specific chemical. Also, recommend additional testing based on case-specific circumstances.				✓				
12. Complete the official <i>EPA Medical Evaluation Form</i> (see <a href="#">Appendix C</a> of this Implementation Plan) each time an emergency responder receives a medical exam. Keep these forms on file and ensure that they are treated as confidential medical records.				✓				
13. Develop an opinion regarding whether an employee is medically fit to perform his/her job duties. Provide your opinion to EPA's Medical Review Officer, who will in turn, complete the <i>Medical Clearance Statement</i> (page 10 of 10 of the <i>EPA Medical Evaluation Form</i> —see <a href="#">Appendix C</a> ) and submit it to the SHEMP Manager.				✓				
14. Give emergency response personnel copies of the <i>Medical Clearance Statements</i> that have been written on their behalf. Let them know if any restrictions are being placed upon their assigned work load.		✓						
15. Retain records of completed <i>Medical Clearance Statements</i> .		✓		✓	✓			
Tasks Associated with the Immunization Program								
16. Share information about your immunization status with your physician. Give physicians adequate documentation of childhood and other previous vaccinations. If records are not easily found, make an attempt to locate missing records by calling previous health care providers. Or if necessary, allow physicians to perform simple blood tests to determine					✓			

ROLES ▶	Who is Responsible for Each Task or Action?							
	Removal Manager	SHEMP Manager	Health and Safety Program Contact	Physicians	Emergency Response Personnel	Supervisors	Other individuals with specially designated responsibilities (EPA employees, contractors, etc.)	
	(Name)	(Name)	(Name)	(Names)	(Names)	(Names)	(Name)	(Name)
whether you are immunized against certain diseases.								
17. Record and certify workers' vaccination history on standard <i>CDC Vaccination Cards</i> . Update and re-certify this card annually or as appropriate.				✓				
18. Keep copies of <i>CDC Vaccination Cards</i> on file.		✓		✓				
19. Carry copies of your <i>CDC Vaccination Card</i> into the field when working on assignment for the Agency.					✓			
20. Inform emergency response personnel of which vaccines EPA recommends obtaining and let them know that the Agency is willing to provide these vaccines. ( <i>Note: EPA-recommended vaccines are listed in Table 5 of this Implementation Plan.</i> ) Make it clear, however, that the Agency cannot force employees to receive vaccines.		✓	✓					
21. Administer vaccines to EPA employees (if necessary and appropriate) and fill out information on the type of vaccine given and the date it was administered on a <i>Vaccine Administration Record</i> (see <a href="#">Appendix D</a> of this Implementation Plan) and retain this record.				✓				
<b>Tasks Associated with the Blood Storage Program</b>								
22. Take responsibility for developing and coordinating a blood storage program.		✓						
23. Identify a suitable blood storage facility within the region.		✓						
24. Obtain policies and procedures from the blood storage facility on its practices for blood storage, disposal, and recordkeeping.		✓						
25. Distribute written materials (or develop them if necessary) for the blood storage program. For example, distribute information about how serum samples will be collected and stored to give employees assurance regarding the use, security, and final disposition of their blood samples. Also, develop permission sheets for the blood storage program.		✓						



ROLES ►	Who is Responsible for Each Task or Action?							
	Removal Manager	SHEMP Manager	Health and Safety Program Contact	Physicians	Emergency Response Personnel	Supervisors	Other individuals with specially designated responsibilities (EPA employees, contractors, etc.)	
	(Name)	(Name)	(Name)	(Names)	(Names)	(Names)	(Name)	(Name)
26. Ensure that the physicians, occupational health centers, or clinics that serve EPA emergency response personnel have been informed of the policies and procedures associated with the blood storage program.		✓						
27. Encourage employees to participate in the blood storage program when they enter EPA's medical surveillance program.		✓		✓				
28. Draw blood and send serum samples to the designated regional storage facilities following appropriate specimen-handling and chain-of-custody procedures. (Note: This should only be done for employees who have actively chosen to participate in the blood storage program.				✓				
29. Determine whether it is necessary to take serum samples out of storage to perform laboratory tests upon them.				✓				
30. Decide whether you want to participate in a blood storage program. If so, provide written consent expressing your willingness to participate.					✓			
<b>Tasks Associated with Medical Surveillance Awareness Training</b>								
31. Participate in medical surveillance awareness training upon entering the Agency's medical surveillance program.					✓			
32. Organize and deliver the awareness training and ensure that it is made available to all EPA emergency response personnel.		✓	✓					
33. Issue training certification letters (see <a href="#">Appendix E</a> of this Implementation Plan) to emergency response personnel who have attended the awareness training.		✓	✓					
34. Retain copies of completed training certification letters.		✓			✓			
35. Keep track of who has (or has not) met the training requirements.		✓	✓					
36. Alert the Removal Manager if an emergency responder has not received awareness training.		✓						

ROLES ▶	Who is Responsible for Each Task or Action?							
	Removal Manager	SHEMP Manager	Health and Safety Program Contact	Physicians	Emergency Response Personnel	Supervisors	Other individuals with specially designated responsibilities (EPA employees, contractors, etc.)	
	(Name)	(Name)	(Name)	(Names)	(Names)	(Names)	(Name)	(Name)
37. Make sure that emergency responders have participated in awareness training before allowing them to engage in response activities.	✓							
<b>Tasks Associated with Addressing and Tracking Occupational Exposures</b>								
38. Carry customized versions of <a href="#">Appendix B</a> with you when on assignment in the field. Follow the procedures listed under Part II of Appendix B if exposure occurs.					✓			
39. Ensure that EPA emergency response personnel have received blank copies of the <i>Exposure, Injury, and Dosimetry Tracking Form</i> , that they understand the reporting requirements, and that they are indeed submitting the forms to their SHEMP Managers on a quarterly basis.			✓					
40. Set official deadlines for workers to submit their <i>Exposure, Injury, and Dosimetry Tracking Forms</i> to their SHEMP Managers.	✓							
41. Submit <i>Exposure, Injury, and Dosimetry Tracking Forms</i> to your SHEMP Manager on a quarterly basis.					✓			
42. Notify your direct supervisor and your SHEMP Manager if you know (or suspect) that you have been exposed to hazardous substances. Also, fill out: (1) Cover Memo to EPA Form 1440-9, "Supervisor's Report of Accident/Illness," and (2) EPA Form 1440-9, "Supervisor's Report of Accident/Illness." (See <a href="#">Appendix G</a> of this Implementation Plan.) Submit these forms to your direct supervisor. In addition, consult the SHEMP Manager for advice and inform your supervisor if you think you need follow-up medical evaluation, treatment, or time off of work.					✓			
43. Collect EPA Form 1440-9 forms from emergency responders who have received any type of known occupational exposure to radiation. Complete the forms for the workers and provide copies to the SHEMP Manager.						✓		

ROLES ▶	Who is Responsible for Each Task or Action?							
	Removal Manager	SHEMP Manager	Health and Safety Program Contact	Physicians	Emergency Response Personnel	Supervisors	Other individuals with specially designated responsibilities (EPA employees, contractors, etc.)	
	(Name)	(Name)	(Name)	(Names)	(Names)	(Names)	(Name)	(Name)
44. Upon receiving copies of a worker's EPA Form 1440-9, ensure that any other required forms are filled out and that any other necessary parties are notified of occupational exposures that have occurred. Investigate any reported accidents, injuries, or illnesses and followup with an independent report. Also, if necessary, initiate procedures for follow-up medical care or worker's compensation.		✓						
45. Assist the SHEMP Manager (if called upon to do so) in helping emergency response personnel gain access to appropriate followup services in the event of an injury or exposure.			✓					
Tasks Associated with Audits and Program Evaluation								
46. Perform internal audits and program evaluations to determine whether the medical surveillance program is: <ul style="list-style-type: none"> <li>• Being implemented in accordance with the national minimum standards identified in this Implementation Plan.</li> <li>• Meeting its ultimate objective (i.e., providing the means of detecting deviations in employee health status, ensuring that employees are capable of performing assigned tasks, and evaluating trends in disease and injury incidence.</li> </ul>	✓	✓	✓					
47. Fill out the <i>Medical Surveillance Audit Form</i> (see <a href="#">Appendix H</a> of this Implementation Plan) on an annual basis.	✓	✓	✓					
48. Retain copies of the <i>Medical Surveillance Audit Form</i> .		✓						
49. Take steps to correct any program deficiencies that are identified during internal audits.	✓	✓						
50. Upon request, provide information about the medical surveillance program to Core ER representatives when they visit the region to perform annual health and safety audits.	✓	✓	✓					

## **APPENDIX B:**

### **Quick Reference Guide (Relating to Medical Surveillance) for EPA Emergency Response Personnel**

**Background Information/Instructions:**

This appendix provides tools that are designed to assist emergency response personnel. The two pages that follow provide:

- A checklist of medical-monitoring-related issues that workers should address before going into the field, and
- Information on what personnel should do if they know (or suspect) that they have been exposed to hazardous substances.

This appendix has some blank lines (highlighted in yellow) that need to be filled. Once the appropriate names have been filled into the blanks, the two informational sheets that follow can be printed on one front-and-back page, laminated, and taken to the field.

# Region     : Medical Surveillance Program

## Part I: Checklist for Emergency Responders

### What Do You Need To Do Before Going Into the Field?

---

- |   |            |
|---|------------|
| 1. Have you attended a medical surveillance awareness training session?   | Yes__ No__ |
| If so, do you have a copy of your training certification letter on file?  | Yes__ No__ |
| 1. Are you up-to-date on your medical examinations?   | Yes__ No__ |
| <i>(Note: Exams should be performed [at a minimum] on an annual basis.)</i>   |            |
| 2. When you visit the physician, do you share information about your medical history, occupational history, and exposure history with him or her?   | Yes__ No__ |
| 4. Do you retain records of all of the <i>Medical Clearance Statements</i> that are issued on your behalf?  | Yes__ No__ |
| 3. Have you shared information about your immunization status with your physician, either by providing documentation of past vaccinations or by allowing the physician to perform a simple blood test to determine whether you are immunized against specific diseases? | Yes__ No__ |
| 4. Have you been vaccinated for Influenza A, Hepatitis A, Hepatitis B, and Tetanus-Diphtheria?  | Yes__ No__ |
| If you lack any of these vaccines:  |            |
| • Have you been informed of the fact that EPA is willing to provide these vaccines to you if you desire them?   | Yes__ No__ |
| • Have you consulted your physician about whether you should be vaccinated?   | Yes__ No__ |
| 5. Do you have the most up-to-date copy of your <i>CDC Vaccination Card</i> , and do you maintain it in an accessible location so that you can carry it with you when you are sent into the field?  | Yes__ No__ |
| 5. Have you received information about your region's blood storage program?   | Yes__ No__ |
| 6. Have you decided whether you want to participate in the blood storage program?   | Yes__ No__ |
| If you have decided to participate:   |            |
| • Have you signed a permission sheet?   | Yes__ No__ |
| • Have your blood samples already been drawn and sent to the blood storage facility?  | Yes__ No__ |
| 5. Are you up to date with all of your <i>Exposure, Injury, and Dosimetry Tracking Forms</i> ?  | Yes__ No__ |
| <i>(Note: These forms must be submitted to the SHEMP Manager on a quarterly basis.)</i>   |            |
- 
-

# Region [REDACTED]: Medical Surveillance Program

## Part II: What To Do If You Know (or Suspect) That You Have Been Exposed To Hazardous Substances

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**Step #1:** Follow the emergency procedures that your region has identified for non-life threatening exposure events as shown here:

<b>Emergency Procedures for Non-life Threatening Exposures</b>							
<b>U.S. EPA Region [REDACTED]</b>							
<b>Medical Surveillance Program</b>							
If you have had a significant exposure to a hazardous chemical or toxic substance, please follow these instructions.							
<ol style="list-style-type: none"><li>1. Seek medical care at the nearest medical facility and identify yourself as a participant in the EPA Medical Surveillance Program. Report exposures. Have the name of the substance(s) to which you have been exposed, if known. Describe the symptoms you are experiencing.</li><li>2. To report exposure and receive advice and directions, have the medical facility doctor or nurse contact: <table border="0"><tr><td><b>During duty hours ([REDACTED] a.m. - [REDACTED] p.m)</b></td><td><b>After duty hours:</b></td></tr><tr><td>Name: [REDACTED]</td><td>Name: [REDACTED]</td></tr><tr><td>Contact Info: [REDACTED]</td><td>Contact Info: [REDACTED]</td></tr></table></li></ol>		<b>During duty hours ([REDACTED] a.m. - [REDACTED] p.m)</b>	<b>After duty hours:</b>	Name: [REDACTED]	Name: [REDACTED]	Contact Info: [REDACTED]	Contact Info: [REDACTED]
<b>During duty hours ([REDACTED] a.m. - [REDACTED] p.m)</b>	<b>After duty hours:</b>						
Name: [REDACTED]	Name: [REDACTED]						
Contact Info: [REDACTED]	Contact Info: [REDACTED]						
<ol style="list-style-type: none"><li>3. Have the medical facility perform the tests that [REDACTED] directs to be done.</li><li>4. Inform the medical facility, if treatment is necessary, that a standard authorization for examination and/or treatment form under the Office of Workers Compensation (OWCP) will be forwarded to them by your supervisor.</li><li>5. Immediately inform your supervisor of the exposure incident. (Supervisor approval is not needed before contacting [REDACTED].)</li><li>6. Contact the Regional Health and Safety Office as soon as possible at: [REDACTED].</li></ol>							

**Step #2:** Submit the following forms to your supervisor: (1) Cover Memo to EPA Form 1440-9, "Supervisor's Report of Accident/Illness," and (2) EPA Form 1440-9, "Supervisor's Report of Accident/Illness."

**Step #3:** If illness or injury results, consult the SHEMP Manager for advice and inform your supervisor if you think you need followup medical evaluation or treatment.

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## APPENDIX C:

### The Official *EPA Medical Evaluation Form*

- Medical History/Examination Results (Pages 1 through 9)
- Medical Clearance Statement (Page 10 of 10)



EPA Medical Evaluation Form (revised 11/04)  
National Medical Surveillance Program  
BCA05EP20012

*EMPLOYEE TO COMPLETE ALL INDICATED AREAS PRIOR TO APPOINTMENT.*

Health Center - COPY completed form and attach COPY of completed screening, diagnostic, and all laboratory tests to send to Stacy Gordon

<b>EMPLOYEE TO COMPLETE</b> Client SS#: _____ SHEMP Manager _____  Client Name: _____  Client's Home Address: _____  Provider Name(s): _____		<b>HEALTH CENTER STAMP</b>   <b>*Periodicity of exams</b> a. Conducted Annually if: 1. Over age 40 2. Known significant medical problem 3. Hazmat team member 4. Engaged in field or lab activity > 30 days per year 5. Exposure to substance mandating annual medical surveillance b. All other exams conducted every other year
<b>DEMOGRAPHIC DATA (Employee to complete)</b>		
Name:	Position Title:	Work Phone #:
SS#:	Date of Birth:	Sex:
Date of Testing:	Supervisor Name:	Supervisor Work Phone #
<b>PROVIDERS PLEASE NOTE – CORE EXAM MUST ALWAYS BE COMPLETED</b>		
<b>BASELINE / EXIT CORE EXAM*</b> <b>OCCUPATIONAL HEALTH EVALUATION</b> <b>(nurse to complete)</b> <u>Required Services:</u> (Check when test performed.) <input type="checkbox"/> FOH Profile, Blood and Urine <input type="checkbox"/> Audiometry <input type="checkbox"/> EKG <input type="checkbox"/> Spirometry <input type="checkbox"/> Vision Screening <input type="checkbox"/> Chest X-Ray - PA <input type="checkbox"/> General Physical Examination <input type="checkbox"/> General Medical History  <u>If indicated services:</u> (Check when test performed.) <input type="checkbox"/> Stress EKG (per MRO only) <input type="checkbox"/> Tetanus Immunization (every 10 years)	<b>PERIODIC CORE EXAM*</b> <b>OCCUPATIONAL HEALTH EVALUATION</b> <b>(nurse to complete)</b> <u>Required Services:</u> (Check when test performed.) <input type="checkbox"/> FOH Profile, Blood and Urine <input type="checkbox"/> Vision Screening <input type="checkbox"/> Audiometry <input type="checkbox"/> General Physical Examination <input type="checkbox"/> General Medical History <input type="checkbox"/> Spirometry (for Respirator Certification)  <u>If indicated services:</u> (Check when test performed.) <input type="checkbox"/> EKG (initially, at age 40, every 5 years thereafter) <input type="checkbox"/> Stress EKG (per MRO only) <input type="checkbox"/> Tetanus Immunization (every 10 years) <input type="checkbox"/> Chest X-Ray - PA (initially, when medically indicated, at exit) <input type="checkbox"/> Spirometry (if indicated)	<b>MEDICAL SURVEILLANCE</b> <b>-SPECIAL PROFILES</b> <b>(Employee check all that apply)</b> <input type="checkbox"/> EPA Divers <input type="checkbox"/> Lab Employees <input type="checkbox"/> Clean Air Inspector/Enforcement Officers <input type="checkbox"/> FIFRA Enforcement Officers <input type="checkbox"/> Pesticide Laboratory Workers <input type="checkbox"/> Emergency Response & On-Scene Coordinators <input type="checkbox"/> Animal Handler <input type="checkbox"/> Field Sampling Personnel <input type="checkbox"/> Remedial Project Officers <input type="checkbox"/> TSCA Enforcement Officers <input type="checkbox"/> RCRA Enforcement Officers <input type="checkbox"/> NESHAPS/AHERA (Asbestos Enforcement Officers) <input type="checkbox"/> Wetlands Staff <input type="checkbox"/> Radiation Staff <input type="checkbox"/> U.S.T. Inspectors <input type="checkbox"/> NPDES Inspectors <input type="checkbox"/> Others

\*This examination does not substitute for a periodic health examination by your private provider. It is being conducted for occupational purposes.



## SPECIALTY EXAMINATIONS

(nurse to complete)

### ☐ EPA Divers - workorder #886

- ☐ Baseline/Exit Exam
  - ☐ Respirator Clearance
- ☐ Periodic Exam
  - ☐ EKG (annually after age 25)
  - ☐ Chest X-Ray (every 2 yrs after age 40)
  - ☐ Respirator Clearance
  - ☐ If diver will be participating in NOAA diving program, then complete SF 88 and 93 and attach to this exam.
  - ☐ Wrist size measured (Measure in inches with cloth tape over "two knobs" above hand.)

### ☐ Pesticide Laboratory Worker - workorder #901

- ☐ Baseline/Exit Exam
  - ☐ Blood Lead
  - ☐ Urine Heavy Metals
  - ☐ RBC and Serum Cholinesterase
  - ☐ Respirator Clearance
- ☐ Periodic Exam
  - ☐ RBC Cholinesterase
  - ☐ Respirator Clearance

### ☐ Remedial Project Officers - workorder #891

- ☐ Baseline/Exit Exam
  - ☐ RBC and Serum Cholinesterase
  - ☐ Blood Lead
  - ☐ Respirator Clearance
- ☐ Periodic Exam
  - ☐ Blood Lead
  - ☐ Respirator Clearance (if indicated)

### ☐ NESHAPS/AHERA - workorder #890

(Asbestos Enforcement Officers)

- ☐ Baseline/Exit Exam
  - ☐ B-Reading and Chest X-Ray
  - ☐ Respirator Clearance
- ☐ Periodic Exam
  - ☐ Chest X-Ray (in accordance with OSHA guidelines)
  - ☐ Respirator Clearance

### ☐ U.S.T. Inspectors - workorder #896

- ☐ Baseline/Exit Exam
  - ☐ Core Component Only
- ☐ Periodic Exam
  - ☐ Core Component Only

### ☐ Lab Employees-workorder #884

- ☐ Baseline/Exit Exam
  - ☐ RBC and Serum Cholinesterase
  - ☐ Blood Lead
  - ☐ Serum PCB
  - ☐ Respirator Clearance (if on emergency team)
  - ☐ Urine Heavy Metal
- ☐ Periodic Exam
  - ☐ Blood Lead
  - ☐ Respirator Clearance (if on emergency team)

### ☐ Emergency Response & On-Scene Coordinators-workorder #889

- ☐ Baseline/Exit Exam
  - ☐ RBC and Serum Cholinesterase
  - ☐ Respirator Clearance
  - ☐ Blood Lead
- ☐ Periodic Exam
  - ☐ Blood Lead
  - ☐ Respirator Clearance
  - ☐ RBC Cholinesterase

### ☐ TSCA Enforcement Officers - workorder #894

- ☐ Baseline/Exit Exam
  - ☐ RBC and Serum Cholinesterase
  - ☐ Blood Lead
  - ☐ Serum PCB
  - ☐ Respirator Clearance
- ☐ Periodic Exam
  - ☐ Core Component Only

### ☐ Wetlands Staff - workorder #893

- ☐ Baseline/Exit Exam
  - ☐ Lyme Disease Titer, IgG only
- ☐ Periodic Exam
  - ☐ Core Component Only

### ☐ NPDES Inspectors - workorder #896

- ☐ Baseline/Exit Exam
  - ☐ Core Component Only
- ☐ Periodic Exam
  - ☐ Core Component Only

### ☐ Clean Air Inspector/Enforcement Officers-workorder #897

- ☐ Baseline/Exit Exam
  - ☐ Blood Lead
- ☐ Periodic Exam
  - ☐ Blood Lead

### ☐ FIFRA Enforcement Officers-workorder #888

- ☐ Baseline/Exit Exam
  - ☐ RBC and Serum Cholinesterase
- ☐ Periodic Exam
  - ☐ RBC Cholinesterase

### ☐ Field Sampling Personnel - workorder #892

- ☐ Baseline/Exit Exam
  - ☐ Blood Lead
  - ☐ RBC and Serum Cholinesterase
  - ☐ Respirator Clearance
- ☐ Periodic Exam
  - ☐ Blood Lead
  - ☐ Respirator Clearance

### ☐ RCRA Enforcement Officers-workorder #899

- ☐ Baseline/Exit Exam
  - ☐ RBC and Serum Cholinesterase
  - ☐ Respirator Clearance (if on emergency response team)
  - ☐ Blood Lead
- ☐ Periodic Exam
  - ☐ RBC and Serum Cholinesterase
  - ☐ Respirator Clearance (if on emergency response team)

### ☐ Radiation Staff - workorder #896

- ☐ Baseline/Exit Exam
  - ☐ Respirator Clearance (if on emergency response team or as needed)
- ☐ Periodic Exam
  - ☐ Respirator Clearance (if on emergency response team or as needed)

### ☐ Others - workorder #896

- ☐ Baseline/Exit Exam
  - ☐ Core Component Only
- ☐ Periodic Exam
  - ☐ Core Component Only

MEDICAL HISTORY (Employee to complete all below)		DIAGNOSTIC AND PHYSICAL FINDINGS (nurse or doctor to complete as indicated)			
<b>VASCULAR</b> <div> <div>Enlarged superficial veins</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Hardening of the arteries</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>High blood pressure</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Stroke</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Transient Ischemic Attack (TIA)</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Aneurysm (dilated arteries)</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Poor circulation to hands and feet</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>White fingers with cold/vibration</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div>		<b>CARDIO/PULMONARY</b> <b>Examining Physician to complete)</b> <div> <div>Normal</div> <div><input type="checkbox"/></div> </div> <div> <div>Abnormal</div> <div><input type="checkbox"/></div> </div> <div> <div>EKG (attach with interpretation.)</div> <div><input type="checkbox"/></div> </div> <div> <div>Lungs/Chest (includes breast)</div> <div><input type="checkbox"/></div> </div> <div> <div>Heart (thrill, murmur)</div> <div><input type="checkbox"/></div> </div> <div> <div>Vascular</div> <div><input type="checkbox"/></div> </div> <b>Pulmonary Function Testing:</b> (Attach copy)		<b>CHEST X-RAY (nurse to complete)</b> <div> <div>Last PA chest X-ray: Date _____</div> </div> <div> <div>Result: <input type="checkbox"/> Normal <input type="checkbox"/> Abnormal</div> </div> <div> <div>Comments: _____</div> </div>	
<b>RESPIRATORY</b> <div> <div>Asthma (incl. exercise induced asthma) <input type="checkbox"/></div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Bronchitis</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Emphysema</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Acute or chronic lung infections</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Wind pipe or lung surgery</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Collapsed lung</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Scoliosis (curved spine) with breathing limitations</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>History of tuberculosis</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div>		<div> <div>% Predicted FVC</div> <div>_____</div> </div> <div> <div>% Predicted FEV1</div> <div>_____</div> </div> <div> <div>% Predicted FEV1/FVC</div> <div>_____</div> </div> <div> <div>% Predicted FEF 25-75</div> <div>_____</div> </div>	<b>(nurse to complete)</b> <div> <div>Height _____ Weight _____</div> </div> <div> <div>Blood pressure _____ mm/hg Pulse _____ /MIN</div> </div> <div> <div>Respirations _____ /MIN Temp (if indicated) _____</div> </div>		
		<div> <div>(In liters)</div> <div>_____</div> </div>		<div> <div>_____</div> </div>	
		<div> <div>Comments: Findings</div> </div>		<b>IMMUNIZATIONS</b> <div> <div>Tetanus (Td) date: _____</div> </div>	
<b>HEART</b> <div> <div>Heart pain (angina)</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Heart rhythm disturbance</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>History of heart attack</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Organic heart disease</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>(including: prosthetic heart valves, mitral stenosis, heart block, pacemakers, Wolf Parkinson White (WPW) syndrome)</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Heart surgery</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Mitral valve prolapse</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Palpitations (irregular heart beat)</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Sudden loss of consciousness</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div>		<b>CARDIAC RISK PROFILE:</b> (Nurse to complete) <div> <div>Chol _____</div> </div> <div> <div>HDL _____</div> </div> <div> <div>LDL _____</div> </div> <div> <div>Trig _____</div> </div> <div> <div>Gluc _____</div> </div>		<b>CORONARY RISK FACTORS</b> <b>(nurse to complete)</b> <div> <div>Blood pressure <math>\geq</math> 145/90</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Fasting glucose <math>\geq</math> 120mg/dl</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Total cholesterol <math>\geq</math> 200 mg/dl <input type="checkbox"/></div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Family history of CVD in members <math>\leq</math> 55</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Obesity</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>No regular exercise program</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div> <div> <div>Currently smoking or <math>\geq</math> pack/yr history</div> <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> </div>	
<b>Physical Activity or Exercise Program (Check one.)</b> <div> <div>Intensity: Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/></div> </div> <div> <div>Activity _____ Frequency _____ Day per week _____</div> </div> <div> <div>Duration _____ Minutes _____</div> </div>		<b>(Employee to complete)</b> <div> <div>Have you been hospitalized or had surgery in the last 2 years? <input type="checkbox"/> Yes <input type="checkbox"/> No</div> </div> <div> <div>If yes, please describe:</div> <div>_____</div> <div>_____</div> <div>_____</div> </div> <div> <div>ALLERGIES: _____</div> </div>			

Client Name: \_\_\_\_\_

Date: \_\_\_\_\_

MEDICAL HISTORY (Employee to complete all on this page)	Client Name	P. 4 of 10
<b>WELLNESS/HEALTH PROFILE</b> <b>Smoking History</b> This information is needed since smoking increases your risk for lung cancer and several other types of cancer, chronic bronchitis, emphysema, asbestos-related lung diseases, coronary heart disease, high blood pressure, and stroke. Please check your smoking status and complete that section: • <b>Never Smoked</b> • <b>Current Smoker</b> Number of cigarettes per day _____ Number of cigars per day _____ Number of pipe bowls per day _____ Total years you have smoked _____ • <b>Former Smoker</b> Number of cigarettes per day _____ Number of cigars per day _____ Number of pipe bowls per day _____ Total years you smoked _____ • <b>Chronic exposure to environmental tobacco smoke</b> <b>Alcohol/Drug Use</b> What is your average alcohol consumption in a week? _____drinks (1 drink = 12 oz. beer, 1 glass wine, or 1.5 oz liquor)  How often do you drink alcohol? <input type="checkbox"/> Weekdays <input type="checkbox"/> Weekends <input type="checkbox"/> Both  Do you use recreational drugs? <input type="checkbox"/> Currently <input type="checkbox"/> Previously <input type="checkbox"/> Never		
<b>Animal Handler Questions</b>  List type of OCCUPATIONAL animal exposure:  <div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <input type="checkbox"/> Non-human Primates &amp; their tissue/fluid  <input type="checkbox"/> Pregnant mammals (non-rodents)  <input type="checkbox"/> Venomous Animals (including snakes)  <input type="checkbox"/> Wild-caught Mammals &amp; Birds  <input type="checkbox"/> Bats  <input type="checkbox"/> Birds  <input type="checkbox"/> <b>Standard Lab Animals (usual EPA exposure = mice, rats, rabbits, dog, cats, pigs, etc.)</b>  <input type="checkbox"/> Other Species               </div> <div style="width: 30%; text-align: right;"> <b>Yes</b>   <b>No</b> </div> </div> <b>Animal Handler Medical History Concerns:</b> <input type="checkbox"/> Known allergies or suspected allergies to animals <input type="checkbox"/> Chronic health problems such as diabetes <input type="checkbox"/> Serious renal or liver disease <input type="checkbox"/> Valvular heart disease <input type="checkbox"/> Immune system deficiencies or other limitations to your ability to fight off disease <input type="checkbox"/> Current therapy with high dose steroids, radiation therapy or cancer therapies <input type="checkbox"/> History of problems with your spleen or absence of spleen <input type="checkbox"/> Pregnant or planning to get pregnant? Exposure to animals outside the workplace. If “yes”, please describe.		
<b>RESPIRATOR CLEARANCE QUESTIONS</b>  <input type="checkbox"/> My position does not require the use of a respirator <b>(If selected, <u>DO NOT</u> complete questions below)</b> <b><u>(NO PERIODIC SPIROMETRY IF THIS CHOICE INDICATED, ONLY BASELINE AND EXIT)</u></b> <input type="checkbox"/> My position may require the use of a respirator <b>(If selected, <u>DQ</u> complete questions below)</b> <b><u>(PERFORM SPIROMETRY IF THIS CHOICE INDICATED)</u></b>  <b>What type of respirator do/will you us:</b> <input type="checkbox"/> Cartridge <input type="checkbox"/> Air Supply <input type="checkbox"/> SCBA  <b>How often do you use a respirator?</b> <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> <two times a year  <b>Effort while using respirator?</b> <input type="checkbox"/> Light <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy <b>Hazards present during use?</b> <input type="checkbox"/> High altitude <input type="checkbox"/> Temp extremes <input type="checkbox"/> Confined Spaces		
<b>Have you ever had, or do you now have any of the following?</b> Please check all that apply and use the space below to comment on positive responses. <div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <b>Yes</b>   <b>No</b>  <input type="checkbox"/> <input type="checkbox"/> Persistent Cough  <input type="checkbox"/> <input type="checkbox"/> Heart Trouble  <input type="checkbox"/> <input type="checkbox"/> Shortness of breath  <input type="checkbox"/> <input type="checkbox"/> History of fainting or seizures  <input type="checkbox"/> <input type="checkbox"/> Fear of tight or enclosed spaces  <input type="checkbox"/> <input type="checkbox"/> Sensation of smothering  <input type="checkbox"/> <input type="checkbox"/> Heat exhaustion or heat stroke  <input type="checkbox"/> <input type="checkbox"/> Contact lenses or eyeglasses  <input type="checkbox"/> <input type="checkbox"/> Other conditions that might interfere with respirator use or result in limited work activity               </div> <div style="width: 30%; text-align: right;"> <b>Yes</b>   <b>No</b> </div> </div> Client comments regarding positive responses to Respirator Clearance Questions:		
<b>Animal Handler Occupational Concerns</b> <input type="checkbox"/> Is animal husbandry an essential part of your duties (i.e., provide food/water, clean cages, groom animals, etc.)? <input type="checkbox"/> What % of your day are you in direct contact with animals or their blood, tissues, fluids? _____ <input type="checkbox"/> Does your work require you to use infectious agents in animals? <input type="checkbox"/> Since your last exam have you experience any of the following in relation to your animal exposure duties: <div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <input type="checkbox"/> Sneezing and runny nose  <input type="checkbox"/> Skin eruptions including hives  <input type="checkbox"/> Cough  <input type="checkbox"/> Chest tightness  <input type="checkbox"/> Wheezing  <input type="checkbox"/> Shortness of breath               </div> <div style="width: 30%; text-align: right;"> <b>Yes</b>   <b>No</b>  <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"/> </div> </div>		
<b>DERMATOLOGY</b> Sun sensitivity <input type="checkbox"/> <input type="checkbox"/> Allergic dermatitis to rubber <input type="checkbox"/> <input type="checkbox"/> History of chronic dermatitis <input type="checkbox"/> <input type="checkbox"/> Active skin disease <input type="checkbox"/> <input type="checkbox"/> Moles that change in size or color <input type="checkbox"/> <input type="checkbox"/>		
<b>U.S. EPA DIVER QUESTIONS</b> List Type or Types of Breathing apparatus/regulators used while diving:  Level of Work Effort (Circle one): Light      Moderate      Heavy      Strenuous Extent of Usage: <input type="checkbox"/> On a daily basis <input type="checkbox"/> Occasionally - but more than once a week <input type="checkbox"/> Rarely - or for emergency situations only Length of time of Anticipated Effort in Hours: _____ Special Work Considerations (i.e., extra cold water, polluted water, deep diving, etc.) _____  <div style="text-align: center;"><b>DIVING HISTORY</b></div> How many dives (wet) do you perform per year (on average)? _____ How many chamber dives per year? _____ How deep do you dive, on average? _____ Do you perform moderate or heavy physical labor at depth? <input type="checkbox"/> Never <input type="checkbox"/> Rarely <input type="checkbox"/> Sometimes <input type="checkbox"/> Usually <input type="checkbox"/> Always <b>History of:</b> Decompression sickness _____ Arterial gas embolism _____ Ear barotrauma _____ Pulmonary barotrauma _____ Marine envenomation _____ Disease from exposure to cold, heat _____ Have you ever been restricted in your diving duties due to a medical condition? If yes, explain: _____  Have you ever required hyperbaric oxygen therapy? If yes, explain: _____  <div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <b>MENTAL HEALTH</b>            Depression      <input type="checkbox"/> <input type="checkbox"/>            History of psychosis      <input type="checkbox"/> <input type="checkbox"/>            Poor adaptation to stress      <input type="checkbox"/> <input type="checkbox"/>            Anxiety or phobia disorder      <input type="checkbox"/> <input type="checkbox"/>            Panic attacks, hyperventilation      <input type="checkbox"/> <input type="checkbox"/>            Uncontrollable rage      <input type="checkbox"/> <input type="checkbox"/>            Claustrophobia      <input type="checkbox"/> <input type="checkbox"/>            Diagnosed personality disorder or neuroses      <input type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 30%; text-align: right;"> <b>Yes</b>   <b>No</b> </div> </div>		
<div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <b>ENDOCRINE</b>            Diabetes (requiring insulin)      <input type="checkbox"/> <input type="checkbox"/>            Diabetes (not requiring insulin)      <input type="checkbox"/> <input type="checkbox"/>            Childhood Onset Diabetes      <input type="checkbox"/> <input type="checkbox"/>            Thyroid Disease      <input type="checkbox"/> <input type="checkbox"/>            Obesity      <input type="checkbox"/> <input type="checkbox"/>            Unexplained weight loss or gain      <input type="checkbox"/> <input type="checkbox"/> </div> <div style="width: 30%; text-align: right;"> <b>Yes</b>   <b>No</b> </div> </div>		
List all current prescription & over counter medications you are taking.		



MEDICAL HISTORY (Employee to complete all below)			DIAGNOSTIC AND PHYSICAL FINDINGS (Examining Physician to complete)		
<b>MUSCULOSKELETAL</b> <div> <div>Moderate to severe arthritis, tendonitis</div> <div>Amputations</div> <div>Loss of use of arm or leg</div> <div>Aseptic bone necrosis</div> <div>Chronic back pain</div> <div>(back pain associated with neurological deficit)</div> </div> <div> <div>Yes</div> <div>No</div> </div>			<div> <div>Normal</div> <div>Abnormal</div> </div> <div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> </div> <div> <div>Upper extremities (strength)</div> <div>Upper extremities (range of motion)</div> <div>Lower extremities (strength)</div> <div>Lower extremities (range of motion)</div> </div>		Comments/Findings:
<b>NEUROLOGICAL</b> <div> <div>Any neurological disease</div> <div>Seizures</div> <div>Spinal Cord Injury</div> <div>Numbness or tingling</div> <div>Head/spine surgery</div> <div>History of head trauma with persistent deficits</div> <div>Chronic recurring headaches (migraine)</div> <div>Brain tumor</div> <div>Loss of memory</div> <div>Insomnia (difficulty sleeping)</div> </div> <div> <div>Yes</div> <div>No</div> </div>			<div> <div>Normal</div> <div>Abnormal</div> </div> <div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> </div> <div> <div>Cranial Nerves</div> <div>Cerebellum</div> <div>Motor/Sensory</div> <div>Deep Tendon reflexes</div> <div>Mental Status Exam</div> </div>		Comments/Findings:
<b>GASTROINTESTINAL</b> <div> <div>Esophageal diverticula</div> <div>Severe reflux</div> <div>Hiatal hernia</div> <div>Gas bloat syndrome</div> <div>Gastric outlet obstruction</div> <div>Ileostomy obstruction</div> <div>Diverticulitis</div> <div>Hernias</div> <div>Fistulae</div> <div>Colostomy</div> <div>Hepatitis</div> <div>Active ulcer disease</div> <div>Irritable bowel syndrome</div> <div>Rectal bleeding</div> <div>Vomiting blood</div> </div> <div> <div>Yes</div> <div>No</div> </div>			<div> <div>Normal</div> <div>Abnormal</div> </div> <div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> </div> <div> <div>Auscultation</div> <div>Palpation</div> <div>Organo-megaly</div> <div>Tenderness</div> <div>Inguinal hernia</div> </div>		Comments/Findings:
<b>GENITOURINARY</b> <div> <div>Blood in urine</div> <div>Difficult or painful urination</div> <div>Infertility (difficulty having children)</div> </div> <div> <div>Yes</div> <div>No</div> </div>			<div> <div>Normal</div> <div>Abnormal</div> </div> <div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> </div> <div>Urogenital exam</div>		Comments/Findings:

Client Name: \_\_\_\_\_

Date: \_\_\_\_\_





**Occupational History****(Employee to complete all below)****Please indicate N/A where applicable**

Div./Br./Sec. \_\_\_\_\_ Duration of employment with U.S. EPA: \_\_\_\_\_

Description of Duties: \_\_\_\_\_

Exposures (i.e., dusts, fumes, vapors, gases, chemicals, radiation, noise, vibration, repetitive movements, temp. extremes): \_\_\_\_\_

Adverse Health Effects Possibly Related to Job: \_\_\_\_\_

Other Work Performed (moonlighting, hobbies, other positions): \_\_\_\_\_

Any other exposures to hazardous material? ☐ Yes ☐ No If yes, explain \_\_\_\_\_**OCCUPATIONAL HISTORY**

How long have you been doing this type of work? \_\_\_\_\_ years

Have you ever been off work more than a day because of work-related illness or injury? ☐ Yes ☐ No

If "yes", please specify \_\_\_\_\_

Have you ever changed jobs or duties due to health problems? ☐ Yes ☐ No

If "yes", please specify \_\_\_\_\_

If this is your first EPA medical surveillance exam, list any previous jobs with associated hazards, starting with the one before your current position:

Agency/Company	Dates of Employment	Specific Hazards
_____	_____	_____
_____	_____	_____

**Functional Activities (current position):** ☐ Heavy lifting/carrying (40 lbs or more) ☐ Walking \_\_\_\_\_ hrs/day ☐ Standing \_\_\_\_\_ hrs/day ☐ Climbing ☐ Operation of a motor vehicle**PLEASE INDICATE BELOW USE OF PERSONAL PROTECTIVE EQUIPMENT****LEVEL A -** SCBA, FULLY ENCAPSULATED SUIT, CHEMICAL RESISTANT GLOVES AND BOOTS**LEVEL B -** SCBA, CHEMICAL RESISTANT CLOTHING, CHEMICAL RESISTANT GLOVES AND BOOTS**LEVEL C -** AIR PURIFYING RESPIRATOR, CHEMICAL RESISTANT CLOTHING**LEVEL D -** COVERALLS, SAFETY BOOTS, GOGGLES

<input type="checkbox"/> <u>Level A Personal Protective Equipment</u>	<input type="checkbox"/> <u>Level B Personal Protective Equipment</u>	<input type="checkbox"/> <u>Level C Personal Protective Equipment</u>	<input type="checkbox"/> <u>Level D Personal Protective Equipment</u>
Extent of Usage: <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Rarely	Extent of Usage: <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Rarely	Extent of Usage: <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Rarely	Extent of Usage: <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Rarely

Additional activities/comments: \_\_\_\_\_

**PLEASE INDICATE LAB AND FIELDWORK (If 0 days, use N/A/)**

% of Time in Field/Lab: \_\_\_\_\_ Fieldwork, approx. number of days per yr: \_\_\_\_\_ Lab work, approx. number of days per yr: \_\_\_\_\_

**Environmental Factors (last two years):**

<input type="checkbox"/> Biological agents	<input type="checkbox"/> Solvents	<input type="checkbox"/> Hot Temperatures	<input type="checkbox"/> Heavy Metals	<input type="checkbox"/> Asbestos	<input type="checkbox"/> Dust	<input type="checkbox"/> Pesticides
<input type="checkbox"/> Fumes, smoke, gases	<input type="checkbox"/> Radiation	<input type="checkbox"/> Excessive Noise	<input type="checkbox"/> Confined Space Entry	<input type="checkbox"/> Sewage	<input type="checkbox"/> Cold temperatures	

Additional Factors/comments: \_\_\_\_\_

Client Name: \_\_\_\_\_

Date: \_\_\_\_\_

Exposure History (current position) (Employee to complete this page if applicable)

Describe your work experience at major EPA work sites (up to six) during the past year.

SITE	DATE	SPECIFIC CHEMICAL AND PHYSICAL FACTORS	*EXPOSURE LEVEL	LEVEL OF PPE	SYMPTOMS FROM EXPOSURE	JOB DUTIES
1.						
2.						
3.						
4.						
5.						
6.						

\*Exposure Levels: Include both Frequency of exposure (# of days) AND Duration of exposure (hours per day)

Client Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>(Examining Physician to complete)</b> Please check all the topics you discussed during the diagnostic work-up/ physical examination	<b>WORKPLACE EXPOSURE MONITORING</b> <b>(Examining Physician to complete)</b>	<b>ABNORMAL FINDINGS SUMMARY WITH PLAN OF ACTION</b> <b>Examining Physician MUST comment</b> on any positive historical or physical findings. Do not provide any official statement (oral or written) concerning the examinee's fitness or capability to perform the duties of any occupation. EPA's Reviewing Medical Officer (RMO) will provide that statement.
<div> <input type="checkbox"/> Diet <div> <input type="checkbox"/> Low-calorie <input type="checkbox"/> Low-fat <input type="checkbox"/> Low-salt </div> </div> <div> <input type="checkbox"/> Cholesterol </div> <div> <input type="checkbox"/> Hypertension </div> <div> <input type="checkbox"/> Exercise </div> <div> <input type="checkbox"/> Obesity </div> <div> <input type="checkbox"/> Smoking Cessation </div> <div> <input type="checkbox"/> Respirator Use </div> <div> <input type="checkbox"/> Avoid Sun Exposure/Sun Screen </div> <div> <input type="checkbox"/> Alcohol Use </div> <div> <input type="checkbox"/> Cancer Screening </div> <div> <input type="checkbox"/> Immunizations </div> <div> <input type="checkbox"/> Hearing Protection </div> <div> <input type="checkbox"/> Vision Referral </div> <div> <input type="checkbox"/> Other Personal Protective Equipment </div> <div> <input type="checkbox"/> Job Stressors </div> <div> <input type="checkbox"/> Referral(s) </div> <div> Others _____ </div>	<div> Is workplace monitoring data or other exposure data for this Employee or this position available for review? <div> <input type="checkbox"/> Yes    <input type="checkbox"/> No </div> </div> <div> If yes, what type of data is available? </div> <div> Acute Exposure Data <div> <input type="checkbox"/> Workplace Monitoring Data <input type="checkbox"/> Individual Dosimetry Data <input type="checkbox"/> MSDS </div> </div> <div> Periodic Exposure Data <div> <input type="checkbox"/> Workplace Monitoring Data <input type="checkbox"/> Individual Dosimetry Data <input type="checkbox"/> MSDS </div> </div> <div> How was data made available? <div> <input type="checkbox"/> Electronic Database <input type="checkbox"/> Hard Copy Report <input type="checkbox"/> Employee Self-Report </div> </div> <div> Please explain what changes, if any, were made in the examination due to review of this data: _____ </div> <div> Based upon your knowledge of the physical demands of the position and/or the potential exposure to occupational hazards, please answer the following:  Does the Employee need to continue in a medical surveillance program? <div> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Cannot determine based on information available <input type="checkbox"/> Other </div> </div> <div> The information obtained in the completion of this form is used to help determine whether an individual assigned to a job with duties that may be considered arduous or hazardous can carry out those duties in a safe, efficient manner that will not unduly risk aggravation, acceleration, exacerbation, or permanently worsen pre-existing condition(s). The collection and use of this information is consistent with the provisions of 5 USC 552a (Privacy Act of 1974), 5 USC 3301 and Executive Orders 12107 and 12564 (Drug Free Federal Workplace) </div> <div> The information will be placed in your official Employee Medical File. </div>	<div> _____   _____   _____   _____   _____   _____   _____ </div> <div> <p align="center"><b>EXAMINING PHYSICIAN TO COMPLETE:</b></p> <p>The Employee has been medically examined by me under the provisions of the EPA National Surveillance program and has been advised of the examination findings.</p> <p><input type="checkbox"/> is fully capable of participating in all job functions.</p> <p><input type="checkbox"/> is medically cleared for unrestricted respirator use</p> <p><input type="checkbox"/> is medically cleared for use of all other suitable protective equipment (chemically resistant clothing, face shield, glasses, gloves, earmuffs/plugs).</p> <p>If any of the above have not been selected, please explain why in detail below:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Note: Please do not provide any official statement (oral or written) concerning the Employee's fitness. The Medical Review Officer will provide a written opinion to the agency.</p> </div>

**RELEASE OF INFORMATION**

I certify that I have reviewed the foregoing information supplied by me and that it is true and complete to the best of my knowledge. I authorize release of all medical information to the Federal Occupational Health/EPA Medical Surveillance Program. Only the Summary of occupational health related findings from the medical surveillance exam (medical clearance statement) will be released to Regional SHEMP Manager and Human Resources (for Employee's file) if restriction(s) note

SIGNATURES

Date medical review completed

Client \_\_\_\_\_

\_\_\_\_\_

Nurse \_\_\_\_\_

\_\_\_\_\_

Physician \_\_\_\_\_

\_\_\_\_\_

**ENVIRONMENTAL PROTECTION AGENCY  
PHYSICAL EVALUATION FORM  
NATIONAL MEDICAL SURVEILLANCE PROGRAM**

**TYPE OF EXAM:  
(nurse to complete)**

☐ ] BASELINE  
☐ ] PERIODIC  
☐ ] EXIT    ☐ ] DIVER (160)

**(NURSE TO COMPLETE)**

Name of Client \_\_\_\_\_  
SSN: \_\_\_\_\_  
Region/Facility Designator: \_\_\_\_\_  
Supervisor Name: \_\_\_\_\_  
Supervisor Phone: \_\_\_\_\_

**(NURSE TO COMPLETE)**

Health Center Site Code \_\_\_\_\_  
Complete Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Health Center Phone and Fax \_\_\_\_\_  
SHEMP Manager Name \_\_\_\_\_  
Complete Mailing Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☐ Lab Employee (060)  
☐ Clean Air Inspector /  
Enforcement Offcr (040)  
☐ FIFRA Enforcement Offcr (050)  
☐ Pesticide Lab Worker (010)  
☐ Emergency Response Coord.  
& On-Scene Coordinator (020)  
☐ Field Sampling Personnel (030)  
☐ Remedial Project Officers (100)  
☐ TSCA Enforcement Offcr (110)  
☐ RCRA Enforcement Offcr(110)  
☐ NESHAPS / AHERA (Asbestos  
Enforcement Officers) (070)

☐ Wetlands Staff (130)

☐ Radiation Staff (090)  
☐ U.S.T. Inspectors (120)  
☐ NPDES Inspectors (080)  
☐ Animal Handlers  
☐ Others (150)

**Medical Clearance Statement    [to be complete by Reviewing Medical Officer Only]**

The above-named EPA Employee has been medically examined under the provisions of the EPA National Medical Monitoring Program and has been advised of the examination findings.  
I have reviewed the Employee medical history, physical examination findings, and diagnostic tests.

In my opinion, this Employee:

- ☐ Is medically qualified to participate in the essential functions of this position and wear all suitable respiratory protective equipment (levels A, B, C, and D).  
☐ Is medically qualified to wear only the indicated respiratory equipment:  
☐ Negative pressure respirator    ☐ PAPR respirator    ☐ SCBA-type respirator    ☐ Air-line respirator

- ☐ Is medically qualified to participate in the essential functions of this position, but is not medically qualified to wear respiratory protective equipment (level D only).  
☐ Is medically qualified to participate in EPA office and/or laboratory activities, but not field activities.  
☐ Reported no need to use respiratory protective equipment for this position.  
☐ Is qualified to participate in EPA field and laboratory activities with the following restrictions: \_\_\_\_\_  
☐ The Employee demonstrated hearing loss. Supervisors should be aware of this impairment. The Employee should avoid, whenever feasible, all hazardous noise exposures.  
When avoidance is not feasible he/she should wear appropriate hearing protective equipment.  
☐ The Employee's near &/or far vision was deficient. The Employee is advised to review this with his/her regular eye doctor.  
☐ A medical recommendation cannot be made at this time. Further medical evaluation, as described below, is needed: \_\_\_\_\_  
☐ Is not medically qualified at this time for this position.  
☐ Is medically qualified for all EPA Diving-related duties and use of breathing apparatuses.

The following occupationally-related medical findings were noted during this evaluation: \_\_\_\_\_  
\_\_\_\_\_

My recommendations, if any, include: \_\_\_\_\_

Schedule next exam in:    ☐ One Year    ☐ Two Years    ☐ EXIT

Reviewing Physician's Signature: \_\_\_\_\_

Date Medical Review Completed: \_\_\_\_\_

Reviewing Physician's Printed Name:    DR. CHRISTOPHER HOLLAND

## **APPENDIX D:**

### **Vaccine Administration Record (Source: [www.immunize.org](http://www.immunize.org))**

# Vaccine Administration Record for Adults

Patient name: \_\_\_\_\_

Birthdate: \_\_\_\_\_

Chart number: \_\_\_\_\_

Before administering any vaccines, give the patient copies of all pertinent Vaccine Information Statements (VISs) and make sure he/she understands the risks and benefits of the vaccine(s). Update the patient's personal record card or provide a new one whenever you administer vaccine.

Vaccine	Type of Vaccine* (generic abbreviation)	Date given (mo/day/yr)	Route	Site given (RA, LA)	Vaccine		Vaccine Information Statement		Signature/ initials of vaccinator
					lot #	mfr.	Date on VIS <sup>§</sup>	Date given <sup>§</sup>	
Tetanus and Diphtheria (e.g., Td)			IM						
			IM						
			IM						
			IM						
			IM						
Hepatitis A <sup>†</sup> (e.g., HepA, HepA-HepB)			IM						
			IM						
			IM						
Hepatitis B <sup>†</sup> (e.g., HepB, HepA-HepB)			IM						
			IM						
			IM						
Measles, Mumps, Rubella (MMR)			SC						
			SC						
Varicella (Var)			SC						
			SC						
Pneumococcal** (PPV)			IM•SC						
			IM•SC						
Influenza (Flu)			IM						
			IM						
			IM						
			IM						
			IM						
			IM						
			IM						
			IM						
			IM						
			IM						
			IM						
			IM						
			IM						
			IM						
	Other								
Other									

\*Record the generic abbreviation for the type of vaccine given (e.g., PPV, HepA-HepB), *not* the trade name.

†For combination vaccines, fill in the row for each individual antigen composing the combination.

§Record the publication date of each VIS as well as the date it is given to the

patient. According to federal law, VISs must be given to patients before administering each dose of Td, MMR, varicella, or hepatitis B vaccine.

\*\*Some high-risk patients need a one-time revaccination with pneumococcal polysaccharide vaccine (PPV).

[www.immunize.org/catg.d/p2023b.pdf](http://www.immunize.org/catg.d/p2023b.pdf) • Item #P2023 (5/03)

## **APPENDIX E:**

### **Medical Surveillance Awareness Training Certification**

**U.S. Environmental Protection Agency (EPA)**  
**Region \_\_\_\_\_**  
**Street Address**  
**City, State and Zip Code**

Date: \_\_\_\_\_

SUBJECT: Medical Surveillance Program Awareness Training Documentation

FROM: \_\_\_\_\_, (SHEMP Manager or other designated position)

TO: \_\_\_\_\_, (EPA emergency responder)

\_\_\_\_\_, (Removal Manager)

\_\_\_\_\_, (Health and Safety Program Contact)

\_\_\_\_\_, (Other applicable stakeholders)

Please be advised that \_\_\_\_\_ (Name of EPA employee) has participated in the following training:

Course Name: Medical Surveillance Program Awareness Training

Course Location: \_\_\_\_\_

Course Date: \_\_\_\_\_

Training topics included:

- ☐ Overview of medical surveillance program, including roles and responsibilities
- ☐ Medical examination procedures and components
- ☐ Exposure tracking
- ☐ Emergency exposure and injury procedures
- ☐ Vaccination considerations/biological hazards
- ☐ Special examinations
- ☐ Voluntary blood storage program
- ☐ Recordkeeping requirements
- ☐ Other (specify): \_\_\_\_\_



**APPENDIX F:**  
**Exposure, Injury, and Dosimetry Tracking Form**

## Exposure, Injury, and Dosimetry Tracking Form

Date: \_\_\_\_\_

Participant: \_\_\_\_\_  
(Name) (Signature)

This report provides information related to activities performed between: \_\_\_\_\_ and \_\_\_\_\_.

**I.** During this reporting period, did you work at a job site where oil or hazardous substances/contaminants, including sources of ionizing radiation, were or may have been present? ☐ Yes ☐ No

If yes, please provide details for each trip:

Site Name and Location	SSID (Site ID)	Dates Present On Site	Specific Chemical and Potential Routes of Exposure (and concentrations if known)	Level(s) of PPE Used	EPA TLD (dosimeter) Worn?
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No

**II.** Did you receive an on-the-job exposure to radiation or any chemical during this reporting period?

☐ Yes ☐ No ☐ Unknown

If Yes, indicate date of exposure \_\_/\_\_/\_\_, and date cover memo and draft EPA Form 1440-9, "Supervisor's Report of Accident/Illness" was submitted to Supervisor \_\_/\_\_/\_\_.

**III.** Were you injured on the job or did you experience a job-related illness during this reporting period?

☐ Yes ☐ No ☐ Unknown

If Yes, indicate date of injury/illness \_\_/\_\_/\_\_, and date cover memo and draft EPA Form 1440-9, "Supervisor's Report of Accident/Illness" was submitted to Supervisor \_\_/\_\_/\_\_.

SHEMP Manager: \_\_\_\_\_ Date Received: \_\_\_\_\_  
(Name) (Signature)

**APPENDIX G:**

**Forms Needed To Report an Accident or Illness**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460**

Date: \_\_\_\_\_

**MEMORANDUM**

**Subject:** Cover Memo for EPA Form 1440-9, "Supervisor's Report of Accident/Illness"

**To:** \_\_\_\_\_  
(Supervisor)

**From:** \_\_\_\_\_  
(Injured or Exposed Employee)

Enclosed, please find a draft copy of EPA Form 1440-9, "Supervisor's Report of Accident/Illness." I have completed applicable information relative to my exposure or injury. Please process this form as follows:

- I. No lost work-time or medical treatment has occurred as a result of my exposure or injury. (I may request additional processing at a later date if my condition changes.)
- II. As part of the Region's Occupational Medical Surveillance Program, I would like to receive a medical consultation to evaluate potential health effects and treatment options as a result of my known or potential exposure to oil or hazardous substances/contaminants.

## Sample of EPA Form 1440-9

<b>SUPERVISOR'S REPORT OF ACCIDENT/ILLNESS</b> <i>(1146-DOL-XX)</i>		
<b>MAIL TO:</b>  EPA Headquarters Occupational Health and Safety Staff Management Information Systems (PM-273) Washington, DC 20460		<b>RETURN MAILING ADDRESS</b>  <div style="border: 1px solid black; height: 40px; width: 100%;"></div>
		<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"><b>TELEPHONE (FTS)</b></div> <div style="width: 45%;"><b>AGENCY ORG CODE</b></div> </div>
<b>INSTRUCTIONS:</b> Detach top copy of this five-part form and mail to the above address. Route other parts of this form as indicated on each part. See Chapter 3 of the EPA Occupational Health and Safety Manual for more detailed instructions.  This form is to be completed and mailed within two (2) work days of your being notified.		
<b>NAME OF INJURED OR ILL EMPLOYEE</b>		<b>JOB TITLE/SERIES/GRADE</b>
<b>DATE OF ACCIDENT</b>	<b>TIME OF ACCIDENT</b>	<b>EXACT LOCATION OF ACCIDENT</b>
<b>INJURY OR ILLNESS AND PART(S) OF BODY INVOLVED</b> <i>(e.g., fractured left leg, scalded right hand)</i>		
<b>ESTIMATED LENGTH OF MEDICAL TREATMENT</b> <i>(if injury or illness)</i>		
<input type="checkbox"/> FIRST AID ONLY <input type="checkbox"/> _____ DAYS OF RESTRICTED WORK ACTIVITY <input type="checkbox"/> _____ DAYS AWAY FROM WORK		<input type="checkbox"/> FATAL
<b>GOVERNMENT PROPERTY DAMAGE</b> <input type="checkbox"/> NO <input type="checkbox"/> YES	<b>ESTIMATED DAMAGE COST</b> \$	<b>APPROPRIATE CA FORMS COMPLETED</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>NARRATIVE DESCRIPTION OF ACCIDENT</b> <i>(Tell what happened and how it happened. Use additional sheets of paper if needed.)</i>		
<b>CORRECTIVE ACTION WHICH HAS BEEN TAKEN</b>		
<b>CORRECTIVE ACTION WHICH REMAINS TO BE TAKEN</b> <i>(By whom and by when)</i>		
<b>NAME OF SUPERVISOR</b> <i>(typed or printed)</i>		<b>TITLE</b>
<b>SIGNATURE OF SUPERVISOR</b>		<b>DATE</b>

EPA Form 1440-9 (Rev. 1-82) Previous edition is obsolete.

**DISTRIBUTION:** White . . . . .EPA Headquarters  
 Green . . . . .Personnel Officer  
 Canary . . . . .Safety Designee  
 Pink . . . . .Supervisor

## **APPENDIX H:**

### **Medical Surveillance Program Audit Form**

## MEDICAL SURVEILLANCE PROGRAM AUDIT FORM

Date of Review: \_\_\_\_\_

Name of Reviewer: \_\_\_\_\_ Phone number: \_\_\_\_\_

REVIEW CRITERIA	Yes	No	N/A
<b>General</b>			
1. Have the Removal Manager, SHEMP Manager, Health and Safety Program Contact, and other relevant stakeholders met to discuss the <i>Medical Surveillance Program Implementation Plan</i> , to review the roles and responsibilities assigned to specific individuals, and to customize the Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Have customized versions of the <i>Medical Surveillance Program Implementation Plan</i> been distributed to all relevant stakeholders?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Medical Examinations</b> (see <a href="#">Section 5.0</a> )			
3. Are the following made available to EPA emergency response personnel: <div style="margin-left: 20px;"> <input type="checkbox"/> Baseline medical examination?  <input type="checkbox"/> Annual medical examinations?  <input type="checkbox"/> Exit medical examination? </div> Are additional medical examinations administered if the attending physician thinks they are warranted or if the employee has developed signs or symptoms of overexposure to hazardous substances or has been injured or exposed above permissive exposure limits?	<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. Are physicians provided with the following: <div style="margin-left: 20px;"> <input type="checkbox"/> A copy of the HAZWOPER standard and its appendices?  <input type="checkbox"/> Information on each employee's duties and potential exposures, including possible exposure levels?  <input type="checkbox"/> Information on any PPE used or to be used by each employee?  <input type="checkbox"/> Information from each employee's past medical examinations? </div>	<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. Do attending physicians adhere to the national minimum standards that are listed in <a href="#">Table 2</a> and <a href="#">Table 3</a> of the <i>Medical Surveillance Program Implementation Plan</i> when performing medical exams on EPA emergency response personnel? (Note: these tables list the tests that should be included [and the frequency with which they should be performed].)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is chemical-specific monitoring or other special testing performed if there is reason to believe that an employee has been exposed to a particular substance or if the employee's medical history suggests that they have particular risk factors that place them at increased risk of experiencing adverse health effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Does the physician submit a written opinion to EPA in a timely fashion regarding whether an employee is medically cleared to perform his or her duties?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Other Components of the Medical Monitoring Program—Immunization and Blood Storage Programs</b> (see <a href="#">Section 6.0</a> )			
8. Does the region keep records of the immunization status of its emergency response personnel?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. If an employee lacks any EPA-recommend vaccines, are they informed that the Agency is willing to make these vaccines available to them?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REVIEW CRITERIA	Yes	No	N/A
10. Has the region established a blood storage program?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. For those emergency response personnel who choose to participate in the blood storage program, are their blood samples being collected upon entering the medical surveillance program and sent to the designated storage facility following appropriate specimen-handling and chain-of custody procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Training</b> (see <a href="#">Section 7.0</a> )			
12. Do EPA emergency response personnel attend medical surveillance awareness training upon enrolling into the medical surveillance program?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Does the region keep track of who has received the awareness training and send notifications of available training opportunities to those who have not yet received the training?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Recordkeeping</b> (See <a href="#">Section 8.0</a> )			
<u>Medical History/Examination Results</u> (see <a href="#">Section 8.1</a> )			
14. Do physicians use the official <i>EPA Medical Evaluation Form</i> to record an employee's medical history, exposure information, and the results obtained during medical examinations? ( <i>Note: the form is included as <a href="#">Appendix C</a> in the Medical Surveillance Program Implementation Plan.</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Does the physician retain copies of the completed forms?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Medical Clearance Statements</u> (see <a href="#">Section 8.2</a> )			
16. Does EPA's Medical Review Officer give SHEMP Managers written <i>Medical Clearance Statements</i> that provide an opinion regarding whether an employee is medically cleared to perform his/her duties? ( <i>Note: the form is included as the last page of the EPA Medical Evaluation Form—See <a href="#">Appendix C</a> in the Medical Surveillance Program Implementation Plan.</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Do the SHEMP Managers and individual emergency response personnel retain copies of completed <i>Medical Clearance Statements</i> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Vaccination Records</u> (see <a href="#">Section 8.3</a> )			
18. Do physicians document all of the vaccines that they administer to emergency response personnel on Vaccine Administration Records? ( <i>Note: this form is included as <a href="#">Appendix D</a> in the Medical Surveillance Program Implementation Plan.</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Do physicians update and certify <i>CDC Vaccination Cards</i> on a regular basis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Do physicians and SHEMP Managers retain copies of the <i>CDC Vaccination Cards</i> on file?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Do emergency response personnel carry copies of their <i>CDC Vaccination Cards</i> into the field?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Training Certification</u> (see <a href="#">Section 8.4</a> )			
22. Are training certification letters issued to all emergency response personnel who have participated in the medical surveillance awareness training? ( <i>Note: a template letter is included as <a href="#">Appendix E</a> in the Medical Surveillance Program Implementation Plan.</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Do SHEMP Managers and emergency response personnel keep these letters on file?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



REVIEW CRITERIA	Yes	No	N/A
<u>Forms and Reports Associated with Occupational Exposures (see <a href="#">Section 8.5</a>)</u>			
24. Are <i>Exposure, Injury, and Dosimetry Tracking Forms</i> submitted to the SHEMP Manager on a quarterly basis? (Note: a copy of this form is included as <a href="#">Appendix F</a> in the <i>Medical Surveillance Program Implementation Plan</i> .)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Do workers who receive any type of occupational exposure notify their supervisors and submit the required forms? (Note: The forms are included in <a href="#">Appendix G</a> of the <i>Medical Surveillance Program Implementation Plan</i> .)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Do EPA managers determine whether followup medical treatment or evaluation is required in the event of an exposure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Audits and Program Evaluation (See <a href="#">Section 9.0</a>)</b>			
27. Is an internal audit/program evaluation performed on an annual basis to examine how well the region's medical surveillance program is operating?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Does the Core ER team perform an external audit of the region's medical surveillance program on an annual basis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Notice of Findings:**