

مركز أبوظبي للصحة المهنية  
ABU DHABI OCCUPATIONAL SAFETY AND HEALTH CENTER

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# Abu Dhabi Occupational Safety and Health System Framework

(OSHAD-SF)

Code of Practice

CoP 5.0 – Occupational Health Screening and Medical  
Surveillance

Version 3.1

June 2017

ABU DHABI PUBLIC  
HEALTH CENTRE

مركز أبوظبي  
للصحة العامة



## Important Note:

(Document Republished for Continued Implementation  
under Abu Dhabi Public Health Center)

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## 1. Introduction

- (a) This Code of Practice (CoP) applies to all employers and places of business within the Emirate of Abu Dhabi. If requirements of this document conflict with requirements set by another regulatory authority, employers are required to follow the more stringent requirement.
- (b) This CoP identifies specific requirements for occupational health screening/fitness to work and medical surveillance for employees performing any of the job duties found in Appendix 1 or exposed to chemicals/materials listed in Appendix 2 of this CoP.
- (c) Occupational health screening shall be undertaken with regards to the potential exposures expected related to the employees occupation and before an employee is exposed to a hazardous work environment.
- (d) Medical surveillance shall be undertaken after a risk assessment and/or occupational hygiene assessments have been undertaken to assess the extent of the exposure and after other control measures implemented to control exposure to an acceptable level using the principles of risk management and the hierarchy of control.

## 2. Training and Competency

- (a) Employers shall ensure that EHS training complies with the requirements of:
  - (i) *OSHAD-SF – Element 5 – Training, Awareness and Competency;*
  - (ii) *OSHAD-SF – Mechanism 7.0 – OSH Professional Entity Registration; and*
  - (iii) *OSHAD-SF – Mechanism 8.0 – OSH Practitioner Registration.*
- (b) Training programs shall be tailor-made to meet the needs of employees performing any of the job duties found in Appendix 1 or exposed to chemicals/materials listed in Appendix 2 of this CoP. Training shall focus on ways to reduce exposures to occupational hazards that could affect the employees' health.
- (c) Employers shall ensure all relevant employees and contractors covered by the requirements of the CoP are informed of the requirements of occupational health screening and medical surveillance.
- (d) Employers shall inform all employees of the requirement of Section 4.0 of this CoP and their right to medical record protection and medical confidentiality.
- (e) Employers shall ensure that person(s) responsible for development and implementation of Occupational Health screening and medical surveillance programs are competent to do so.

## 3. Requirements

### 3.1 Roles and Responsibilities

#### 3.1.1 Employers

- (a) Employers shall undertake their roles and responsibilities in accordance with the general requirements of *OSHAD-SF – Element 1 – Roles, Responsibilities and Self-Regulation* Section 3.2.5
- (b) Every employer shall be responsible for performing a risk assessment in accordance with *OSHAD-SF – Element 2 – Risk Management* to determine the risks associated to job tasks and determine the requirements of their occupational health and medical surveillance program.
- (c) Employers shall maintain medical records and medical confidentiality in accordance with Section 4.0 of this CoP.
- (d) Employers shall arrange for medical surveillance of employees that have been or it is reasonably practicable to believe they have been exposed to a hazardous material if:
  - (i) the material is listed in Appendix 2 and the degree of risk to the health of the employee is significant; or
  - (ii) the employer reasonably believes that:
    - 1. an identifiable adverse effect may be related to exposure;
    - 2. the health effect may happen under the work conditions of the employee;
    - 3. a valid biological or technical technique or test is available to detect the signs of the health effect or a valid biological monitoring procedure is available to detect the material or its metabolite; and
    - 4. other Federal or Local legislation/regulations requires such surveillance to be conducted.
- (e) If the medical surveillance relates to an occupation listed in Appendix 1 the employer shall:
  - (i) arrange for the medical surveillance to be done by a HAAD licensed physician under the supervision of a HAAD licensed Occupational Medicine Specialist; and
  - (ii) ask the physician to give the employee and the employer a medical surveillance report which includes a description of the effects of the material or exposure on the employees' health and the need, if any, for remedial action or treatment; and an explanation of the report.
- (f) Employers with occupational health screening and medical surveillance programs shall use an employee general health history questionnaire to collect, at a minimum, the following information (see Appendix 3 for sample questionnaire):
  - (i) occupational history - physical, chemical, biological, radiological, and ergonomic stressors from previous employers;
  - (ii) personal risk factors - personal and family history, allergies, and lifestyle;
  - (iii) previous medical conditions;

- (iv) medical history - including surgical history or pregnancy in females; and
- (v) immunization history - if applicable.
- (g) employers shall communicate the results of the occupational health screening and/or medical surveillance to the employee. This includes:
  - (i) informing employees of all findings and provide them with a copy of medical exam report;
  - (ii) providing any follow up treatment for employment related health problems, if needed;
  - (iii) counselling and education about relevant occupational hazards; and
  - (iv) provide follow up health education to ensure employee understands the health risks of his/her occupation and/or lifestyle habits.
- (h) the employer, or employer provided insurance (if included), shall pay all associated costs for the occupational health screening and medical surveillance. Employees shall not be held responsible for any costs associated with these programs, including time required to undertake the programme/screening or surveillance tests or any other associated travel costs which shall be provided by the employer.

### 3.1.2 Employees

- (a) Employees shall undertake their roles and responsibilities in accordance with the general requirements of *OSHAD-SF – Element 1 – Roles, Responsibilities and Self-Regulation* Section 3.2.7.
- (b) Employees shall participate in any medical surveillance program or occupational health screening program if their job tasks or a risk assessment indicates the exposure warrants such screening or surveillance and as required by their employer.
- (c) Employees have a right to decline to take part in occupational health screening or surveillance programs but shall be informed of the consequences by the employer or a qualified physician and evidence of the decision shall be recorded in writing along with the employee's, employer's and physician's signatures.
- (d) Employees shall report to any place required for the screening or surveillance to be conducted as advised by their employer.
- (e) Employees shall report any adverse effects or symptoms associated with their work or exposure to a particular hazard at work to the employer or supervisor which shall be recorded in writing and investigated.
- (f) Employees have a right to request copies of their records or risk assessment results and an explanation of the results in a language they understand through the use of a translator.

### 3.2 General Requirements for Occupational Health Screening:

- (a) For occupations listed in Appendix 1, or any high risk activities as determined by the risk assessment (refer to 3.1.1(b)), occupational health screening and medical examinations shall be conducted to determine:

- (i) if employees are medically and physically able to perform the assigned duties without substantial risk of harm to themselves, others, or the job to be performed (fitness for duty examinations); and
  - (ii) to identify pre-existing medical conditions which may be aggravated by workplace hazards or exposures.
- (b) Employers shall also include employees in the occupational health screening program if it is reasonably practicable to believe that:
- (i) an identifiable adverse effect may be related to the occupation;
  - (ii) the health effect may happen under the work conditions of the employee; and
  - (iii) the employee's occupational activities and tasks may involve a risk to themselves or others shall occupational health screening or medical surveillance not be undertaken.
- (c) An employer shall arrange for occupational health screening of employees.
- (d) The employer shall pay all of the associated costs for the occupational health screening.

### 3.3 General Requirements for Medical Surveillance:

- (a) Medical surveillance programs shall be based on the results of the risk assessment as required by Section 3.1.1(b) and/or the results of an occupational hygiene survey which warrants such surveillance based upon exposure assessment results.
- (b) In the absence of industrial hygiene and exposure data, a qualified occupational physician licensed by HAAD shall make a decision on the placement of employees into the medical surveillance program based on knowledge of the workplace processes, job requirements, exposures and occupational history of the employee.
- (c) Data collected from medical surveillance shall be evaluated at a minimum annually to determine if the workplace is causing or contributing to employee's injuries or illnesses due to occupational exposures. When data suggests that there is a link, control measures shall be implemented to reduce the risk to as low as reasonably practicable as well as additional medical surveillance if warranted.

### 3.4 Types of Occupational Health Screening and Medical Surveillance

- (a) *Occupational Health Screening/ Baseline Examinations:* These examinations are performed before placement in a specific job to medically assess if the employees shall be able to perform the job safely. They may be combined with occupational medical surveillance to record a baseline of values for future comparison. These examinations shall be done before the employee commences work. However, if the individual has already started work, these examinations shall be completed within 30 days of assignment. (Refer Appendix 4 for an example Employment Medical Examination Form.)
- (b) *Periodic Medical Surveillance Examinations:* Periodic monitoring examinations are conducted with appropriate frequency dependent on the results of risk assessments. Periodic examinations may include an interval history, a physical examination, and/or clinical and laboratory screening tests based on exposures or work place requirements and demands.



- (c) *Termination of Employment Examinations:* These examinations are designed to assess pertinent aspects of an employee's health when the employee leaves employment. Documentation of examination results may be beneficial in assessing the relationship of any future medical problems to an exposure in the workplace.
- (d) *Termination of Exposure Examinations:* These examinations are performed when exposure to a specific hazard has ceased. Exposure may cease when a employee is reassigned, a process is changed, or the employee leaves employment.
- (e) *Specific Occupations/Occupational Groups:* Some occupations or occupational groups, such as those listed in Appendix 1, have specific job demands and requirements which are important for the tasks or activities of the job to be completed safely and these occupations or groups shall undergo occupational health screening with appropriate tests and follow up medical surveillance done if exposure warrants this.

### **3.5 Medical Records and Medical Confidentiality:**

- (a) Medical records shall be maintained in a secure location where only medical personnel or medical program managers have access to the records.
  - (i) in the event that employers do not have medical personal or a medical program manager, medical records may be maintained at a HAAD licensed medical facility; or
  - (ii) the employer may assign an OSH staff member or other employee the duties of maintaining medical records and ensuring records are secure.
- (b) At no time may medical records be provided to Human Resources, management, or any other representative of the entity as a means to evaluate:
  - (i) the performance of an employee;
  - (ii) if an employee shall be retained or contract renewed unless medically justifiable; or
  - (iii) as a means to determine if an employee shall be promoted.
- (c) Medical records shall not be provided to any person or party outside the employer or employer approved medical provider without the written consent of the employee.
- (d) Medical record data may be used to evaluate the health of employees in general, guide employer sponsored wellness programs, or determine funding of employee sponsored wellness programs. When used for these purposes, the employer shall:
  - (i) remove any data that could be used to identify an employee; and
  - (ii) ensure data of a single employee is not provided as standalone data.
- (e) Insurance claim forms shall be maintained with the same confidentiality as medical records.
- (f) Employee can request a copy of their medical records and a copy shall be provided within five (5) working days. Employees may not be charged for receiving a copy of their medical records.

- (g) Employees and medical professionals that have access to employee medical records shall not discuss the contents of the records, or the health of employees to anyone not associated with providing medical care to the employees.

## 4. Record Keeping

- (a) The employer shall maintain an accurate record of each employee undergoing medical surveillance or screening. The employer shall assure that this medical record is maintained for the duration of employment and for a period of 30 years thereafter.
- (b) All records must be retained if they are part of an external investigation or legal proceedings.
- (c) Medical records shall include, but not limited to:
  - (i) doctor's written opinion as to the employee's suitability for employment in specific job role;
  - (ii) any medical complaint by the employee related to exposure to the toxic material or hazardous material;
  - (iii) a copy of any employee exposure monitoring reports which were conducted at an employee's work site;
  - (iv) a copy of the employee's employment history; and
  - (v) medical surveillance and/or screening records and exposure monitoring records shall be available for review by employees and the relevant SRA.

## 5. References

- OSHAD-SF – Element 1 – Roles, Responsibilities and Self-Regulation
- OSHAD-SF – Element 2 – Risk Management
- OSHAD-SF – Element 5 – Training Awareness and Competency
- OSHAD-SF – Mechanism 7.0 -OSH Professional Entity Registration
- OSHAD-SF - Mechanism 8.0 - OSH Practitioner Registration
- US Department of Labor. OSHA 3162-12R 2009. Screening and Surveillance Guide. Available at: URL: <http://www.osha.gov/Publications/osha3162.pdf>
- Department of Transport (UK). DVLA. Medical Standards for fitness to drive. Available at: URL: <http://www.dft.gov.uk/dvla/medical/ataglance.aspx>
- UAE General Civil Aviation Authority. Civil Aviation Regulations. Part II. Chapter 5
- CDC ‘Yellow Book’, USA. Atlanta, GA. Available at URL: <http://wwwnc.cdc.gov/travel/yellowbook/2012/table-of-contents.htm>
- NFPA. Standard on Comprehensive Occupational Medical Requirements for Fire Departments Standard 1582, USA. Available at URL: <http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1582>
- Palmer K, Cox, R and Brown, I. Fitness for Work the Medical Aspect 4th Ed. Oxford University Press. Oxford Medical Publications. 2007
- ILO. Guidelines for Conducting Pre-Sea and Periodic Medical Fitness Examinations for Seafarers (2007)
- Health and Safety Executive (UK). The Medical Examination and Assessment of Divers (MA1). Available at URL: <http://www.hse.gov.uk/diving/ma1.pdf>
- Workplace Health and Safety Queensland. Workplace Health and Safety Regulations 2008. Schedule 8 Hazardous Materials for which health surveillance shall be supplied. Queensland Australia

## 6. Document Amendment Record

Version	Revision Date	Description of Amendment	Page/s Affected
2.0	February 2012	First Issue	All
3.0	1 <sup>st</sup> July 2016	Change of Logo	All
		Change from AD EHS Center to OSHAD	throughout
		Change of document title: AD EHSMS RF to OSHAD-SF	Throughout
		Acknowledgements deleted	2/3
		Preface Deleted	4
3.0	1 <sup>st</sup> July 2016	Document Withdrawn	All
3.1	18 <sup>th</sup> June 2017	Clause 3.1.1(d)(iii) to 3.1.1(d)(vi) renumbered to 3.1.1(e) to (h)	6-9
		<i>OSHAD-SF – Element 5 – Training, Awareness and Competency</i> added to references	11
		<i>OSHAD-SF – Mechanism 7.0 &amp; 8.0</i> added to references	11

## Appendix 1: Specified Occupations Requiring Medical Screening

- Professional Drivers (taxi, bus, truck drivers etc.)
- Aviators (Air Crew-pilots, Flight Crew-cabin attendants, Flight Despatcher etc.)
- Health Care Workers (Physicians, Nurses, Nursing Assistants, Dentist, Therapists – physiotherapists, occupational therapists, respiratory therapists, Technicians – ECG, respiratory, radiographer, laboratory, radiology, sterilization)
- Professional Divers
- Emergency Responders (fire fighters, police, civil defense, ambulance personnel, hazmat emergency responders etc.)
- Sea Farers (Marine Skippers / Captains, Boat Masters and Seaman etc.)

## Professional Drivers

Includes: Taxi, truck, heavy equipment – cranes, bulldozers, forklift drivers etc.

<b>Sub Type:</b>	<b>Group 1: Taxi Driver (1 to 7 passengers)</b>
Workplaces:	Taxi company, Private, Commercial
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
Investigation:	Visual acuity and Colour vision
Restriction:	Vision Test: Typically 6/9 in better eye
	Colour Vision: Ability to recognize signals
	Seizure free for 7 years with medication
	Malignant tumors of the brain = 1 year off driving
	Cardiac Artery Bypass Graft (CABG) = Cease driving for 4 weeks
	Absence of hypoglycaemic episodes
	Acute psychotic disorder, Mania, Schizophrenia; Must cease driving immediately - stable for 3 months can drive
	Alcohol misuse : 6 months with controlled drinking
	Alcohol dependence: 1 y without dependence
	Drug abuse: At least one year without abuse
Periodic Medical:	At the time of taking license 18 years to 70 years
	Once every 3 years - no upper limit
References:	Department of Transport (UK). DVLA. Medical Standards for fitness to drive.

<b>Sub Type:</b>	<b>Group 2: Bus, Taxi (8 or more passengers) - Category: D</b>
Workplaces:	Commercial drivers
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
Investigation:	Visual acuity and Colour vision
Restriction:	Complete Stage 3 of Bruce Protocol
	Vision Test: Typically 6/9 in better eye
	Colour Vision: Ability to recognize signals
	Monocular Vision: not allowed to drive
	Seizure free for 10 years without medication
	Malignant tumours of the brain 2 years off driving

	CABG cease driving for 3 months
	Absence of hypoglycaemic episodes
	Acute psychotic disorder, Mania, Schizophrenia; Must cease driving immediately require stable for 3 years to drive
	Alcohol misuse : 1 year with controlled drinking
	Alcohol dependence: 3 years without dependence
	Drug abuse: At least one year without abuse
	Sleep apnoea: If causing excessive sleep (in working hours)
Periodic Medical:	At the time of taking license 21 years to 45 years
	45 years and older: Medical every 5 years till age 65 years
	65 years and older: Medical annually without upper limit
References:	Department of Transport (UK). DVLA. Medical Standards for fitness to drive.

<b>Sub Type:</b>	<b>Group 2: Commercial Vehicle 3.5 to 7.5 ton - Category: C</b>
Workplaces:	Commercial drivers
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
Investigation:	Visual acuity
	Colour vision
Restriction:	Complete Stage 3 of Bruce Protocol
	Vision Test: Typically 6/9 in better eye
	Colour Vision: Ability to recognize signals
	Monocular Vision: not allowed to drive
	Seizure free for 10 years without medication
	Malignant tumours of the brain 2 years off driving
	CABG cease driving for 3 months
	Absence of hypoglycemic episodes
	Acute psychotic disorder, Mania, Schizophrenia; Must cease driving immediately - Require stable for 3 years to drive
	Alcohol misuse : 1 year with controlled drinking
	Alcohol dependence: 3 years without dependence
	Drug abuse: At least one year without abuse
	Sleep apnea: If causing excessive sleep (in working hours)
Periodic Medical:	At the time of taking license 21 years to 45 years
	45 years and older: Medical every 5 years till age 65 years
	65 years and older: Medical annually without upper limit
References:	Department of Transport (UK) DVLA Medical Standards for fitness to drive.



Sub Type:	Heavy Equipment - eg. Crane, Bulldozer
Workplaces:	Construction, demolition, renovation
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
Investigation:	Visual acuity , Stereoscopic vision
	Colour vision
Restriction:	Complete Stage 3 of Bruce Protocol
	Vision Test: Typically 6/9 in better eye
	Colour Vision: Ability to recognize signals
	Monocular Vision: not allowed to drive
	Stereopsis: not allowed for crane or forklift operator
	Seizure free for 10 years without medication
	Malignant tumours of the brain 2 years off driving
	CABG cease driving for 3 months
	Absence of hypoglycaemic episodes
	Acute psychotic disorder, Mania, Schizophrenia; Must cease driving immediately - Require stable for 3 years to drive
	Alcohol misuse : 1 year with controlled drinking
	Alcohol dependence: 3 years without dependence
	Drug abuse: At least one year without abuse
Sleep apnoea: If causing excessive sleep (in working hours)	
Periodic Medical:	At the time of taking license 21 years to 45 years
	45 years and older: Medical every 5 years till age 65 years
	65 years and older: Medical annually without upper limit
References:	Department of Transport (UK). DVLA. Medical Standards for fitness to drive.
	Palmer K, Cox, R and Brown, I. Fitness for Work the Medical Aspect 4 <sup>th</sup> Ed. Oxford University Press. Oxford Medical Publications. 2007.

## **Aviators**

Includes: Air Crew-pilots, Flight Crew-cabin attendants, Flight Despatcher etc.

<b>Sub Type:</b>	<b>Air Crew -Pilots</b>
Workplaces:	Civil Aviation, Commercial Airlines, private planes
Health History:	UAE General Civil Aviation Authority. Application Form for Aviation Medical Certificate.
Physical Examination:	UAE General Civil Aviation Authority. Form for Aviation Medical Certificate Class 1, 2, 3 (require to be Approved Medical Examiner)
Investigation:	Visual acuity
	Colour Vision: ability to reliably identify red, white, green (normal colour vision not always required)
	Hearing (voice test)
	Pulmonary peak flow rate
	EKG (if required by history)
Restriction:	As per UAE General Civil Aviation Authority Policies
Periodic Medical:	As per UAE General Civil Aviation Authority Policies
References:	UAE General Civil Aviation Authority. Civil Aviation regulations. Part II. Chapter 5. Medical provisions for Licensing.

<b>Sub Type:</b>	<b>Flight Crew - Cabin Attendants</b>
Workplaces:	Civil Aviation, Commercial Airlines, private planes
Health History:	UAE General Civil Aviation Authority. Application Form for Aviation Medical Certificate.
Physical Examination:	UAE General Civil Aviation Authority. Form for Aviation Medical Certificate Class 1, 2, 3 (require to be Approved Medical Examiner)
Investigation:	Visual acuity
	Colour Vision: ability to reliably identify red, white, green (normal colour vision not always required)
	Hearing (voice test)
	Pulmonary peak flow rate
	EKG (if required by history)
Restriction:	As per UAE General Civil Aviation Authority Policies
Periodic Medical:	As per UAE General Civil Aviation Authority Policies
References:	UAE General Civil Aviation Authority. Civil Aviation regulations. Part II. Chapter 5. Medical provisions for Licensing.

Sub Type:	Aircraft Maintenance Engineer
Workplaces:	Civil Aviation, Commercial Airlines, private planes
Health History:	UAE General Civil Aviation Authority. Application Form for Aircraft Maintenance Engineer Medical Certificate
Physical Examination:	UAE General Civil Aviation Authority. Form for Aircraft Maintenance Engineer Medical Certificate (required to be Approved Medical Examiner)
Investigation:	Visual acuity
	Colour Vision: ability to reliably identify red, white, green (normal colour vision not always required)
	Hearing (voice test)
Restriction:	As per UAE General Civil Aviation Authority policies
Periodic Medical:	As per UAE General Civil Aviation Authority policies
References:	UAE General Civil Aviation Authority. Civil Aviation regulations. Part II. Chapter 5. Medical provisions for Licensing.

## Health Care Workers

Includes: Physicians, Nurses, Nursing Assistants, Dentist, Therapists –physiotherapists, occupational therapists, respiratory therapists, Technicians – ECG, respiratory, radiographer, laboratory, radiology, sterilization/CSSD

Sub Type:	Physician
Workplaces:	Hospitals, Clinics, Occupational Health Facilities in different industries, private practice, etc.
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
	Review Health History Questionnaire information and assess any positive findings in more detail.
Investigations:	Hepatitis Profile (A, B & C) and HIV
	Measles Antibodies and Varicella Antibodies
	Chest x-ray
Results of Investigations:	To be provided to Candidate / Employee
Restriction:	Hep B e antigen positive
	Active Pulmonary Tuberculosis
Periodic Medical:	Once every 3 years till age 59
	Once every year at age 60 and above
References:	CDC 'Yellow Book', USA, Atlanta, GA.

Sub Type:	Nurse, Nursing Assistant
Workplaces:	Hospitals, Clinics, Health Facilities in different industries, etc.
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
	Review Health History Questionnaire information and assess any positive findings in more detail.
Investigations:	Hepatitis Profile (A, B & C) and HIV
	Measles Antibodies and Varicella Antibodies
	Chest x-ray
Results of Investigations:	To be provided to Candidate / Employee
Restriction:	Hep B e antigen positive (Nursing Assistants are exempted)
	Active Pulmonary Tuberculosis

	Unable to perform moderate to heavy physical demands
	BMI of 40 or above with co morbidity
Periodic Medical:	Once every 3 years till age 59
	Once every year at age 60 and above
References:	CDC 'Yellow Book', USA, Atlanta, GA.

Sub Type:	Dentist
Workplaces:	Hospitals, Clinics, Private Practice, etc
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
	Review Health History Questionnaire information and assess any positive findings in more detail.
Investigations:	Hepatitis Profile (A, B & C) and HIV
	Measles Antibodies and Varicella Antibodies
	Chest x-ray
Results of Investigations:	To be provided to Candidate / Employee
Restriction:	Hep B e antigen positive
	Active Pulmonary Tuberculosis
Periodic Medical:	Once every 3 years till age 59
	Once every year at age 60 and above
References:	CDC 'Yellow Book', USA, Atlanta, GA.

Sub Type:	Physiotherapist / Occupational / Respiratory Therapist
Workplaces:	Hospitals, Clinics, Rehabilitation Centres, etc
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
	Review Health History Questionnaire information and assess any positive findings in more detail.
Investigations:	Hepatitis Profile (A, B & C) and HIV
	Measles Antibodies and Varicella Antibodies
	Chest x-ray

Results of Investigations:	To be provided to Candidate / Employee
Restriction:	Active Pulmonary Tuberculosis
	Unable to perform moderate to heavy physical demands
	BMI of 40 or above with co morbidity
Periodic Medical:	Once every 3 years till age 59
	Once every year at age 60 and above
References:	CDC 'Yellow Book', USA, Atlanta, GA.

<b>Sub Type:</b>	<b>Technicians: ECG, Respiratory, Radiographer</b>
Workplaces:	Hospitals, Clinics, etc.
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
	Review Health History Questionnaire information and assess any positive findings in more detail.
Investigations:	Hepatitis Profile (A, B & C) and HIV
	Measles Antibodies and Varicella Antibodies
	Chest x-ray
Results of Investigations:	To be provided to Candidate / Employee
Restriction:	Active Pulmonary Tuberculosis
	Unable to perform moderate to heavy physical demands
	BMI of 40 or above with co morbidity
Periodic Medical:	Once every 3 years till age 59
	Once every year at age 60 and above
References:	CDC 'Yellow Book', USA, Atlanta, GA.

<b>Sub Type:</b>	<b>Laboratory Technician, Radiology Technician</b>
Workplaces:	Hospitals, Clinics, Independent Labs etc.
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
	Review Health History Questionnaire information and assess any positive findings in more detail.

Investigations:	Hepatitis Profile (A, B & C) and HIV
	Measles Antibodies and Varicella Antibodies
	Chest x-ray
Results of Investigations:	To be provided to Candidate / Employee
Restriction:	Active Pulmonary Tuberculosis
	Unable to perform moderate to heavy physical demands
Periodic Medical:	Once every 3 years till age 59
	Once every year at age 60 and above
References:	CDC 'Yellow Book', USA, Atlanta, GA.

<b>Sub Type:</b>	<b>Sterilization Technician</b>
Workplaces:	Hospitals, Clinics etc.
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
	Review Health History Questionnaire information and assess any positive findings in more detail.
Investigations:	Hepatitis Profile (A, B & C) and HIV
	Measles Antibodies and Varicella Antibodies
	Chest x-ray
Results of Investigations:	To be provided to Candidate / Employee
Restriction:	Hep B e antigen positive
	Active Pulmonary Tuberculosis
	Unable to perform moderate to heavy physical demands
	BMI of 40 or above with co morbidity
Periodic Medical:	Once every 3 years till age 59
	Once every year at age 60 and above
References:	CDC 'Yellow Book', USA, Atlanta, GA.

## Professional Divers

Sub Type:	Deep Sea Diver
Workplaces:	Navy, Explorer, Merchants, Police
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
	Electrocardiogram and Spirometry and Audiometry and Step Test
	Bruce Protocol (optional: if required to assess cardiac fitness)
Restriction:	Ischemic heart disease, angina, CABG and Valvular heart disease
	T.B, Asthma, Fibrotic or Cystic Lung disease,
	Epilepsy, severe head injury, Severe motion sickness
	Active ENT infection, Stapedectomy, Meniere's
	Acute psychotic disorder, Mania, Schizophrenia
	Inflammatory bowel disease, hernia,
	gall bladder or pancreatic pathology
	Sickle cell anaemia, thalassemia major,
BMI greater than 27	
Investigation:	CBC and Hb and Urine micro
Periodic Medical:	Initial medical and then annual assessment
References:	Health and Safety Executive (UK). The Medical Examination and Assessment of Divers (MA1).



## **Emergency Responders**

Includes: Fire-fighters, police, civil defence, ambulance personnel, hazmat emergency responders etc.

<b>Sub Type:</b>	<b>Fire Fighter</b>
Workplaces:	Civil Defence; Industry, Offshore
Health History:	General Health History Questionnaire - Appendix 3
Physical Examination:	Employment Medical Examination Form - Appendix 4
	Assess physical ability to perform the tasks associated with job
Investigation:	Spirometry and Electrocardiogram and Audiometry
	Bruce Protocol and Lab tests as per NFPA standard
	Respirator use medical evaluation if required
Results of investigations	To be provided to employee
Restriction:	Inability to wear Self Contained Breathing Apparatus (SCBA)
	Epilepsy or history of sudden loss of consciousness
	* refer to NFPA standards regarding restrictions
Periodic Medical:	Initial Medical and then annual assessment
	Additional if exposure exceeds permissible exposure limits more than 29 days a year.
	Termination of employment
References:	NFPA. Standard on Comprehensive Occupational Medical Requirements for Fire Departments Standard 1582, USA.
	US Department of Labour. OSHA 3162-12R 2009. Screening and Surveillance Guide.

## Sea Farers

Includes: Marine Skippers/Captains, boat masters and seaman etc.

Sub Type:	Seafarer
Workplaces:	Shipping, Marine, Offshore etc.
Health History:	ILO Guideline
Physical Examination:	ILO Guideline
	Seafarers Certificate of Medical Fitness
Investigation:	ILO Guideline
Restriction:	ILO Guideline
Periodic Medical:	Initial Medical
	Every 3 years up to age 40
	Every 2 years up to age 50
	Annually thereafter
References:	ILO. Guidelines for Conducting Pre-sea and Periodic Medical Fitness Examinations for Seafarers (2007).

## Appendix 2: Hazardous Materials or Exposures Requiring Medical Surveillance

### Acrylonitrile

Standard Requirements	
<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes – annual <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes
<b>Termination exam</b>	Yes – if no exam within 6 months of termination
<b>Examination includes special emphasis on these body systems</b>	Respiratory, gastrointestinal <sup>1</sup> , thyroid, skin, neurological (peripheral and central)
<b>Work and medical history</b>	Required for all exams <sup>2</sup>
<b>Chest x-ray</b>	Yes
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Fecal occult blood <sup>1</sup>
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes – by physician
<b>Medical removal plan</b>	No

## Arsenic (Inorganic)

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes
<b>Termination exam</b>	Yes – if no exam within 6 months of termination
<b>Examination includes special emphasis on these body systems</b>	Skin, nasal, peripheral nervous system
<b>Work and medical history</b>	Required for all exams <sup>2</sup> with focus on respiratory symptoms; includes smoking history
<b>Chest x-ray</b>	Yes
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Urinary Total Arsenic
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician
<b>Medical removal plan</b>	No

## Asbestos (incl. Synthetic Mineral Fibres and Man-Made Mineral Fibres)

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1, 3</sup>
<b>Periodic exam</b>	Yes – annual <sup>1</sup> or more frequently if determined by physician
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Pulmonary and gastrointestinal
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; special emphasis on pulmonary, cardiovascular, gastrointestinal; standardized form required;
<b>Chest x-ray</b>	Yes <sup>1</sup> only for diagnosis certified radiologist or physician with expertise in pneumoconioses required;
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub>
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician; includes informing employee of increased risk of lung cancer from combined effects of smoking and asbestos exposure
<b>Medical removal plan</b>	No

## Benzene

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1, 3, 4</sup>
<b>Periodic exam</b>	Yes – annual <sup>1, 4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1, 4</sup> – includes urinary phenol test
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Hemopoietic; add cardiopulmonary if respiratory protection used at least 30 days/year, (initially, then every 3 years)
<b>Work and medical history</b>	Required for initial and periodic exams (pre-placement exam requires special history) <sup>2</sup>
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	Initially and every 3 years if respiratory protection used 30 days/year; specific tester requirements
<b>Other required tests</b>	CBC, differential, other specific blood tests; repeated as required;
<b>Evaluation of ability to wear a respirator</b>	Yes – if respirators are used
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician
<b>Medical removal plan</b>	Yes

## Blood-Borne Pathogens (Hepatitis, B)

### *Standard Requirements*

<b>Pre-placement exam</b>	No – must offer Hepatitis B (HBV) vaccine unless already immune or vaccine contraindicated
<b>Periodic exam</b>	No
<b>Emergency/exposure examination and tests</b>	Specific post-exposure monitoring for employee and source; HBV vaccine;
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	No
<b>Work and medical history</b>	No
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Yes – post-exposure incident;
<b>Evaluation of ability to wear a respirator</b>	No
<b>Additional tests if deemed necessary</b>	Yes – for post-exposure incident; follow post-exposure protocols
<b>Written medical opinion</b>	Yes – licensed healthcare professional to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes– by licensed healthcare professional; counseling re: HBV vaccine and post-exposure follow-up;
<b>Medical removal plan</b>	No

## 1,3-Butadiene

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1, 3, 4</sup>
<b>Periodic exam</b>	Yes <sup>1, 4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1, 4</sup> – within 48 hours of exposure
<b>Termination exam</b>	Yes <sup>4</sup> – if 12 months have elapsed since last exam
<b>Examination includes special emphasis on these body systems</b>	Liver, spleen, lymph nodes, and skin
<b>Work and medical history</b>	Required annually and for all examinations <sup>2</sup> ; standardized form or equivalent; includes comprehensive occupational and health history;
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Annually, CBC with differential and platelet count; also within 48 hrs. after exposure in an emergency situation and repeated monthly for 3 more months
<b>Evaluation of ability to wear a respirator</b>	Yes – if respirators are used
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician or other licensed healthcare professional to employer and employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician or other licensed healthcare professional
<b>Medical removal plan</b>	No



## Cadmium

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1, 3, 4</sup>
<b>Periodic exam</b>	Yes <sup>1, 4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1, 4</sup>
<b>Termination exam</b>	Yes <sup>3</sup>
<b>Examination includes special emphasis on these body systems</b>	Respiratory, cardiovascular (BP), urinary
<b>Work and medical history</b>	Required for pre-placement and periodic exams <sup>2</sup> ; standardized form required
<b>Chest x-ray</b>	Yes
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub>
<b>Other required tests</b>	Annually <sup>1</sup> , cadmium in urine, beta-2 microglobulin in urine, cadmium in blood, CBC, BUN, serum creatinine, urinalysis;
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician; includes explanation of results, treatment, and diet, and discussion of decisions re: medical removal; effect of smoking on cadmium exposure
<b>Medical removal plan</b>	Yes

## Creosote

### Standard Requirements

<b>Pre-placement exam</b>	Yes
<b>Periodic exam</b>	Yes – annual
<b>Emergency/exposure examination and tests</b>	Yes <sup>1</sup> – special medical surveillance begins within 24 hours
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Exam includes emphasis on the neurological system and Skin noting any abnormal lesions and Evidence of skin sensitisation
<b>Work and medical history</b>	Required for all examinations; includes family and occupational history, and environmental factors
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes if respirators are used
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer
<b>Employee counselling re: exam results, conditions of increased risk</b>	No
<b>Medical removal plan</b>	Yes if sensitisation occurs

## Chromium (VI), Hexavalent

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1</sup>
<b>Termination exam</b>	Yes <sup>3</sup> – unless last exam was less than 6 months prior to date of termination
<b>Examination includes special emphasis on these body systems</b>	Skin especially hands and forearms and respiratory tract
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; includes past, present and anticipated future exposure; any history of respiratory system dysfunction, asthma, dermatitis, skin ulceration or nasal septum perforation; smoking status and history
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician
<b>Medical removal plan</b>	No

## Coke Oven Emissions

<i>Standard Requirements</i>	
<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	Yes – if no exam within 6 months of termination
<b>Examination includes special emphasis on these body systems</b>	Skin
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; includes smoking history and presence and degree of respiratory symptoms
<b>Chest x-ray</b>	Yes
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub>
<b>Other required tests</b>	Weight, urine cytology, urinalysis for sugar, albumin, hematuria
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes ,
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician; also, employer must inform employee of possible health consequences if employee refuses any required medical exam
<b>Medical removal plan</b>	No

## Cotton Dust

### Standard Requirements

<b>Pre-placement exam</b>	Physical exam not specified; other tests required
<b>Periodic exam</b>	Physical exam not specified; other tests required <sup>1, 4</sup>
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Pulmonary
<b>Work and medical history</b>	Medical history; standardized questionnaire required;
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub> , FEV <sub>1</sub> /FVC Employees with specific abnormalities are referred to specialists <sup>1, 4, 5</sup>
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	No
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician re: results of exam and any medical conditions requiring further examination or treatment
<b>Medical removal plan</b>	Yes – for inability to wear a respirator (6 months)

## Crystalline Silica

### Standard Requirements

<b>Pre-placement exam</b>	Physical exam other tests required
<b>Periodic exam</b>	Physical exam annual; other tests required
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Pulmonary
<b>Work and medical history</b>	Medical history; standardized questionnaire required;
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub> , FEV <sub>1</sub> /FVC Employees with specific abnormalities are referred to specialists
<b>Other required tests</b>	Yes x ray only for diagnosis certified radiologist or physician with expertise in pneumoconioses required;
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	No
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician re: results of exam and any medical conditions requiring further examination or treatment
<b>Medical removal plan</b>	Yes – for inability to wear a respirator (6 months)

## 1,2-dibromo-3-chloropropane

### Standard Requirements

<b>Pre-placement exam</b>	Yes
<b>Periodic exam</b>	Yes <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes – male reproductive; repeat in 3 months
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Reproductive, genitourinary;
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; Includes reproductive history;
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician
<b>Medical removal plan</b>	No

## Ethylene Oxide

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes – annual <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1</sup>
<b>Termination exam</b>	Yes <sup>1</sup>
<b>Examination includes special emphasis on these body systems</b>	Pulmonary, skin, neurologic, hematologic, reproductive, eyes
<b>Work and medical history</b>	Required for all exams; includes reproductive history and special emphasis on some body systems;
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	CBC, white cell count with differential, hematocrit, hemoglobin, red cell count;
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician
<b>Medical removal plan</b>	No



## Formaldehyde

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1, 4</sup>
<b>Periodic exam</b>	Yes <sup>1, 4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>4</sup>
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Evidence of irritation or sensitization of skin, respiratory system, eyes; shortness of breath
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; questionnaire required;
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub> , FEF should be evaluated if respiratory protection is used
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes– by physician; includes information on whether medical conditions were caused by past exposures or emergency exposures
<b>Medical removal plan</b>	Yes

## Hazardous Waste Operations and Emergency Response (HAZWOPER)

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes – annually or at physician's discretion <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1</sup>
<b>Termination exam</b>	Yes – if no exam within 6 months of termination/ reassignment
<b>Examination includes special emphasis on these body systems</b>	Determined by physician;
<b>Work and medical history</b>	Yes – with emphasis on symptoms related to handling hazardous materials and health hazards, fitness for duty and ability to wear PPE <sup>2</sup>
<b>Chest x-ray</b>	No – unless determined by physician
<b>Pulmonary function test (PFT)</b>	No – unless determined by physician
<b>Other required tests</b>	No – unless determined by physician
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician
<b>Medical removal plan</b>	No

## Isocyanates

<b>Standard Requirements</b>	
<b>Pre-placement exam</b>	Physical exam other tests required
<b>Periodic exam</b>	Physical exam annual; other tests required
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Pulmonary, skin
<b>Work and medical history</b>	Medical history; standardized questionnaire required;
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub> , FEV <sub>1</sub> /FVC
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	No
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician re: results of exam and any medical conditions requiring further examination or treatment
<b>Medical removal plan</b>	Yes – for inability to wear a respirator (6 months)

## Lead

<b>Standard Requirements</b>	
<b>Pre-placement exam</b>	Yes
<b>Periodic exam</b>	Yes <sup>1, 4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1, 4</sup>
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Teeth, gums, hematologic, gastrointestinal, renal, cardiovascular (BP), neurological; pulmonary status if respiratory protection used
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; includes reproductive history, past lead exposure, both work/non-work, and history of specific body systems; see standard
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No – unless deemed necessary by physician
<b>Other required tests</b>	Hemoglobin, hematocrit, ZPP, BUN, serum creatinine, Urinalysis with micro, blood-lead levels, peripheral smear morphology, red cell indices <sup>1, b</sup> ;
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician; includes advising the employee of any medical condition, occupational or non-occupational, requiring further medical examination or treatment
<b>Medical removal plan</b>	Yes

## Mercury

### Standard Requirements

<b>Pre-placement exam</b>	Yes
<b>Periodic exam</b>	Yes <sup>1, 4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1, 4</sup>
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Eyes, skin, respiratory gastrointestinal, renal, cardiovascular (BP), neurological CNS and PNS); pulmonary status if respiratory protection used
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; includes reproductive history, past mercury exposure, both work/non-work, and history of specific body systems;
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Urinary and blood inorganic mercury others determined by physician
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician; includes advising the employee of any medical condition, occupational or non-occupational, requiring further medical examination or treatment
<b>Medical removal plan</b>	Yes

## Methylene Chloride

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1, 4</sup>
<b>Periodic exam</b>	Yes <sup>1, 4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>4</sup>
<b>Termination exam</b>	Yes – if no exam within 6 months of termination
<b>Examination includes special emphasis on these body systems</b>	Lungs, cardiovascular (including BP and pulse), liver, nervous, skin; extent of exam determined by examiner based on employee's health status, work, and medical history
<b>Work and medical history</b>	Required for all exams; example of work and medical history form provided
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No – unless deemed necessary by physician or other licensed healthcare professional
<b>Other required tests</b>	Laboratory surveillance may include tests as determined by examiner including “before and after shift tests”; Carboxyheamoglobin
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – by physician or other licensed healthcare professional to employer and Employee of increased risk of harm from combined effects of smoking and Methylene Chloride
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician or other licensed healthcare professional
<b>Medical removal plan</b>	Yes

## Methylene di-aniline (MDA)

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1, 3, 4</sup>
<b>Periodic exam</b>	Yes – annual <sup>1, 4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1, 4</sup>
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Skin, hepatic
<b>Work and medical history</b>	Required for all examinations <sup>2</sup> ; includes past work with MDA and other specific items;
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Liver function tests, urinalysis
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician
<b>Medical removal plan</b>	Yes

## Noise

### Standard Requirements

<b>Pre-placement exam</b>	Baseline audiograms are required within 6 months of exposure at or above 85dB.
<b>Periodic exam</b>	Annual audiometric testing required
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No requirements
<b>Examination includes special emphasis on these body systems</b>	Auditory
<b>Work and medical history</b>	Yes
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Initial and annual audiometric testing <sup>1, 4, 5;</sup>
<b>Evaluation of ability to wear a respirator</b>	No
<b>Additional tests if deemed necessary</b>	Yes, bone conduction audiometry
<b>Written medical opinion</b>	No
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – if standard threshold shift or suspected ear pathology
<b>Medical removal plan</b>	No



## Organophosphate Pesticides

### Standard Requirements

<b>Pre-placement exam</b>	Physical exam other tests required baseline Red blood cell and plasma Cholinesterase activity levels <sup>5</sup>
<b>Periodic exam</b>	Physical exam annual;
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	No
<b>Work and medical history</b>	Medical history; standardized questionnaire required;
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Yes – if deemed necessary – estimated red cell and plasma cholinesterase activity at end of work day after exposure
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	No
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician re: results of exam and any medical conditions requiring further examination or treatment
<b>Medical removal plan</b>	Yes – for inability to wear a respirator (6 months)

## Respiratory Protection

### Standard Requirements

<b>Pre-placement exam</b>	Evaluation questionnaire or exam; follow-up exam when required <sup>5</sup>
<b>Periodic exam</b>	Yes – in specific situations <sup>5</sup>
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Yes <sup>5</sup>
<b>Work and medical history</b>	Yes <sup>2</sup>
<b>Chest x-ray</b>	As determined by physician or other licensed healthcare professional
<b>Pulmonary function test (PFT)</b>	As determined by physician or other licensed healthcare professional
<b>Other required tests</b>	As determined by physician or other licensed healthcare professional
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician or other licensed healthcare professional to employer and employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	Yes – by physician or other licensed healthcare professional
<b>Medical removal plan</b>	No

## Vinyl Chloride

### Standard Requirements

<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Special attention to detecting enlargement of the liver, spleen or kidneys, or dysfunction of these organs and abnormalities in skin, connective tissue and pulmonary system;
<b>Work and medical history</b>	Required for initial and periodic exams <sup>2</sup> ; includes alcohol intake, history of hepatitis, exposure to hepatotoxic agents, blood transfusions, hospitalizations, and work history
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Blood test for total bilirubin, alkaline phosphatase, SGOT, SGPT and gamma glutamyl transpeptidase
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes – physician to employer; employer to employee
<b>Employee counselling re: exam results, conditions of increased risk</b>	No
<b>Medical removal plan</b>	Yes

## Footnotes

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<sup>1</sup> Pre-placement and periodic examinations are dependent upon specific factors such as airborne concentrations of the material and/or years of exposure, biological indices, age of employee, amount of time exposed per year.

<sup>2</sup> Standard requires medical and work history focused on special body systems, symptoms, personal habits, and/or specific family, environmental or occupational history.

<sup>3</sup> No examination required if previous examination done within specified time frame (eg., 6 months or 12 months) and provisions of standard met.

<sup>4</sup> Additional physician review: Provisions for referring employees with abnormalities to a specialist as deemed necessary by examiner.

<sup>5</sup> May require specific protocol.

## Appendix 3: Sample General Health History Questionnaire

Medical Exam Frequency: Pre-Placement, Annual, Termination

General Health History Questionnaire — Page 1 of 2			
First Name _____		Last Name _____	
Date of Birth (d/m/y) ____ / ____ / ____		<input type="checkbox"/> Male <input type="checkbox"/> Female	Height _____ cm Weight: ____ Kg

### OCCUPATIONAL HISTORY

	From	To	Occupation
1			
2			
3			

WORK EXPOSURE (Check box if yes)	
<input type="checkbox"/> Ionizing Radiation	<input type="checkbox"/> Dust
<input type="checkbox"/> Chemicals	<input type="checkbox"/> Noise
<input type="checkbox"/> Heavy Metals	<input type="checkbox"/> Industrial Accident / Compensation

### PERSONAL HISTORY - Do you suffer from or have you had? – (Check box if yes)

<input type="checkbox"/> Rheumatic Fever	<input type="checkbox"/> Rectal Bleeding	<input type="checkbox"/> Thyroid Disease	<input type="checkbox"/> Muscular weakness / paralysis
<input type="checkbox"/> High Blood Pressure	<input type="checkbox"/> Hernia	<input type="checkbox"/> Anxiety / Depression	<input type="checkbox"/> Lost work time due to back pain
<input type="checkbox"/> Varicose Veins	<input type="checkbox"/> Venereal Disease	<input type="checkbox"/> Insomnia	<input type="checkbox"/> Unexplained Chronic fatigue
<input type="checkbox"/> Chest Pain	<input type="checkbox"/> Kidney Disease	<input type="checkbox"/> Back Trouble	<input type="checkbox"/> Irritable or inflammatory Bowel disease
<input type="checkbox"/> Breathlessness	<input type="checkbox"/> Renal Colic	<input type="checkbox"/> Bone Complaint	<input type="checkbox"/> Lost work time due to migraines
<input type="checkbox"/> Palpitations	<input type="checkbox"/> Incontinence	<input type="checkbox"/> Joint Complaint	<input type="checkbox"/> Diagnosis of depression
<input type="checkbox"/> Pneumonia	<input type="checkbox"/> Frequent Urination	<input type="checkbox"/> Skin Disease	<input type="checkbox"/> Diagnosis of Bipolar Disorder
<input type="checkbox"/> Tuberculosis	<input type="checkbox"/> Painful Urination	<input type="checkbox"/> Multiple Sclerosis	<input type="checkbox"/> Diagnosis of obsessive Compulsive disorder
<input type="checkbox"/> Bronchitis	<input type="checkbox"/> Blood in Urine	<input type="checkbox"/> Jaundice	<input type="checkbox"/> Diagnosis of anxiety or Panic Attacks
<input type="checkbox"/> Asthma	<input type="checkbox"/> Epilepsy	<input type="checkbox"/> Diabetes	<input type="checkbox"/> Have you been admitted to a mental health/Psychiatric Hospital?
<input type="checkbox"/> Chronic Cough	<input type="checkbox"/> Stroke	<input type="checkbox"/> Poliomyelitis	<input type="checkbox"/> Have you ever suffered any mental and/or psychiatric illness/disorder?
<input type="checkbox"/> Sputum with Blood	<input type="checkbox"/> Migraine	<input type="checkbox"/> Anemia	<input type="checkbox"/> Have you ever taken and/or been prescribed any psychiatric meds?
<input type="checkbox"/> Peptic Ulcer	<input type="checkbox"/> Loss of Consciousness	<input type="checkbox"/> Cancer	<input type="checkbox"/> Have you ever suffered any serious head traumas/injuries?
<input type="checkbox"/> Haemorrhoids	<input type="checkbox"/> Numbness / Tingling	<input type="checkbox"/> Arthritis	<input type="checkbox"/> Have you even seen a Psychiatric and/or Psychologist/Counselor?
<input type="checkbox"/> Eye Trouble	<input type="checkbox"/> Ear Trouble	<input type="checkbox"/> Fibromyalgia	<input type="checkbox"/> Drug Reaction : _____
<input type="checkbox"/> Difficulty Color Vision	<input type="checkbox"/> Nose Trouble		<input type="checkbox"/> Allergy _____

### FEMALES

Are you pregnant? <input type="checkbox"/> Yes <input type="checkbox"/> No	Number of Pregnancies <input type="text"/>	Number of Live Births <input type="text"/>
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### FAMILY HISTORY

FAMILY	AGE	State of Health / Cause of Death	FAMILY	AGE	State of Health / Cause of Death
Father			Wife / Husband		
Mother			Son(s)		
Brother(s)			Daughter(s)		
Sisters(s)			Number of Children	<input type="text"/>	
<b>Is there a family history of – (Check box if yes)</b>					
<input type="checkbox"/> Heart Disease	<input type="checkbox"/> Anemia	<input type="checkbox"/> Kidney Disease	<input type="checkbox"/> Diabetes		
<input type="checkbox"/> High Blood Pressure	<input type="checkbox"/> Asthma	<input type="checkbox"/> Stroke	<input type="checkbox"/> Cancer		
<input type="checkbox"/> Allergy	<input type="checkbox"/> Tuberculosis	<input type="checkbox"/> Epilepsy	<input type="checkbox"/> Mental Disorder		

## General Health History Questionnaire – Page 2 of 2

### LIFESTYLE

Daily consumption of tobacco: \_\_\_\_\_ per day

Average **weekly** consumption of alcohol: \_\_\_\_\_ units per week

Exercise type: \_\_\_\_\_ Minutes per day \_\_\_\_\_

Recreational Drugs:  Yes  No

### MEDICAL HISTORY

#### Information on Medications taken on a regular or occasional basis over the past two years.

I have **not** taken any medications over the past 2 years or List as requested below ...

Medication And Dosage	Date Started	Reason for Medication	Are you currently taking this medication?
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

### SURGICAL HISTORY

#### List all Chronic Health Problems, Hospitalizations and Surgeries that you have experienced:

I have **not** had any chronic health problems, hospitalizations, nor surgeries or Complete information below ...

Date	Problem / Hospitalization/Surgery	Surgery Performed?		Current status related to each health issue & date of any surgery performed
		Yes	No	

### IMMUNIZATION HISTORY

<b>Tuberculosis (TB)</b>	Have you ever had active pulmonary TB? <input type="checkbox"/> No <input type="checkbox"/> Yes; if 'yes' give date _____
	Was it treated and for how long? <input type="checkbox"/> No <input type="checkbox"/> Yes Treated for ____ months
	Have you had a BCG vaccine? <input type="checkbox"/> No <input type="checkbox"/> Yes; if 'yes' give year : _____
	Have you had a TB skin test (Mantoux)? <input type="checkbox"/> No <input type="checkbox"/> Yes; if 'yes' give date _____ & Result ____ mm
<b>Hepatitis</b>	Have you ever been diagnosed with Hepatitis (A, B, C)? <input type="checkbox"/> No
	<input type="checkbox"/> Yes; if 'yes' give date: _____

	<p>_____</p> <p>What type of Hepatitis did you have? _____ What was your treatment? _____</p>
	<p>Have you had any Hepatitis vaccines? <input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>Which vaccine did you have? _____</p> <p>Dates of each dose : _____; _____ and _____</p>
<b>Measles, Mumps, Rubella</b>	<p>Have you had the vaccine for Measles/Mumps/Rubella? <input type="checkbox"/> No <input type="checkbox"/> Yes; if 'yes' give date _____</p>
<b>Tetanus / Diphtheria</b>	<p>Have you had a booster for Tetanus / Diphtheria? <input type="checkbox"/> Never <input type="checkbox"/> Yes, in the year _____</p>
<b>Chicken Pox / Varicella</b>	<p>Have you had the Varicella vaccine? <input type="checkbox"/> No <input type="checkbox"/> Yes - Date of each dose _____ &amp; _____</p>

<p>Please check to make sure you <u>have completed all questions</u> on the two pages of this form. <b>Your medical information cannot be evaluated unless all questions are completed or marked "unknown".</b></p>	
<p>I affirm that the information and responses I have provided are accurate and true to the best of my knowledge.</p>	
<p>Signature: _____</p>	<p>Date (dd/mm/yy): _____</p>



## Appendix 4: Sample Employment Medical Examination Form

EMPLOYMENT MEDICAL EXAMINATION FORM						
<i>Page 1 of 2</i>						
This report is to be completed by a licensed Medical Physician who performs complete physical exams as a part of his/her practice. Please assess and describe all abnormal findings, including past surgeries, serious and chronic conditions and indicate all current treatments.						
Family Name _____	First Name _____	Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female	Age _____	Height (cm) _____	Weight (kg) _____	BMI _____
EXAMINATION		FINDINGS	COMMENTS ON ABNORMAL FINDINGS			
<b>General</b>						
HAIR						
SKIN						
NAILS						
<b>EYES</b>						
LIGHT REFLEXES						
ACCOMODATION						
NYSTAGMUS						
FUNDI						
COLOR VISION		ISHIHARA TEST	EYE TEST			
		OTHER	RT / 6 LT / 6			
<b>EARS</b>						
MEATUS						
EAR DRUMS						
ABILITY TO HEAR / CONVERSATIONAL HEARING TONES		Weber				
		Rinne				
<b>CARDIO – VASCULAR</b>						
PULSE			/ min			
RHYTHM						
BLOOD PRESSURE		Systolic / Diastolic	mmhg		INDICATE NATURE & DEGREE	
HEART SOUNDS						
HEART MURMURS						
VARICOSE VEINS						
<b>RESPIRATORY</b>						
NASAL PASSAGE			PERCUSSION			
THYROID						
TRACHEA						
LYMPH NODES						
CHEST SHAPE / MOVEMENT						
BREATH SOUNDS						
ADDED SOUNDS						
<b>ALIMENTARY</b>						
TEETH						
TONGUE						
LIVER						

SPLEEN							
LYMPHADENOPATHY							
HERNIAL ORIEICES							
ANUS RECTUM / P.R.							
<b>URINARY</b>							
KIDNEYS							
GENITALIA							
<b>MUSCULO - SXELETAL</b>							
HANDS							
LIMBS							
BACK							
JOINTS							
INJURIES							
<b>CENTRAL NERVOUS</b>							
CRANIAL NERVES		I	II	III	IV	V	VI
		VII	VIII	IX	X	XI	XII
REFLEXES		SI	TR	SUP	KN	AN	PL
	RT.						
	LT.						
POWER							
TONE							
CO -ORDINATION							
SENSATION							
EMOTIONAL STABILITY							

### EMPLOYMENT MEDICAL EXAMINATION

Page 2 of 2

Please complete the requested information, based on your findings during the health history and physical exam on this individual ability to:

ACTIVITY	Y	N	EXPLANATION/FINDINGS	
Ability to stand and walk continuously for 8 - 12 hours per day.				
Ability to bend, stoop & squat repeatedly				
Ability to push, pull and lift patients				
Ability to lift 12 kg				
Ability to carry 12 kg occasionally & for short periods				
Ability to climb step ladders				
Ability to operate motorized equipment and/or vehicles				
Ability to work 12 hours and to rotate shifts (shift work)				
Ability to sit for extended periods of time				
<b>Previous surgery</b>  <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Type Surgery</b>		<b>Date (dd/mm/yy)</b>	<b>Current status</b>

<b>Describe chronic conditions, with current status for each:</b>			
1			
2			
3			
4			
5			
<b>I Have examined the employee and in my medical opinion consider that he / she is (check one):</b>			
<input type="checkbox"/> Physically fit for employment and demands of the job.			
<input type="checkbox"/> Temporarily unfit, but likely to become fit after recovery from the medical problem identified in the examination result. From a medical aspect, I estimate he / She may be fit for work in _____ weeks.			
MD Name & Stamp:		Signature	
		Date (d/m/y)	
<b>Note: This form is valid for a period of six months from the date of signature</b>			

## Appendix 5: Sample Seafarers Certificate of Medical Fitness

### CERTIFICATE OF MEDICAL FITNESS

*This certificate is issued by the approved medical practitioner of Ministry of Communications to the medical and visual standards of STCW and ILO Convention 1946 (No 73).*

Seafarer's Name:

Seaman's Book Number:

Date of Expiry of this Certificate:

I certify that the above mentioned seafarer has undergone a medical examination in compliance with the above regulation and I have found him/her fit for UNRESTRICTED seafaring in the following category:

**Category:** Deck / Engine / Catering \*

Officer / Rating \*

**I confirm that:**

- His/her hearing and eyesight are satisfactory for the duties to be performed,
- His/her color vision is satisfactory ,
- He/she is fit / for lookout duties.

**Official Stamp**

-----

Signature and Name of Approved  
Medical Practitioner.

**Date of Examination** -----

\*Delete as necessary.

**Note :**

Medical certificate of seafarers below age 40 - Valid for 5 years.

**Medical certificate of seafarers above age 40 - Valid for 2 years**

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