

## **GUIDELINE FOR CONDUCTING PRE-EMPLOYMENT MEDICAL EXAMINATION**

### **1.0 Introduction.**

Most employers require job applicants fulfil their requirements in term of qualification, experience and personal attributes as well as passing the pre-employment medical examination. The qualification, experience and personal attributes are normally well established and the applicant is usually assessed by an interview panel made up of at least three senior managers. However, in case of medical fitness assessment, this is left to the discretion of a panel doctor who is usually not provided with any form of guideline. The interpretation of "Fitness" is left entirely to the doctor. Unfortunately most doctors who carry out pre-employment examination are not familiar with the occupational health and safety hazards at the workplace and consequently, their recommendations may not meet the pre-employment examination objectives.

### **2.0 Objective of pre-employment medical examination.**

From the medical professional perspectives, there are two objectives for carrying out pre-employment medical examination;

#### **i) Safety.**

It is considered critical that the new applicant be free from medical conditions that could result in sudden incapacitation that can lead to an accident, especially, for health and safety sensitive jobs. Examples of such a position are driving, piloting, climbing working over a body of water, driving etc. In these positions, sudden incapacitation, would expose the worker himself and his colleague to great danger. Health and safety position is defined as a position in which incorrect decision and/or action by the incumbent would result in an incident with high potential in injury, plant and environmental damage, harm to Company reputation and financial loss.

#### **ii) Health.**

Pre-employment is a means to establish baseline health data against which future health status of the worker be compared. It is also a means of identifying existing medical conditions which could be adversely affected by occupational exposures.

The employer on the other hand has additional objectives for conducting pre-employment examination. These are;

#### **i) Productivity and Efficiency.**

Most employers attempt to satisfy themselves that new recruits are free from medical conditions which can affect the productivity of the new recruits once they employed. Pre-employment medical examination is the means by which they can meet this objective.

#### **ii) Cost.**

The cost of medical treatment is escalating. Employers who provide coverage on medical care especially the ones who provide full, unlimited coverage, are concerned on this. They are not willing to employ job applicants who suffer from medical conditions that has high medical cost potential.

### **3.0 Requirements for doctors to conduct pre-employment medical examination.**

In order to meet the objectives of pre-employment medical examination, it is essential that the examining doctor be familiar with the physical and mental demands of the job and the health status of the applicant. Although all doctors are trained to conduct medical examination, not all are familiar with occupational health issues sufficient enough to allow them to conduct the pre-employment effectively. Some training in occupational health is considered essential for all doctors who are involved in conducting pre-employment medical examination and in the care of the working population.

#### 4.0 Guideline for determining **FITNESS**.

4.1 Job applicant with chronic psychiatric and physical conditions. A candidate must be free from psychiatric and physical illness that can compromise safety, disrupt operations. This applies to many chronic mental and physical conditions and shall be declared **UNFIT** unless these conditions are reversible.

4.2 Job applicants with acute medical conditions.

Acute medical condition can either be totally cured or become recurrent and in so doing become chronic. Acute medical condition can be further classified as either medical or surgical. Job applicants who fall under this category is to be certified as **TEMPORARY UNFIT**. They remain in this category until the condition is cured. Following their recovery, the job applicant is to be reassessed to ensure that full recovery has taken place. If recovery is complete, the candidate is now declared as **FIT**.

Examples of medical conditions that fall under this classification: -

- Acute medical conditions that can be cured by medications such as acute pulmonary tuberculosis, pneumonia, acute kidney conditions, acute liver conditions.
- Medical conditions that can be cured by surgery such as perforated ear drum, hernia.

4.3 Job applicants with physical disabilities.

The suitability of job applicants with one or more disabilities is to be determined by the job requirements and the safety risk associated with the job.

Example of disability;

- Monocular vision.
- Low vision.
- Colour deficient.
- Deaf.

4.3.1 Job applicant with monocular vision.

A job applicant with monocular vision i.e. able to see only with one eye is **UNFIT** to perform jobs which requires good depth perception. Examples of jobs which require normal depth perception are: driving, offshore work, jobs that require climbing and jumping, aircraft pilot.

4.3.2 Job applicants with colour deficient.

Colour deficient is fairly common in the community. Most affected individuals are unaware of their condition until they are tested. Colour vision is commonly tested by using the Ishihara chart or the lantern test.

The most common type of colour deficient involve red, green and yellow. Applicants with colour deficient are able to safely perform all jobs except those that require ability to differentiate colours correctly such as;

- Piloting aeroplanes
- Professional fire fighters
- Electricians
- Electronic technicians
- Laboratory technicians
- Panel operator

Applicants for jobs as above be further tested by a practical test or a lantern test. On passing these tests, they should be considered as **FIT**.

4.3.3 Job applicants with deformity and/or amputation of limb(s).  
A job applicant with deformity or amputation of a limb to such a degree that the deformity or amputation interferes with successful and safe performance and emergency evacuation is declared **UNFIT**.

4.3.4 Job applicants with infectious diseases.  
Job applicants with infectious disease is advised to have the condition treated before his suitability can be certified.

## **5.0 Content of the Medical Assessment.**

Medical and occupational history.

The medical history should cover the applicant's known health problems such as major illnesses, surgical procedures, medication use, allergies, trauma. In addition the medical history should include a family health history, health habit history, immunisation history and reproductive history.

Symptoms review is also important for detecting early indication of illness. An occupational history should also be obtained to collect information about the person's past occupational and environmental exposures.

## **6.0 Medical Examination.**

The medical examinations include the following organ system;

- (a) Vital signs: Pulse, respiration, blood pressure and temperature (if indicated).
- (b) Visual acuity and colour vision.
- (c) Dermatological system.
- (d) Ears, eyes, nose, mouth and throat.
- (e) Cardiovascular system.
- (f) Respiratory system.
- (g) Gastrointestinal system.
- (h) Endocrine and metabolic system.
- (i) Genitourinary system.
- (j) Musculoskeletal system.
- (k) Neurological system.

## **7.0 Laboratory tests.**

The following tests are recommended for applicants for all type of jobs;

- Haemoglobin.
- Complete blood count.
- Urinalysis.
- Chest X-ray.

The following tests are to be performed if clinically indicated and if work exposures require these tests to be done to establish baseline date:

- Liver function.
- Renal function.
- Pregnancy test for female applicants.
- Audiometry.
- Spirometry.

Additional tests are to be conducted based on the exposures at work. For example if the workers are exposed to noise level of more than 90dB (A), audiogram is to be conducted. Likewise candidates who are going to work in dusty areas are to have a baseline vitalograph done.

Depending on the policy of the employing company, the following tests may be conducted (with informed consent);

- Drug screening.
- Hepatitis B profile.
- HIV antibodies.

#### **8.0 Reporting the results of the medical examination.**

All individuals who are required to undergo pre-employment medical examination should be informed ahead of time of the purpose of the examination and the content of the examination. Most companies require that the report be submitted to the Recruitment Officer. Companies that do this normally require the job applicant to sign a form to give his/her consent to the doctor to provide the medical report to the potential employer. In this situation, the examining doctor is no longer obligated to observe his duty on maintaining the confidentiality of the medical information of the applicant.

However, if consent for the release of the examination report is not given, the results and recommendations arising from the examination should be expressed in general terms without diagnostic information. Where more specific information is needed in order to make a decision on the status of the applicant, a specific consent form for releasing that information should be obtained from the candidate.

#### **9.0 Ethical issues associated with pre-employment examination.**

A doctor conducts medical examination on a job applicant on the request of the potential employer. In carrying the examination, the doctor is paid by the employing company for his services. By so doing, the doctor becomes an agent of the employing company. Most of the job applicants are not regular patients of the doctor and therefore, the usual doctor/patient relation does not exist. This is very much similar to the insurance medical examination. As a professional, the doctor is required to be objective in his assessment and as such is required to give his recommendations without fear or favour.

In giving his medical report to the employing company, the doctor is required to bear in mind the confidential nature of medical information as has been discussed under Item 8.0 above.

Please describe any health problems or injuries you have experienced connected with your present or past jobs by answering the following question?

**YES NO**

- |                                                                                                                                                                                                                    |                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| 1. Have any of your co-workers also experienced health problems or injuries connected with the same jobs?                                                                                                          | <input type="checkbox"/> <input type="checkbox"/> |
| 2. Have you ever smoked cigarettes, cigars or pipes?<br>If so, which and how many per day:                                                                                                                         | <input type="checkbox"/> <input type="checkbox"/> |
| 3. Do you smoke while on the job, as a general Rule?                                                                                                                                                               | <input type="checkbox"/> <input type="checkbox"/> |
| 4. Do you consume alcohol? If so, how much                                                                                                                                                                         | <input type="checkbox"/> <input type="checkbox"/> |
| 5. Do you have any allergies or allergic conditions? If so, please describe.                                                                                                                                       | <input type="checkbox"/> <input type="checkbox"/> |
| 6. Have you ever worked with any substance which caused you to break out in a rash? If so, please describe your reaction and name the substance:                                                                   | <input type="checkbox"/> <input type="checkbox"/> |
| 7. Have you ever been off work for more than a day because of an illness or injury Related to work? If so, please describe.                                                                                        | <input type="checkbox"/> <input type="checkbox"/> |
| 8. Have you ever worked at a job which caused you trouble breathing, such as cough, Shortness of breath, wheezing? If so, Please describe.                                                                         | <input type="checkbox"/> <input type="checkbox"/> |
| 9. Have you ever changed jobs or work assignments because of any health problems or injuries?..... If so, please describe:                                                                                         | <input type="checkbox"/> <input type="checkbox"/> |
| 10. Have you ever worked on shift before?                                                                                                                                                                          | <input type="checkbox"/> <input type="checkbox"/> |
| 11. In addition to your regular work, are you doing any other paying job?<br>List additional jobs.                                                                                                                 | <input type="checkbox"/> <input type="checkbox"/> |
| 12. Do you have your experience frequent pain or discomfort in your lower back or have you been under a doctor's care for back problem? If so, please describe.                                                    | <input type="checkbox"/> <input type="checkbox"/> |
| 13. Have you ever worked at a job or hobby in which you came into direct contact with any of the following substances by breathing, touching, or direct exposure? If so please check the box beside the substance. | <input type="checkbox"/> <input type="checkbox"/> |

[ ] Acids

[ ] Ethylene dibromide

[ ] Polychlorinated biphenyls

- |                                                |                                                   |                                            |
|------------------------------------------------|---------------------------------------------------|--------------------------------------------|
| <input type="checkbox"/> Alcohols (Industrial) | <input type="checkbox"/> Ethylene dichloride      | <input type="checkbox"/> Phono             |
| <input type="checkbox"/> Alkalis               | <input type="checkbox"/> Fiberglass               | <input type="checkbox"/> Phosgene          |
| <input type="checkbox"/> Ammonia               | <input type="checkbox"/> Halothane                | <input type="checkbox"/> Radiation         |
| <input type="checkbox"/> Arsenic               | <input type="checkbox"/> Heat (severe)            | <input type="checkbox"/> Rock dust         |
| <input type="checkbox"/> Asbestos              | <input type="checkbox"/> Isooanates               | <input type="checkbox"/> Silica powder     |
| <input type="checkbox"/> Benzene               | <input type="checkbox"/> Ketones                  | <input type="checkbox"/> Solvents          |
| <input type="checkbox"/> Beryllium             | <input type="checkbox"/> Lead                     | <input type="checkbox"/> Talc              |
| <input type="checkbox"/> Cadmium               | <input type="checkbox"/> Manganese                | <input type="checkbox"/> Trichloroethylene |
| <input type="checkbox"/> Carbon tetrachloride  | <input type="checkbox"/> Mercury                  | <input type="checkbox"/> Trinitrotoluene   |
| <input type="checkbox"/> Chloroform            | <input type="checkbox"/> Methylene chloride       | <input type="checkbox"/> Toluene           |
| <input type="checkbox"/> Chloroprene           | <input type="checkbox"/> Nickel                   | <input type="checkbox"/> TDI or MDI        |
| <input type="checkbox"/> Chromates             | <input type="checkbox"/> Noise (loud)             | <input type="checkbox"/> Vibration         |
| <input type="checkbox"/> Coal dust             | <input type="checkbox"/> Pesticides               | <input type="checkbox"/> Vinyl choride     |
| <input type="checkbox"/> Cold (severe)         | <input type="checkbox"/> Petchlorethylene         | <input type="checkbox"/> Welding lumes     |
| <input type="checkbox"/> Dichlorobenzene       | <input type="checkbox"/> Polybrominated biphenyls | <input type="checkbox"/> X-rays            |

If you have answered "yes" to any of the above. Please describe your exposure on a separate sheet of paper. \*TDI: Toluene diisocyanate. MDI: Methylene Disphenyl Isocyanate (both used in polymethane production)

**ENVIRONMENTAL HISTORY**

- |                                                                                                                                                      |                                                                                                                                                                |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|                                                                                                                                                      | <b>YES NO</b>                                                                                                                                                  |  |  |
| 1. Have you ever changed your residence or home because of a health problem<br>If so, please describe:                                               | <table border="1" style="border-collapse: collapse;"><tr><td style="width: 30px; height: 20px;"></td><td style="width: 30px; height: 20px;"></td></tr></table> |  |  |
|                                                                                                                                                      |                                                                                                                                                                |  |  |
| 2. Do you live next door to or very near an industrial plant? If so, please describe:                                                                | <table border="1" style="border-collapse: collapse;"><tr><td style="width: 30px; height: 20px;"></td><td style="width: 30px; height: 20px;"></td></tr></table> |  |  |
|                                                                                                                                                      |                                                                                                                                                                |  |  |
| 3. Do you have a hobby or craft which you do at home? e.g. Painting, Sculpting, woodworking, welding etc. If yes, please specify                     | <table border="1" style="border-collapse: collapse;"><tr><td style="width: 30px; height: 20px;"></td><td style="width: 30px; height: 20px;"></td></tr></table> |  |  |
|                                                                                                                                                      |                                                                                                                                                                |  |  |
| 4. Does your spouse or any other household member have contact with dusts or chemicals at work or during leisure activities? If so, please describe: | <table border="1" style="border-collapse: collapse;"><tr><td style="width: 30px; height: 20px;"></td><td style="width: 30px; height: 20px;"></td></tr></table> |  |  |
|                                                                                                                                                      |                                                                                                                                                                |  |  |
| 5. Do you use pesticides around your home or garden? If so, please describe:                                                                         | <table border="1" style="border-collapse: collapse;"><tr><td style="width: 30px; height: 20px;"></td><td style="width: 30px; height: 20px;"></td></tr></table> |  |  |
|                                                                                                                                                      |                                                                                                                                                                |  |  |
| 6. What clearing agents do you use to clean your home and workplace?                                                                                 | <table border="1" style="border-collapse: collapse;"><tr><td style="width: 30px; height: 20px;"></td><td style="width: 30px; height: 20px;"></td></tr></table> |  |  |
|                                                                                                                                                      |                                                                                                                                                                |  |  |

I hereby confirm that all the information provided above is true and correct.

.....  
Signature of applicant

Name : \_\_\_\_\_  
NRIC : \_\_\_\_\_  
Date : \_\_\_\_\_