

Medical Examination Standards  
For

# Vocational Driver's Licensing



Occupational Health Unit  
Disease Control Division  
Ministry of Health



Medical Examination Standards For Vocational Driver's Licensing  
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Preface	4
Participant of Medical Examination Standards For Vocational Driver's Licensing Technical Committee Expert Committee	5 7
Medical Examination Standard	10
Guidelines for Medical Examination of Vocational Drivers	25
Medical Examination Format Process	26
Process Flow	29
References	31

# Preface



**Dato' Dr. Hasan bin Abdul Rahman**  
Director General of Health, Malaysia

I would like to take this opportunity to commend the Occupational Health Unit, Disease Control Division, Ministry of Health, Malaysia, for developing these much needed standards. Medical examination for the assessment of fitness of vocational drivers is a very important process in the application of a vocational license. Medical conditions may have a potential impact on the driving ability of a person and if not addressed, this may prove dangerous to the public.

Driving a motor vehicle is a complex task involving perception, appropriated judgement, adequate response time and reasonable physical capabilities. A range of medical conditions may impair one's driving ability resulting in a crash causing injury or death.

Medical standards are required to assess certain conditions that may impair driving ability. Stringent standards are required for drivers of commercial vehicles due to the potential detrimental threat to body and life.

These standards have been developed by an expert committee that has studied the needs and requirements of vocational drivers while also taking into consideration existing standards in many other countries.

The Ministry of Health is committed to ensuring that the health and safety of the public is maintained and thus the need for adherence to compulsory standard

A handwritten signature in black ink, appearing to be 'HAR', written over a large, stylized loop.

Dato' Dr. Hasan bin Abdul Rahman  
Director General of Health, Malaysia

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## MEDICAL EXAMINATION STANDARDS

This medical examination standards are to be used to determine the fitness level of the applicants. Any applicant not fulfilling the criteria stated will be considered as unfit to apply for a vocational driving license.

### CHAPTER 1: VISUAL DISORDERS

CONDITION	MEDICAL STANDARDS
<p><b>1.1 VISUAL IMPAIRMENT</b></p>	<p><b>License may be granted</b> if visual acuity is of at least 6/12 in each eye (i.e. each eye must have at least 6/12, 6/9, 6/6 or better, tested separately) with or without corrective aids such as glasses or contact lenses.</p> <p><b>Test required :</b> Visual acuity test done at 6 meters, using standard Snellen's Chart either number, alphabet, or illiterate E Chart or chart with logarithmic progression, such as in the ETDRS standards, at the distance appropriate for the chart. Test one eye at a time. A person who makes more than two errors on the line with five characters should be regarded as having failed that line. Drivers who require corrective lens to achieve maximum visual acuity should be required to wear their corrective lenses while driving. Charts designed to be used at 3m or greater are recommended.</p>
<p><b>1.2 VISUAL FIELD DEFECTS</b></p> <p>(Disorders such as Severe Bilateral Glaucoma, Severe Bilateral Retinopathy, Retinitis Pigmentosa and other disorders producing field defects including partial or complete homonymous hemianopia, quadrantanopia or complete bitemporal hemianopia)</p>	<p><b>License may be granted</b> if the binocular visual field has an extent of at least 120° along the horizontal meridian</p> <p><b>Test required :</b> Visual fields is done with both eyes open and may be initially screened by Confrontation test. Any person who has or is suspected of having a visual field defect should be referred for expert assessment by an Optometrist or an Ophthalmologist for an objective test using an automated perimetry with Goldmann Standard testing conditions such as Humphrey, Octopus, Kowa Automated Visual Field Analyzer and others. Use the Esterman function Test and test with both eyes open.</p>
<p><b>1.3 DIPLOPIA</b></p> <p>(Double vision)</p>	<p><b>Not qualified for licensing</b> if diplopia is <b>present</b> within the central 40° primary gaze (i.e. 20° to the right, left, above and below fixation, even if the diplopia is correctable with a prism).</p>

CONDITION	MEDICAL STANDARDS
1.4 COLOUR VISION DEFECT	<p><b>Not qualified for licensing</b> if severe protanopia (severe red defect) is present: Those who fail to recognize correctly 4 plates of the Ishihara Test for Colour Deficiency (38 plates) should be referred to the specialist for further evaluation of colour vision. Confirmatory tests for colour vision include Farnsworth-Munsell Dichotomous D-15 Test, SPP pseudoisochromatic Part 1 &amp; Part 2 and Farnsworth-Munsell 100 Hues Test.</p>
1.5 NIGHT BLINDNESS	<p><b>Not qualified for licensing</b> if night blindness is present. Currently there are no standard tests or procedures that can be recommended for assessing night blindness. Condition is elicited from history.</p>

## CHAPTER 2: OTORINOLARYNGOLOGY DISORDERS

CONDITION	MEDICAL STANDARDS
2.1 HEARING LOSS	<p>Compliance with the standards should be clinically assessed initially and possible hearing loss measured by audiological testing that is performed by certified personnel and using certified facilities.</p> <p>Note :</p> <ul style="list-style-type: none"> <li>-“Certified personnel” are Audiologist’s and certified Audiometricians</li> <li>-“Certified facilities” are facilities that are <b>certified by DOSH</b> or any licensing body</li> </ul> <p><b>Not qualified for licensing</b> If the person has an unaided average hearing threshold level of equal to or greater than 60dB in the better ear.</p> <p>(Average hearing threshold is the simple average of pure tone air conduction thresholds at 500, 1000, 2000 and 3000Hz).</p> <p><b>License may be granted</b>, taking into account the opinion and endorsement of an ORL specialist and the nature of the driving task, and <b>subject to periodic review</b> if the standard is met with a hearing aid.</p> <p>Further assessment of the person may be arranged with the RTD authority and advice may be sought regarding modifications to the vehicle to provide a visual display of safety critical operations.</p>

CONDITION	MEDICAL STANDARDS
<p><b>2.2 VESTIBULAR DISORDERS</b></p>	<p>Note : Vestibular vertigo is vertigo caused by disturbances of vestibular system.</p> <p><b>License may be granted</b>, taking into account the opinion and endorsement of an ORL specialist, Physician and the nature of the driving task, and subject to periodic review:</p> <p>For persons who have had vertigo caused by Meniere's disease or recurring unheralded attacks of vertigo or are free of vertigo for at least 12 months;</p> <ul style="list-style-type: none"> <li>• For persons who have had one episode of vertigo caused by Acute Labyrinthitis (deafness and vertigo), Acute Neurolabyrinthitis (Vestibular Neuronitis), or any other type of vertigo or are free of vertigo for at least 6 months;</li> <li>• For persons who have had Benign Paroxysmal Positional Vertigo (BPPV) only, free of symptoms and signs of BPPV for at least 6 months.</li> </ul> <p>The ORL specialist's opinion to be sought on :</p> <ul style="list-style-type: none"> <li>• The nature of the condition and response to treatment; and</li> <li>• The functional ability to operate the vehicle safely</li> </ul>

### CHAPTER 3: NEUROLOGICAL DISORDERS

CONDITION	MEDICAL STANDARDS
<p><b>3.1 EPILEPSY</b></p>	<p>Free of epileptic attacks (including nocturnal attacks) for at least 10 years without medication.</p>
<p><b>3.2 FIRST EPILEPTIC SEIZURE/SOLITARY FIT</b></p>	<p><b>License may be granted</b> after taking specialist's opinion, size and condition of duties to be performed and hours of worked (with conditions including limited and/or restricted use) :</p> <ul style="list-style-type: none"> <li>• Person has had a single provoked seizure event; and</li> <li>• Provocative factors can be avoided reliably; and</li> <li>• Seizure free for 1 year; and</li> <li>• Does not take anti-epileptic medication; and</li> <li>• EG shows no epileptiform activity</li> </ul>
<p><b>3.3 LOSS OF CONSCIOUSNESS (LOC) DUE TO SIMPLE FAINT</b> LOSS OF CONSCIOUSNESS DUE TO UNEXPLAINED SYNCOPE AND LOW RISK OF RECURRENCE</p>	<p>Needs opinion from a physician whether the condition will cause LOC or loss of ability to control a vehicle. Suggested 6 months waiting period lapse from the time of the episode and complete neurological examination.</p>

CONDITION	MEDICAL STANDARDS
<p><b>3.4 LOSS OF CONSCIOUSNESS DUE TO UNEXPLAINED SYNCOPE AND HIGH RISK OF RECURRENCE:</b></p> <p>Abnormal ECG</p> <p>Structural heart disease</p> <p>Syncope cause injury</p> <p>More than 1 episode in previous 6 months</p> <p>Neurocutaneous sign</p> <p>Abnormal cardiac findings</p> <p>Known medical Conditions</p>	<p><b>License may be granted</b> if the result is negative and no medication is required to control the condition.</p> <p>Certification should be deferred for at least 6 months until the driver has fully recovered from that condition and has no existing residual complications and not taking medication to control the condition.</p> <p><b>Note: Certification should be done by a physician.</b></p>
<p><b>3.5 CHRONIC NEUROLOGICAL DISORDERS</b> (e.g. Parkinson's disease)</p>	<p>License may be granted after taking into account :</p> <ul style="list-style-type: none"> <li>• Response to treatment</li> <li>• Annual driver tester report</li> <li>• Modification to the vehicle if necessary by Rehabilitation Physician or Occupational Therapist</li> </ul>
<p><b>3.6 LIABILITY TO SUDDEN ATTACKS OF DISABLING GIDDINESS AND FAINTING</b></p>	<p>If condition is sudden and disabling, <b>not qualified for licensing.</b></p> <p>If symptom free and controlled for at least one year, may be considered.</p>
<p><b>3.7 CEREBROVASCULAR DISEASES</b> (including Stroke due to Vascular diseases, Intra Cranial Haemorrhage and Transient Ischemic Attack)</p>	<p>License may be granted and certified by a Physician or Rehabilitation Physician, if satisfactory functional recovery is attained within a period of 6 months from the date of the event.</p>
<p><b>3.8 CENTRAL NERVOUS SYSTEM INFECTIONS</b></p>	<p>1) During acute illness, must stop driving :</p> <ul style="list-style-type: none"> <li>* For meningitis - 5 years without medication</li> <li>* For encephalitis - 10 years without medication</li> </ul> <p>2) If seizure occurs during or after convalescence - must stop driving.</p> <p><b>License may be granted</b> if 10 years free of attack without medication and do not cause danger whilst driving. Also depends on the residual physical disability as assessed by a Physician or Neurosurgeon.</p>

CONDITION	MEDICAL STANDARDS
<b>3.9 SPINAL CORD INJURIES PERIPHERAL NERVE INJURIES</b>	<p><b>License may be granted</b> following:</p> <ol style="list-style-type: none"> <li>1) A consultation with orthopaedic Surgeon/ Rehabilitation Physician and an assessment by Occupational Therapist</li> <li>2) Able to drive a non – modified automatic vehicle</li> </ol>
<b>3.10 NERVOUS SYSTEM TUMOUR</b>	<p><b>Not qualified for licensing</b> until cleared by relevant Specialist.</p>
<b>3.11 SERIOUS CRANIOSPINAL INJURIES</b> (Operated Intracerebral Hematoma or Compound Depressed Fracture or Dural Tear with more than 24 hours Post-Traumatic Amnesia)	<p><b>Not qualified for licensing</b> until cleared by relevant Specialist.</p>
<b>3.12 NON TRAUMATIC CRANIOSPINAL HAEMORRHAGE</b> (e.g. Subarachnoid Haemorrhage)	<p><b>Not qualified for licensing</b> until cleared by relevant Specialist.</p>
<b>3.13 HYDROCEPHALUS</b>	<p><b>License may be granted</b> if uncomplicated and has no associated neurological deficit.</p>
<b>3.14 COMPLICATED MIGRAINE</b>	<p><b>Not qualified for licensing</b> until cleared by relevant Specialist.</p>
<b>3.15 CEREBRAL PALSY</b>	<p><b>Not qualified for licensing</b> unless cleared by relevant Specialist.</p>
<b>3.16 INVOLUNTARYMOVEMENT</b>	<p><b>Not qualified for licensing</b> unless cleared by relevant Specialist</p>

## CHAPTER 4: MUSCULOSKELETAL DISORDERS

CONDITION	MEDICAL STANDARDS
4.1 MUSCULOSKELETAL DISORDERS	<p><b>Not qualified for licensing :</b></p> <ol style="list-style-type: none"> <li>1) If rotation of the cervical spine is clinically restricted to less than 45 degrees to the left and right.</li> <li>2) If chronic pain and restriction of the peripheral joint movement interfere with relevant movements or concentration such that the vehicle cannot be operated safely.</li> <li>3) If there is ankylosis or chronic loss of joint movements of sufficient severity that control of vehicle is not safe.</li> <li>4) Severe cervical myelopathy and quadriplegia.</li> </ol>
4.2 ABSENCE OF UPPER LIMB OR LOSS OF UPPER LIMB FUNCTION	<p><b>Not qualified for licensing</b></p>
4.3 ABSENCE OF LOWER LIMB OR LOSS OF LOWER LIMB FUNCTION	<p><b>Only applied to car drivers,</b></p> <p><b>Licensing may be granted following:</b></p> <ol style="list-style-type: none"> <li>1) A consultation with orthopaedic Surgeon/ Rehabilitation Physician and an assessment by Occupational Therapist</li> <li>2) Able to drive a non – modified automatic car.</li> </ol>

## CHAPTER 5: PSYCHIATRIC DISORDERS

CONDITION	MEDICAL STANDARDS
5.1 PSYCHIATRIC DISORDERS	<p><b>Not qualified for licensing :</b></p> <ul style="list-style-type: none"> <li>• If the person has an Acute or Chronic Psychosis (e.g.Schizophrenia, Bipolar Mood Disorder), Depressive Psychosis; Organic Psychosis (e.g. Dementia or Drug-induced Psychosis etc.); or</li> <li>• If the person is using or dependent on psychotropic drugs which will impair driving performance on a long-term basis; or</li> <li>• If the person's judgment or perception, cognitive or motor function is affected by a mental disorder (e.g.Dementia, Post-Stroke, Adult ADHD); or</li> <li>• If the person has any psychiatric disorder with features such as aggression, violence etc. which are hazardous to driving; or</li> <li>• If the examining doctor believes that there is a significant risk of a previous psychotic condition relapsing.</li> </ul>

## CHAPTER 6: DRUG AND ALCOHOL ABUSE AND DEPENDENCY

CONDITION	MEDICAL STANDARDS
<p><b>6.1 ALCOHOL ABUSE AND DEPENDENCY</b></p>	<p><b>Not qualified for licensing :</b></p> <ul style="list-style-type: none"> <li>• If there is alcohol dependency</li> <li>• If the person has a strong history of alcohol abuse and relevant biochemical findings</li> </ul> <p><b>License may be granted</b> after taking into account appropriate specialist opinion, nature of the driving task and subject to periodic review:</p> <ul style="list-style-type: none"> <li>• If the person has stopped drinking for a substantial period (for at least 12 months); and</li> <li>• Is compliant with treatment; and</li> <li>• Shows no evidence of end organ damage relevant to driving; and</li> <li>• Shows no evidence of alcohol related seizures for at least two years.</li> </ul>
<p><b>6.2 SUBSTANCE DEPENDENCE AND ABUSE</b></p>	<p><b>Not qualified for licensing :</b></p> <p>If there is clear evidence of dependency or persistent abuse of any psychoactive drugs.</p> <p><b>License may be granted</b> after taking into account appropriate specialist opinion, nature of driving task and subject to periodic review:</p> <ul style="list-style-type: none"> <li>• Persons who are compliant with treatment for illicit drug addiction (including Methadone or Buprenorphine medication) for at least 12 months; and</li> <li>• The severity of the addiction(s), the response to treatment and the driving requirements are taken into account.</li> </ul>

## CHAPTER 7: CARDIOVASCULAR DISORDERS

CONDITION	MEDICAL STANDARDS
7.1 ANGINA PECTORIS	<p><b>License may be granted</b> when free from Angina for at least 6 weeks while on medication, but if indicated, to perform at least a resting ECG. A Stress Test or equivalent diagnostic investigation may be required.</p>
7.2 ACUTE CORONARY SYNDROMES (ACS)	<p>Driving to cease for a minimum of 6 weeks - return to driving will be permitted when the person is symptom free, there is no other disqualifying condition and the person is able to complete the exercise ECG to the required standards:</p> <ul style="list-style-type: none"> <li>• There is an exercise tolerance of greater than 9 minutes (stage 3) on the Bruce Treadmill Test</li> <li>• Less than 2 mm ST segment depression on an exercise ECG</li> </ul> <p>In addition the LVEF must be &gt; 40%.</p>
7.3 ACUTE MYOCARDIAL INFARCTION	<p>Driving to cease for a minimum of 3 months - return to driving will be permitted when the person is symptom free, there is no other disqualifying condition and the person is able to complete the exercise ECG to the required standards :</p> <ul style="list-style-type: none"> <li>• There is an exercise tolerance of greater than 9 minutes (stage 3) on the Bruce Treadmill Test</li> <li>• Less than 2 mm ST segment depression on an exercise ECG</li> </ul> <p>In addition the LVEF must be &gt; 40%.</p>
7.4 ANGIOPLASTY	<p>Driving to cease for a minimum of 6 weeks - return to driving will be permitted when the person is symptom free, there is no other disqualifying condition and the person is able to complete the exercise ECG to the required standards :</p> <ul style="list-style-type: none"> <li>• There is an exercise tolerance of greater than 9 minutes (stage 3) on the Bruce Treadmill Test</li> <li>• Less than 2 mm ST segment depression on an exercise ECG</li> </ul> <p>In addition the LVEF must be &gt; 40%.</p>
7.5 CABG	<p>Driving to cease for a minimum of 3 months - return to driving will be permitted when the person is symptom free, there is no other disqualifying condition and the person is able to complete the exercise ECG to the required standards:</p> <ul style="list-style-type: none"> <li>• There is an exercise tolerance of greater than 9 minutes (stage 3) on the Bruce Treadmill Test.</li> <li>• Less than 2 mm ST segment depression on an exercise ECG.</li> </ul> <p>In addition the LVEF must be ≥40</p>

CONDITION	MEDICAL STANDARDS
7.6 LEFT VENTRICULAR ASSIST DEVICES	<b>Not qualified for licensing</b> permanently.
7.7 AORTIC ANEURYSM	The person should not drive for at least 3 months post - repair.  <b>Not qualified for licensing</b> if patient has a large (more than 5.5 cm) Aortic Aneurysm, Thoracic or Abdominal. Periodic reviews are necessary.
7.8 CAROTID ARTERY STENOSIS	<b>Not qualified for licensing</b> if symptomatic or the degree of stenosis is severe enough to warrant intervention.  <b>License may be granted</b> if symptom free after repair or stent implantation.
7.9 PERIPHERAL ARTERIAL DISEASE	<b>License may be granted</b> if there are no symptoms of severe limb ischemia.
7.10 DEEP VEIN THROMBOSIS (DVT)	<b>Not qualified for licensing</b> if the person has Deep Vein Thrombosis which is liable to recurrence or embolus.
7.11 ARRHYTHMIA	<b>Not qualified for licensing :</b> • If the person has a history of recurrent or persistent arrhythmia, which may result in syncope or incapacitating symptoms.  <b>License may be granted</b> when the arrhythmia is controlled for at least 3 months or the arrhythmia is successfully cured, provided that the LV ejection fraction is satisfactory (i.e. LVEF is > 40%) and there is no other disqualifying condition.
7.12 PACEMAKER IMPLANT	<b>The person should not drive</b> for at least 6 weeks after insertion of pacemaker and the person is symptom free.  <b>License may be granted</b> thereafter provided that there are no other disqualifying conditions.
7.13 SUCCESSFUL CATHETER ABLATION	<b>License may be granted</b> if there are no recurrent symptoms for 6 weeks and there are no other disqualifying conditions.
7.14 UNPACED CONGENITAL COMPLETE HEART BLOCK	<b>Not qualified for licensing</b> if symptomatic or severe bradycardia (Heart rate below 30 beats per minute).

CONDITION	MEDICAL STANDARDS
7.15 BIVENTRICULAR PACEMAKER	<b>Not qualified for licensing</b> permanently.
7.16 IMPLANTABLE CARDIOVERTER DEFIBRILLATOR (ICD)	<b>Not qualified for licensing</b> permanently.
7.17 PROPHYLACTIC ICD IMPLANT	<b>Not qualified for licensing</b> permanently.
7.18 HYPERTENSION	<p><b>Not qualified for licensing</b> if Resting Blood Pressure consistently exceeds 180 mmHg systolic or more, and/or 100 mmHg diastolic or more;</p> <ul style="list-style-type: none"> <li>• With or without medication or</li> <li>• Medication causes symptoms which affect driving ability.</li> </ul> <p><b>License may be granted</b> if the person is treated with Antihypertensive drug therapy and the blood pressure is not greater than 150/95 mmHg. Ideal blood pressure is less than 140/90 mmHg.</p>
7.19 CHRONIC AORTIC DISSECTION	<p><b>License may be granted :</b></p> <ul style="list-style-type: none"> <li>• If maximum transverse diameter of the aorta, including false lumen / thrombosed segment, does not exceed 5.5cm</li> <li>• If blood Pressure is well controlled (120/80 mmHg).</li> </ul>
7.20 MARFAN'S SYNDROME	<p><b>License may be granted :</b></p> <ul style="list-style-type: none"> <li>• If no major organ involvement and there is no other disqualifying condition.</li> </ul>
7.21 DILATED CARDIOMYOPATHY	<p><b>Not qualified for licensing :</b></p> <p>If symptomatic and ejection fraction &lt; 40%. License may be granted, taking into account the opinion of a cardiologist, and the nature of the driving task, and subject to annual review: If there is an ejection fraction of &gt; 40%.</p>
7.22 HYPERTROPHIC CARDIOMYOPATHY (HCM)	<p><b>Not qualified for licensing</b> if symptomatic.</p> <p>License may be granted if they do not have more than one of the listed criteria below:</p> <ol style="list-style-type: none"> <li>1. There is no family history of sudden premature death from presumed HCM.</li> <li>2. The cardiologist can confirm that the HCM is Anatomically mild.</li> <li>3. No serious arrhythmia has been demonstrated i.e. Ventricular Tachy - arrhythmia excluding isolated Ventricular pre-excitation beats.</li> <li>4. Hypotension does not occur during the completion of 9 minute exercise testing.</li> </ol>

CONDITION	MEDICAL STANDARDS
7.23 HEART OR HEART LUNG TRANSPLANT	<b>Not qualified for licensing.</b>
7.24 PULMONARY EMBOLISM	<p><b>License may be granted</b>, taking into account the opinion of an appropriate specialist, and the nature of the driving task, and subject to periodic review :</p> <ul style="list-style-type: none"> <li>• After an appropriate non-driving period of a minimum of 6 months or as determined by the attending doctor; and</li> <li>• Depending on the cause of the embolus and response to treatment.</li> </ul>
7.25 HEART VALVE DISEASE	<p><b>License may be granted</b> after taking into account the opinion of a Cardiologist, and the nature of the driving task, and subject to annual review :</p> <ul style="list-style-type: none"> <li>• If the person's cardiological assessment shows Mild Valvular Disease of no haemodynamic significance.</li> <li>• Three (3) months following successful surgery.</li> <li>• Ejection Fraction &gt; 40%.</li> </ul>
7.26 HEART FAILURE	<p><b>Not qualified for licensing</b> if symptomatic.</p> <p><b>License may be granted</b> provided that the LV ejection fraction is good i.e. LVEF is &gt; 40%, the exercise/functional test requirements can be met and there are no other disqualifying condition.</p>
7.27 CONGENITAL HEART DISEASE	<p><b>Not qualified for licensing</b> when complex or severe disorder(s) is (are) present after assessment by an appropriate consultant.</p> <p>Those with minor diseases and others who have had successful repair of defects or relief of valvular problems, fistulae etc. may be licensed provided that there are no other disqualifying conditions. Periodic reviews may be necessary</p>
7.28 SYNCOPE DUE TO HYPOTENSION (VASOVAGAL AND AUTONOMIC DYSFUNCTION)	<b>Not qualified for licensing</b> if the condition is severe enough to cause episodes of loss of consciousness without warning.

## CHAPTER 8: DIABETES MELLITUS AND OTHER ENDOCRINE DISEASES

CONDITION	MEDICAL STANDARDS
<p><b>8.1 GENERAL GUIDELINES FOR DIABETES MELLITUS</b></p>	<p><b>Not qualified for licensing</b> (for initial application and maintenance) if :</p> <ol style="list-style-type: none"> <li>1. Hypoglycemia within the previous 6 months which requires help from another person or producing loss of consciousness.</li> <li>2. Hypoglycemia appearing in the absence of warning symptoms (hypoglycemia awareness).</li> <li>3. Uncontrolled Diabetes: HbA1c &gt; 12% within the last 6 months.</li> <li>4. There is presence of end organ effects which may affect driving; <ul style="list-style-type: none"> <li>• High risk Proliferative Retinopathy/ Diabetic Maculopathy</li> <li>• Peripheral Neuropathy or Cardiovascular Diseases with the potential to affect driving (refer to particular section).</li> </ul> </li> </ol>
<p><b>8.2 INSULIN TREATED DIABETES MELLITUS</b></p>	<p>All applicants on insulin should be assessed by attending doctor trained in diabetic care.</p> <p><b>Not qualified for licensing according to the above mentioned criteria in 8.1.</b></p> <p>Further exclusion criteria for insulin treated applicants :</p> <ul style="list-style-type: none"> <li>• Have less than 2 follow-up clinic visits during the last year for diabetic care.</li> </ul>
<p><b>8.3 METABOLIC AND ENDOCRINE DISORDERS (OTHER THAN DIABETES)</b></p>	<p>Because of the diverse manifestation of these conditions, each person will require an individual assessment regarding likelihood of acute loss of control of their vehicle.</p> <p>If there is a real risk of acute loss of control then the criteria would not be met; appropriate specialist's opinion must be obtained.</p> <p>Specific defects which may be associated with an Endocrine Disorder may also need evaluation, e.g. effects on visual field from Pituitary Tumours or Exophthalmos in Hyperthyroidism.</p>

## CHAPTER 9: RESPIRATORY DISORDERS

CONDITION	MEDICAL STANDARDS
<b>9.1 CHRONIC LUNG DISEASES</b> (e.g Asthma, COPD, Interstitial Lung diseases)	Drivers who are diagnosed with chronic respiratory illnesses likely to interfere with their ability to drive despite optimal therapy will not be qualified for licensing.  Note: - Public health aspects must be considered in drivers
<b>9.2 RESPIRATORY FAILURE</b>	<b>Not qualified for licensing :</b> If the person has severe respiratory failure. If the person has unstable diseases requiring oxygen therapy.  <b>License may be granted</b> on an individual basis as assessed by a Physician or Psychiatrist.
<b>9.3 NARCOLEPSY/ CATAPLEXY</b>	<b>License may be granted</b> on an individual basis as assessed by a Respiratory Physician

## CHAPTER 10. RENAL DISORDERS

CONDITION	MEDICAL STANDARDS
<b>10.1 RENAL FAILURE AND OTHER RENAL DISEASES</b>	<b>Not qualified for licensing :</b>  <ul style="list-style-type: none"> <li>If the person has end - stage renal failure (requiring dialysis) or advanced predialysis renal failure (GFR &lt; 20% of normal).</li> </ul> <b>License may be granted</b> , taking into account the opinion of a renal specialist, and the nature of the driving task, and subject to periodic review:  <ul style="list-style-type: none"> <li>If the patient's condition is stable with limited co-morbidities.</li> </ul>

## CHAPTER 11: MISCELLANEOUS

CONDITION	MEDICAL STANDARDS
<p><b>11.1 RESPIRATORYRELATED SLEEP DISORDERS</b></p> <p><b>(OBSTRUCTIVE SLEEP APNOEA SYNDROME / OSA)</b></p>	<p>Drivers who are diagnosed with OSA and require treatment are advised to have annual review by a ORL/ Respiratory specialist to ensure adequate treatment is maintained.</p> <p><b>Not qualified for licensing :</b></p> <ul style="list-style-type: none"> <li>• If the person has established Sleep Apnoea Syndrome (Sleep Apnoea on a diagnostic sleep study and excessive daytime sleepiness) with moderate to severe sleepiness until treatment is effective.</li> <li>• If there is a history suggestive of apnoea in association with severe day time sleepiness, until investigated and treated. Severe sleepiness is indicated by frequent self-reported sleepiness while driving motor vehicle crashes caused by inattention or sleepiness or an <b>Epsworth Sleepiness Scale score of &gt;10 or OSA syndrome screening indicating high risk of OSA.</b></li> </ul> <p><b>License may be granted,</b> taking into account the opinion of a specialist (Respiratory/Otorhinolaryngology) in sleep disorders and the nature of driving task and subject to annual review:</p> <ul style="list-style-type: none"> <li>• For those with established Sleep Apnoea Syndrome (Sleep Apnoea on a diagnostic sleep study and excessive daytime sleepiness) who are on satisfactory treatment.</li> </ul>

**GUIDELINES FOR MEDICAL  
EXAMINATION OF  
VOCATIONAL DRIVERS**



# **GUIDELINES FOR MEDICAL EXAMINATION OF VOCATIONAL DRIVERS**

## **INTRODUCTION**

Medical examinations have been carried out as a requirement of the Road Transport Department (RTD), for the application of vocational driving licenses. This was conducted using the JPJ L8A form for new applications and the JPJ L8 form for renewal of licenses. Due to inconsistencies faced in the examinations being conducted by various medical practitioners, a standardized medical examination format has been developed by the Ministry of Health and Road Transport Department with input from clinical specialists, the Malaysian Medical Association (MMA) and the Malaysian Institute of Road Safety Research (MIROS).

## **OBJECTIVE**

The objective of this format is to :

- Ensure the standardization of medical examinations being conducted by the government doctors and the private practitioners.
- To develop standards to be used in the determination of the fitness of the applicants

## **MEDICAL EXAMINATION**

1. Who conducts the medical examinations?
  - Government Doctors
    - Outpatient Doctors
    - Specialists (who have fulfilled the qualifying criteria); for applicants who are under their follow up
  - Private Practitioners
2. Place of examination
  - Government Clinics
  - Private Clinics

### 3. Examination Standards

The medical examination standards for vocational drivers licensing are to be used to determine the fitness level of the applicants.

### 4. Confidentiality

- All information obtained from the medical examination is confidential and may not be divulged to anyone without the permission of the applicant.
- All data of the medical examination will be retained by the clinic where the examination was conducted.

# **MEDICAL EXAMINATION FORMAT**

## **Part 1 : Applicants Information**

This section describes the socio demographic details of the applicant and is to be completed by the applicant.

The section includes:

- i. Name of the applicant
- ii. Address
- iii. Identification card number
- iv. Date of birth
- v. Gender
- vi. Contact information

## **Part 2 : Medical History**

Medical history is to be completed by the applicant with the assistance of the medical practitioner if necessary.

## **Declaration by the applicant**

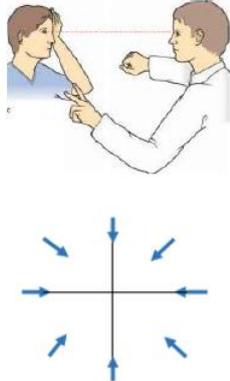
The applicant is to make a declaration on the accuracy of the information provided in Part 2 witnessed by the examining doctor.

## **Part 3: Medical examination**

A complete medical examination is to be conducted by the medical practitioner who is to enter the findings obtained in Part 3.

- a. General Examination
  - i. Weight
  - ii. Height
  - iii. Body Mass Index
  - iv. Date of Examination
  
- b. Specific Examination
  - i. Vision
    - Visual acuity is to be tested using Snellens Chart
    - Visual field tested using the Confrontation Method
    - Colour deficiency tested using Ishihara Charts

### Confrontation Visual Field Test

<b>Indication</b>	To detect visual field defect	
<b>Tools</b>	Target: Finger or pen	
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Explain to patient regarding the test.</li> <li>2. Examiner sits 1 meter in front of the patient.</li> <li>3. Begin testing the patient's right eye by asking the patient to close his/her left eye. The examiner needs to close his/her right eye.</li> <li>4. Please ask the patient to fixate at the examiner's eye at all times during this test.</li> <li>5. At 50cm or in between the patient and the examiner, the examiner moves the target from 180° temporally towards the centre until the patient could detect the target.</li> <li>6. Repeat step 5 from all other directions, including superior, inferior, temporal and nasal visual field.</li> <li>7. Examiner must ensure the patient's eyes are always fixated to the examiner's eye during the entire test.</li> <li>8. Repeat step 3 to 6 to test the left eye.</li> </ol>	
<b>Result</b>	Normal visual field- Patient could detect the target at all quadrants.	

- ii. Hearing
  - To be tested using the `Whisper Test`

### WHISPER TEST\*

#### Instructions

1. The examiner stands at arm's length (~0.6 m) behind the patient (to prevent lip reading)
2. The opposite auditory canal is occluded by the patient or examiner and the tragus is rubbed in a circular motion (goal; to block hearing from that ear)
3. The examiner exhales and whispers a combination of numbers and letters (example 4-K-2). *Whispering at the end of exhalation is to ensure as quiet and as standardized voice as possible.*
4. If the patient responds correctly, hearing is considered normal and no further screening is necessary on that ear.
5. If the patient responds incorrectly, then repeat using a different number-letter combination.
6. If on repeated testing, the patient can answer three out of a possible six numbers-letters correctly, the patient passes. If they cannot answer three out of six or more, the patient fails in that ear.
7. Repeat the sequence in the opposite ear using different combinations of numbers and letters. (Note: patients with memory problems may need a simplified letter/number combination to compensate for their inability to remember)

\*Pirozzo S. Whispered voice test for screening for hearing impairment in adults and children: systematic review. BMJ. 2003 October 25;327(7421):967.

### **Significance**

Hearing loss prohibits patients from understanding conversations, contributes to cognitive decline, and leads to social isolation. This impairment is the third most chronic impairment among older people. It is also useful to ask the patient and family if they have noticed any changes in hearing, to describe any changes and if they have had any prior treatment.

Patients with no wax occlusion of their ear canal and who failed this test have a hearing loss that correlates with 30 dB loss. This level of hearing loss has a significant affect on communication.

- iii. Neurology and Musculoskeletal System This includes:
  - History of epilepsy
  - Symptoms of neurological disorders
  - Conducting the Rhomberg's Test
  - Examination of the Musculoskeletal System
- iv. Cardiovascular System
  - Blood pressure
  - Pulse rate
  - Apex Beat
  - Heart sounds
- v. Respiratory System
  - Respiratory Sounds
- vi. Diabetes Mellitus
  - A complete history of Diabetes Mellitus including treatment and attacks of hypoglycaemia

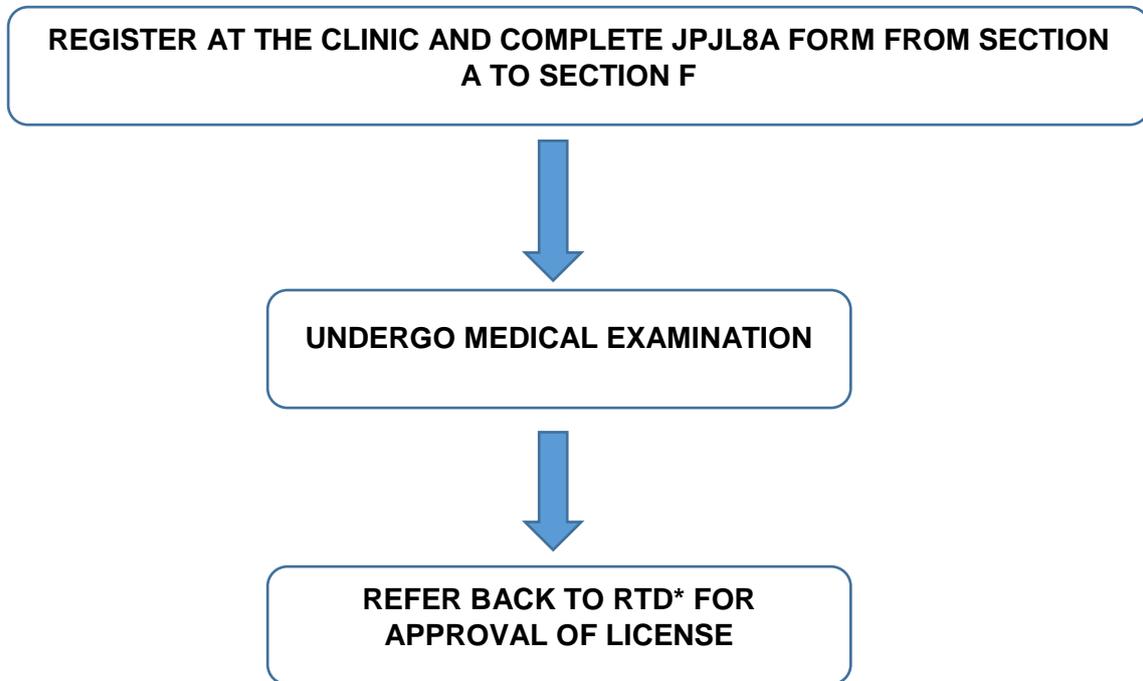
### **Part 4 : Investigations**

- i. Blood Investigations
- ii. HBA1c testing for applicants suffering from Diabetes Mellitus

### **Part 5 : Certification of fitness**

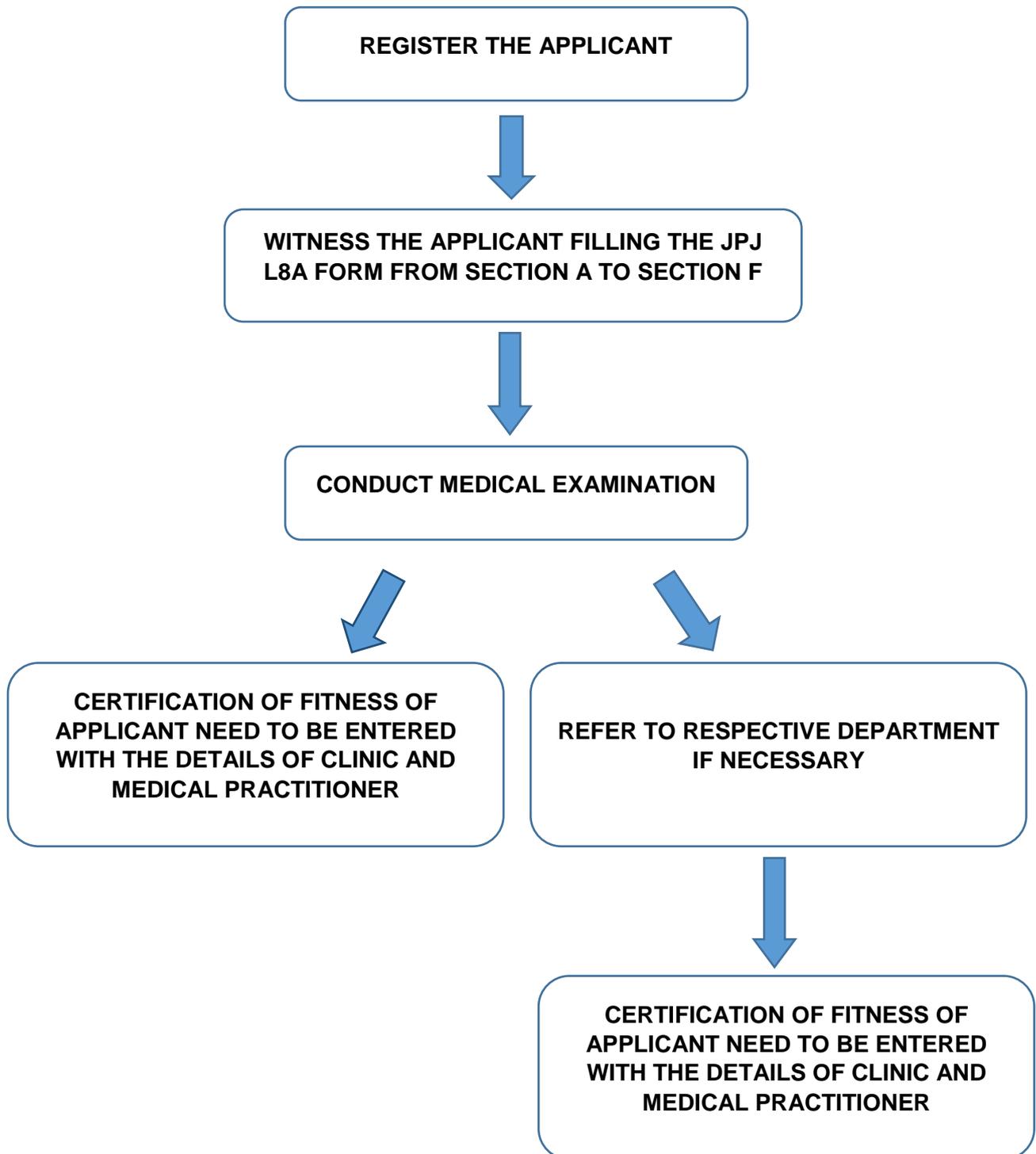
- i. Certification of fitness is to be completed by the examining doctor and indicates the ability of the applicant to apply for a vocational driving license
- ii. Information entered into the system during the examination will be registered and may not be altered

## **PROCESS FLOW FOR THE APPLICANT**



***\*RTD: Road Transport Department***

**PROCESS FLOW OF THE EXAMINING DOCTOR**



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