



Noise Induced Hearing Loss (NIHL) – Semi AI software to assist Occupational Health Doctors

Dr Shawaludin Husin - Malaysia



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29 Full Members

ASIA | AFRICA | OCEANIA



About APOSHO

The Asia-Pacific Occupational Safety and Health Organization (APOSHO) is an international body

- composed of non-profit professional organizations devoted to the **prevention of occupational accidents and diseases**. Although full membership is given to non-governmental organizations in the Asia-Pacific region, any occupational safety and health organizations, even in the regions other than the Asia-Pacific, can join the APOSHO as associate or affiliate members

Eg. The Institution of Occupational Safety & Health (IOSH), Board of Certified Safety Professionals (BCSP), The German Social Accident Insurance (DGUV)

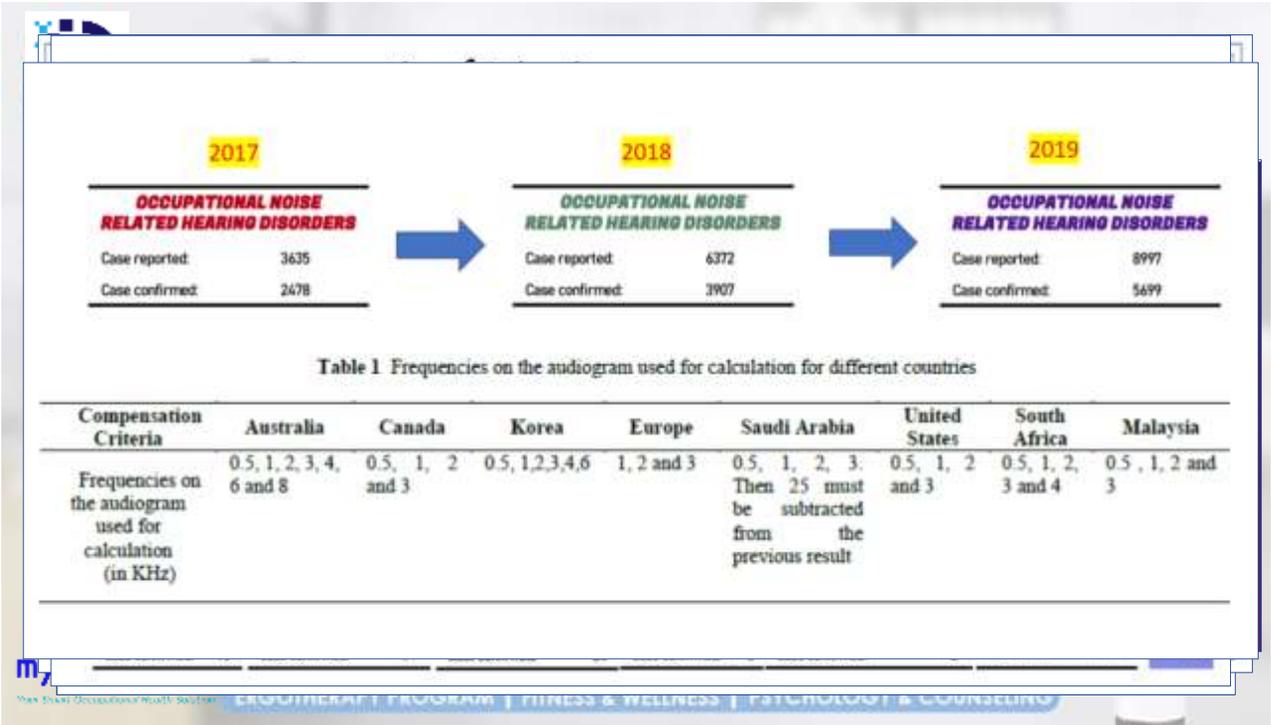
- Members as of 2020 : 39 organizations from 21 different countries or districts. Two or more member organizations from Australia, China, Indonesia, Korea, Malaysia, Mauritius, Thailand, Vietnam, etc. respectively.

- Technical Committee
- Membership Committee
- Management Development Committee
- Occupational Health and Safety Management System (OHSMS) Committee
- Education & Training Committee
- **Health & Wellbeing Committee**

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History



History of Malaysia's Occupational Safety Health Legislation (Noise)

- Factory and Machinery Act 1967
- Lift Regulation 1970
Lead Regulation 1984
- Noise Regulation 1989
- Mineral Dust Regulation 1989
Asbestos Regulation 1991
- Occupational Safety & Health Act 1994
- Regulation & Industry Code of Practice for Management of Occupational Noise Exposure and Hearing Conservation 2019**

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Difference

Factory and Machinery Act 1967

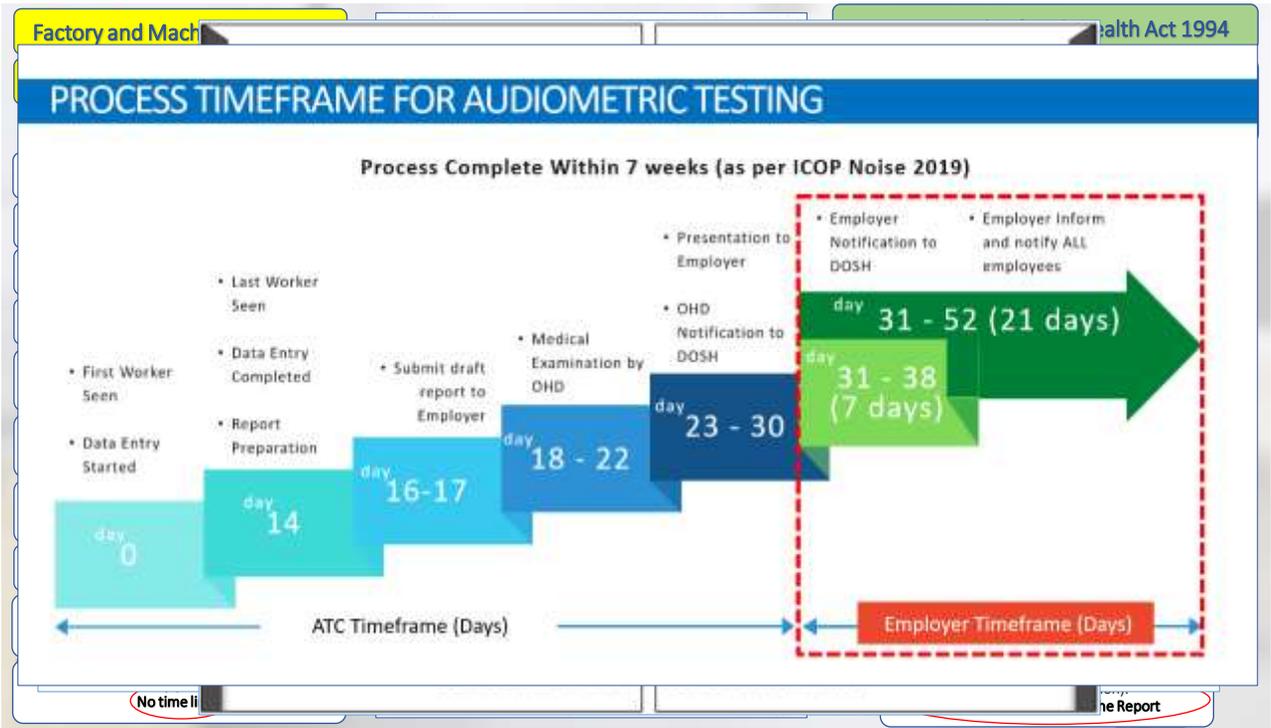
Noise Regulation 1989

FACTORIES AND MACHINERY (NOISE EXPOSURE) REGULATIONS 1989	OCCUPATIONAL SAFETY & HEALTH ACT (NOISE EXPOSURE) REGULATION 2019
Applied to all FACTORIES in which persons are employed involving exposure to excessive noise	Applied to ALL PLACE OF WORK covered under OSHA 1994
No identification of excessive noise	Identification of excessive noise
Noise Competent Person	Noise Risk Assessor (NSA)
Training for workers expose to more than 85dB(A). Training once every 2 year	Training for workers expose to excessive noise. Training every year
No assessment	Assessment of control measure's practicability
Warning Signs	Hearing protection zone
General information on Audiometric testing programme	Audiometric testing - detailing the scope of work for employee, ATC and OHD
Medical Practitioner	OHD (Occupational Health Doctor)
No requirement on registration of ATC	Registration of ATC (Audiometric Testing Centre)
Fine not exceeding Penalty RM1,000	Fine not exceeding Penalty RM10,000 or imprisonment for a term not exceeding 1 year, or BOTH
General information on Noise control method	Detailing the information of Noise control method
Hearing protection device	Personal hearing protector
Audiometry (Repetition): = PEL/MSTS: Yearly = AL & PEL: 2 yearly	Above MEL (Noise Exposure Limit) Annually
Audiometry (Submission) / No time limit	Audiometry (Submission) : 1 month from date of testing
Audiometry (Screening Questionnaire): Not provided	Audiometry (Screening Questionnaire) Provided to determine noise and other factors to affect results
PEL: = 90 dBA, = 135 dBA (max), > 140 dB (peak)	NIH: > 85 dBA, = 115 dBA (max), > 140 dB (peak)
Action Level : 85 dBA	Action level : 82 dBA
Exchange rate : 3 dBA	Exchange rate : 3 dBA
Medical Examination Form: Not Provided	Medical Examination Form: Provided (history, PE & other if necessary) and required for notification
Referral: Not mentioned	Referral: To be decided by OHD
Hearing Disorders To Be Notified: PSTs by MP	Hearing Disorders To Be Notified : NIH, NI & PSTs by OHD & Employer (DOFP, ME Form, select audiology)

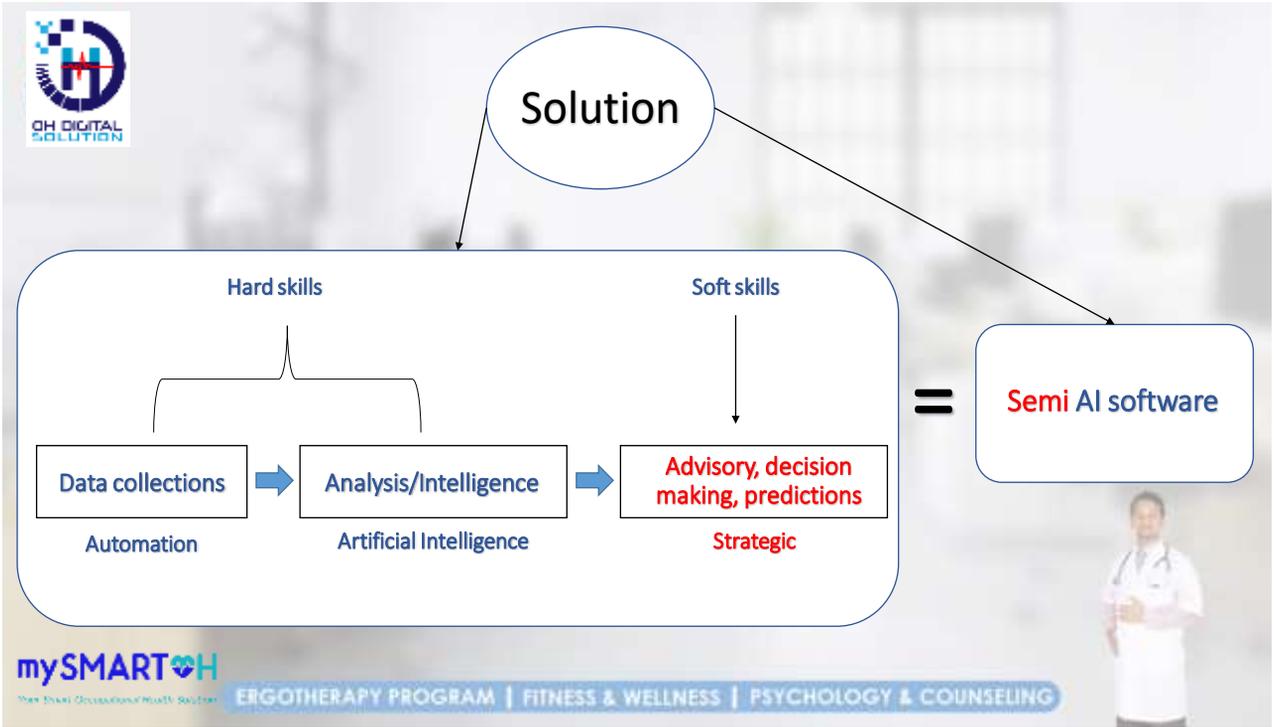
Occupational Safety & Health Act 1994

Industry Code of Practice for Management of Occupational Noise Exposure and Hearing Conservation 2019

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mySMARTOH

Welcome to MySmartOH Dashboard (Dynamic Dashboard)

Dashboard

Employees: 16

Employees: 233

Exams: 389

Reports: 14

Draft Exams: 84

Pending Approval Exams: 27

Exams in Draft Mode

Exam Type	Create Date	Monitoring Date	Reference No	Employee
Audiometric Exam Test	03/07/2019			MURGESU
Audiometric Exam Test	03/07/2019			MURHAMMAL
Audiometric Exam Test	23/08/2019			aaTWO REAK
Audiometric Exam Test	04/09/2019			_QUALITAST

Approved Exam Per Month

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The Smart Occupational Health Solution

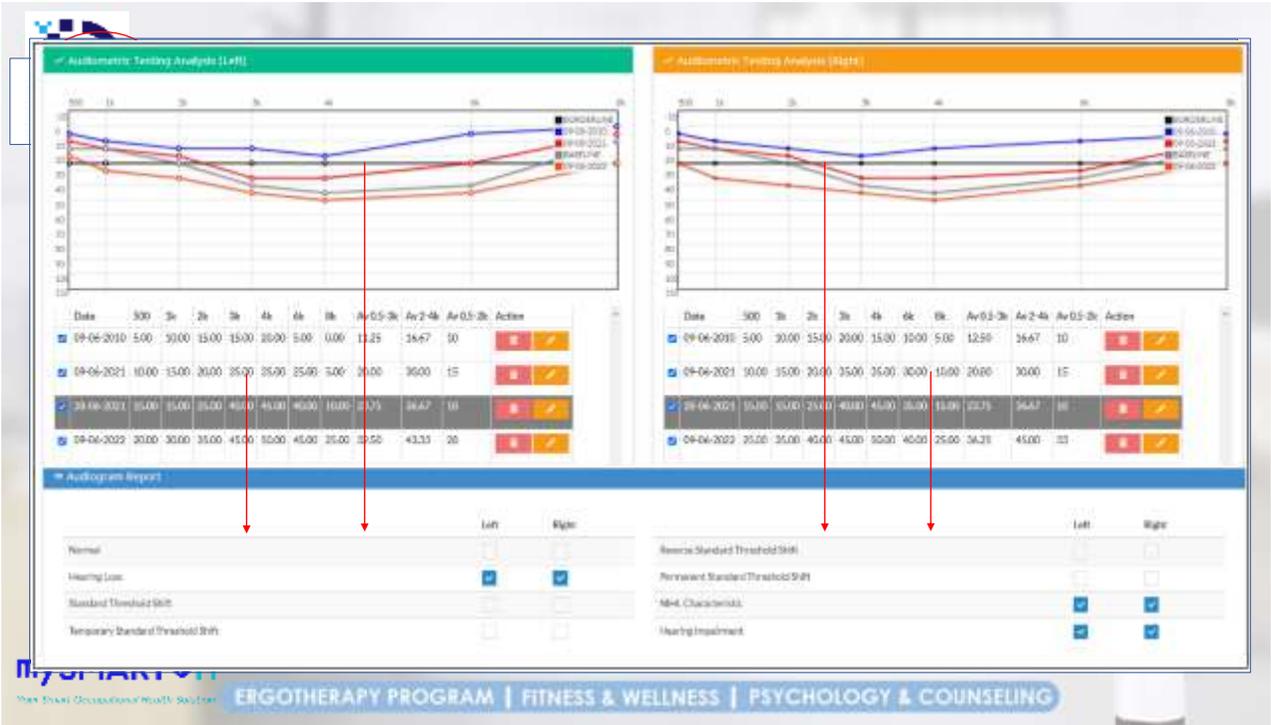
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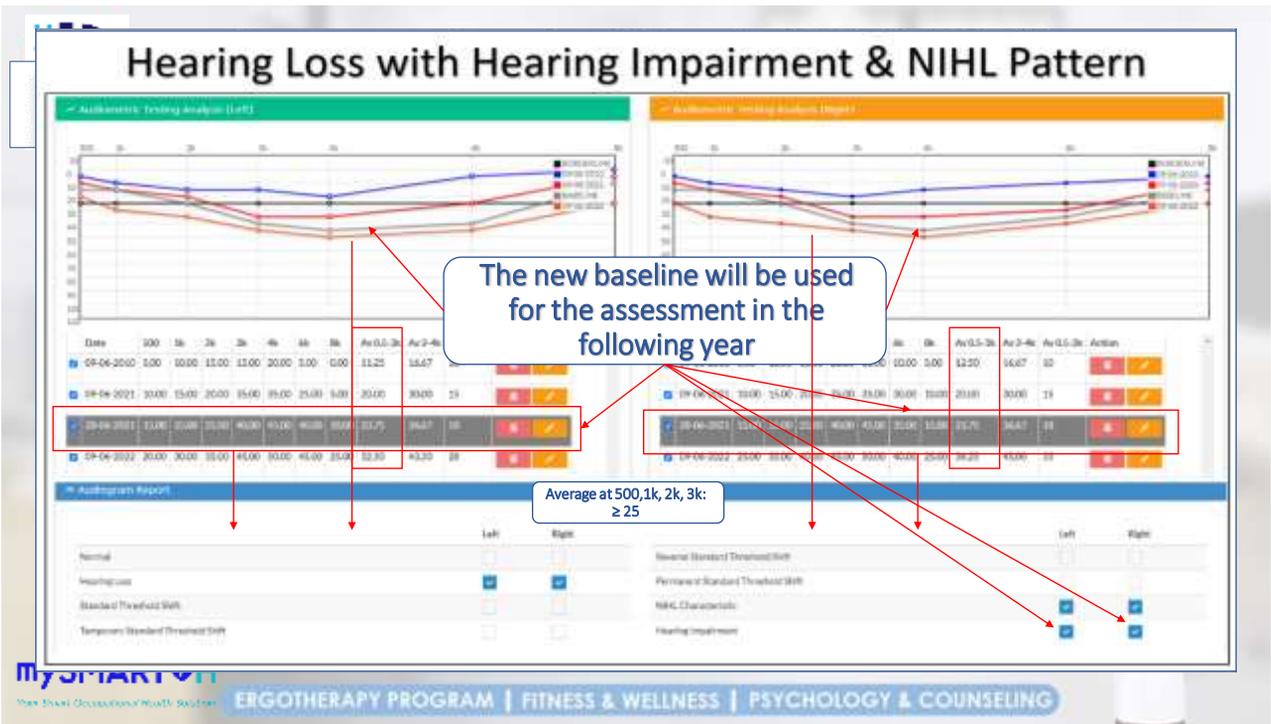
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Recommendations

- Medical Exam by OHD
 - Repeat audiometry within 3 months
 - Repeat audiometry after treatment
 - Continue annual audiometry
- Education & Training
- Notification to DOSH

When click it will directly go to the Department of Occupational Safety and Health (DOSH) website for notification purposes

Introduction

The purpose of e-JKKP7 is to allow the employer and the registered medical practitioner reporting occupational disease and poisoning through online system. According to Occupational Safety and Health Act 1994 (Act 514) employers and medical practitioners are required to report to the Department of Occupational Safety and Health closest if any occupational disease and poisoning occur in the workplace. The Act also states that every registered medical practitioner must report if an employee believed / suspected of suffering from occupational diseases or occupational poisoning to the Director General.

Scope

This system consists of several modules :-

- Registration Module
- Investigation Module
- Reporting Module
- Administration Module

System Interface

The interface between the eJKKP7 System and the user is a web browser, PDA or Smartphone Web Browser. The Graphic User interface (GUI) for eJKKP7 follow the modern design. The eJKKP7 system support popular web browser such as Internet Explorer 9.0 and above, Mozilla, Opera and Safari. eJKKP7 is designed to give support department a broader and user-centered experience.

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AUDIOMETRIC REPORT

For Audiometric Screening at ASA OSH SERVICES

An audiometric testing was done on Jan 2021 for ASA OSH SERVICES. Total number of 95 employees had undergone the test.

Employees have been advised through their management to avoid from high noise exposure at least 14 hours before the test. Prior to the test, there were required to fill in a questionnaire set on personal information, medical history, current health status, medication, and activities or hobbies that can affect hearing capability. It was followed by audiometric test which was carried out by trained technician under supervision of Occupational Health Doctor (OHD), Dr. Shawaikha Hussain, in accordance with the frequency banding requirement. The frequency banding was 300 Hz, 1000 Hz, 2000 Hz, 3000 Hz, 4000 Hz, 6000 Hz and 8000 Hz.

Personal audiogram were kept by Occupational Health Doctor under Medical Act, 1971.

Summary result of the audiometric testing as in table 1.

Table 1: Summary result of audiometric testing

Result	Number of Subject
1. Normal hearing	1
2. Hearing loss	94
2.1. NH, pattern	82
2.2. Not NH, pattern	12
3. Standard Threshold Shift	32
4. Permanent Threshold Shift	30
5. Hearing impairment	25
5.1. NH, pattern	11
5.2. Not NH, pattern	14

Click this button to view the summary report

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Table 1: Summary result of audiometric testing

3.0 RESULT & INTERPRETATION*

No	Name	Workgroup	Age	Sex	Potential HL	Potential NHL	STS	Temporary STS	Permanent PTS	Potential HS	Diagnosis	Control Action	Audiometry
59	HAJIB AMBAN	ETM	33	NO	YES	YES	NO	NO	YES	NO	HL(both ears),NHL(both ears),PTS(bilateral)	Continue annual audiometry, Education & Training, Provision of PPE, Notification to DOSH.	Repeat audiometry within 3 months
60	AZHAR ALI	PANTING	26	NO	YES	YES	NO	YES	NO	NO	HL(both ears),NHL(both ears),STS(bilateral)	Continue annual audiometry, Education & Training, Provision of PPE, Notification to DOSH.	Repeat audiometry within 3 months
61	SHAHAN ROSLIAN	BODY ASSEMBLY	32	NO	YES	YES	NO	NO	NO	YES	HL(both ears),NHL(left ear),HSL(right ear)	Continue annual audiometry, Education & Training, Provision of PPE, Notification to DOSH.	to be confirmed
62	ROSILAN AHMAN	BODY ASSEMBLY	32	NO	YES	YES	NO	NO	NO	YES	HL(both ears),NHL(left ear),HSL(right ear)	Continue annual audiometry, Education & Training, Provision of PPE, Notification to DOSH.	to be confirmed
63	AZM AZAN	TRIMFINAL	41	NO	YES	YES	NO	NO	YES	YES	HL(both ears),NHL(both ears),STS(bilateral)	Continue annual audiometry, Education & Training, Provision of PPE, Notification to DOSH.	to be confirmed

Details of Control/ Further Action is stated here

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Easier to manage the Audiometry Program

 <p>RECORD KEEPING</p> <ul style="list-style-type: none"> Keep and analyze employee record (big data) as per legal requirement Optimize storage compare to scan method or Electronic Management System 	 <p>SMART NOTIFICATION</p> <ul style="list-style-type: none"> System will notify employee within 21 days for ALL result 	 <p>REALTIME DASHBOARD</p> <p>Employer can view and monitor company performance online such as</p> <ol style="list-style-type: none"> i. Trend of result (HL, HI, STS, etc..) ii. Record Monitoring – e.g. expose, control, training control, signage area, PPE issuance, etc.
 <p>SUSTAINABILITY DATA</p> <ul style="list-style-type: none"> Employer has full access control on all record without rely on 3rd party i.e. ATC/OHD/SHO Employer has a right to transfer record to external party without compromise data integrity 	 <p>MULTIPLE MODULE</p> <p>Employer entitle to get full suite of mySMARTOH module e.g. audiometry, medical surveillance, fitness to work, etc..</p>	 <p>COST</p> <ul style="list-style-type: none"> Storage for filling purposes Purchase software/hardware Logistic to courier historical record Penalty Compensation (if no proactive action taken)

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OFFICE ADDRESS

26B, Jalan Raya 7/2 Serdang Jaya,
43300 Seri Kembangan, Selangor,
Malaysia.

PHONE

+6013-368 7255 (Dr. Shawaludin Husin)

EMAIL

admin@mysmartoh.com



LET'S TALK!

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