

Silent SUCCESS! Hearing Conservation Program Malaysia Airport (Sepang) Sdn Bhd

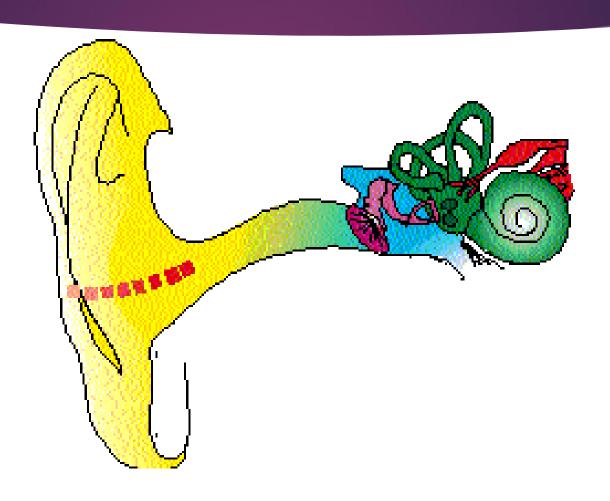
Factories and Machinery (Noise Exposure) Regulations, 1989 Factories and Machinery Act, 1967 (Act 139) Occupational Safety and Health Act, 1994 (Act 514)



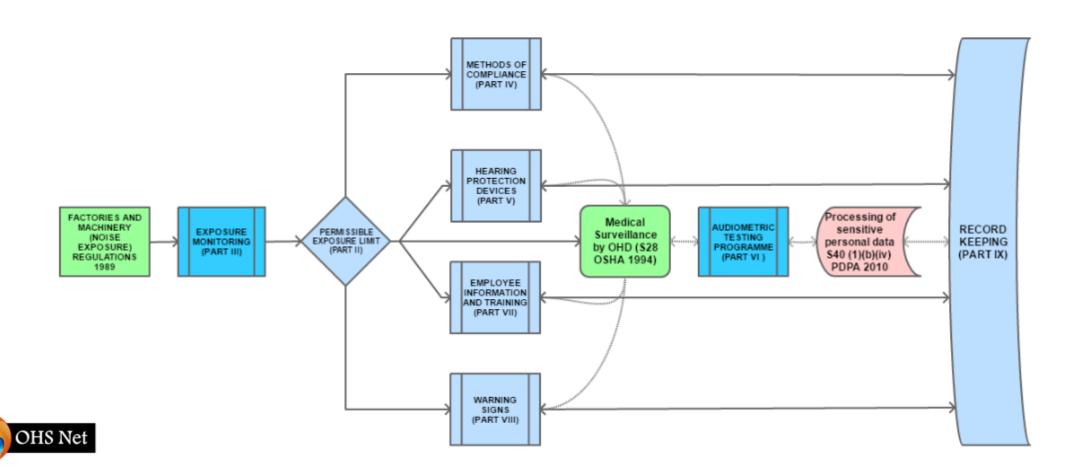




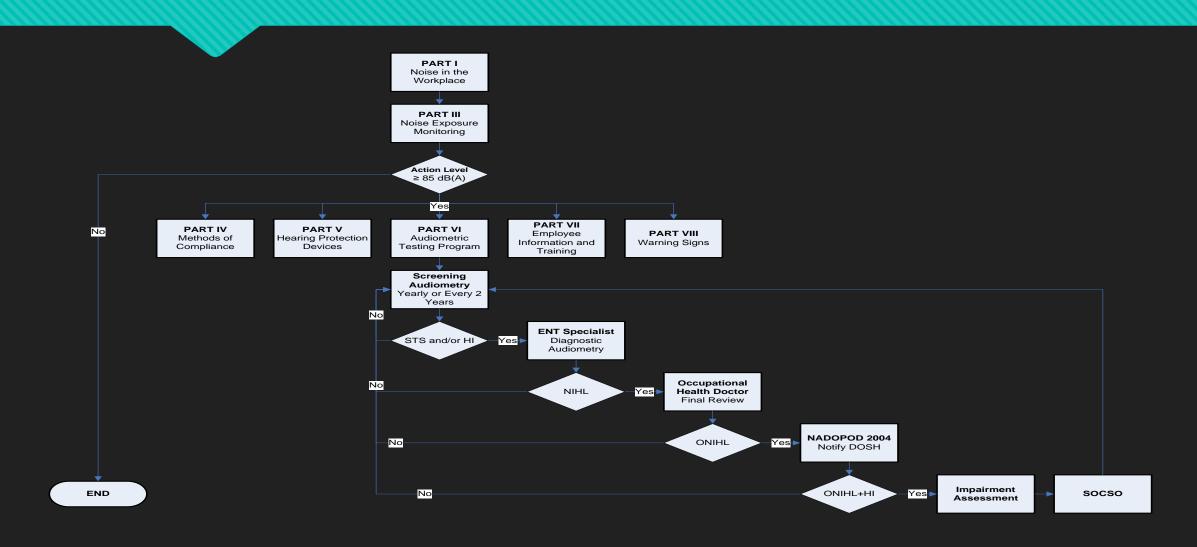
The Effects of Noise on Hearing



Hearing Conservation Program



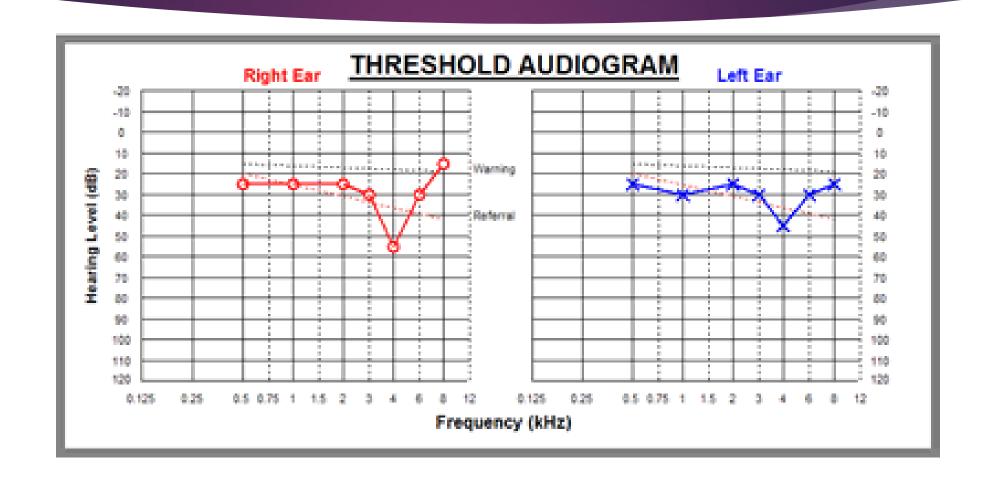
Hearing Conservation Program Flowchart



Hearing Conservation Program Elements

- Exposure Monitoring [Part III]
- Methods of Compliance [Part IV]
- Hearing Protection Devices [Part V]
- Audiometric Testing Program [Part VI]
- Employee Information and Training [Part VII]
- Warning Signs (Part VIII)
- Record Keeping [Part IX]

Occupational Noise Induced Hearing Loss



The Many Issues in Noise Monitoring & Audiometry

Managing A
Hearing
Conservation
Program

What & When is Deafness?

Standardisation?

Competency?

False Protection

Medical
Surveillance or
Medical
Examination?

Record keeping?

Transfer of records?

Case investigations?

Occupational Health Case Management?

NADOPOD

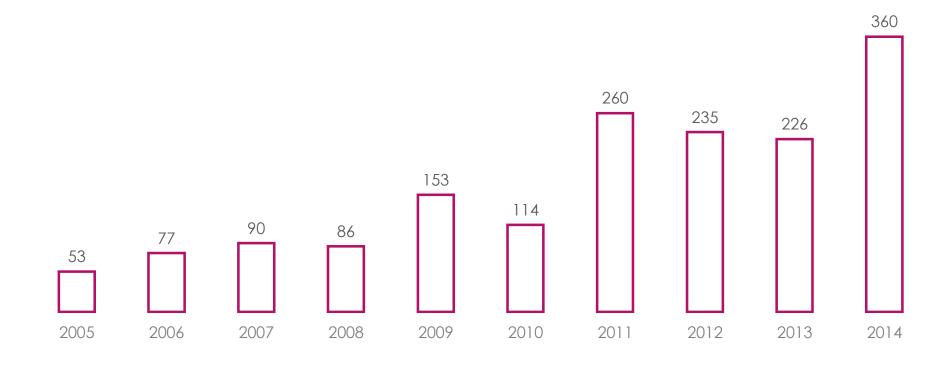
SOCSO Claims Management?

Software System for Epidemiology

Price war?

Some
Perspective
SOCSO Annual
Report

Occupational Noise Induced Hearing Loss



Just for Completeness Legislations



Acts

Occupational Safety and Health Act, 1994 (514) Factories and Machinery Act, 1967 (139)

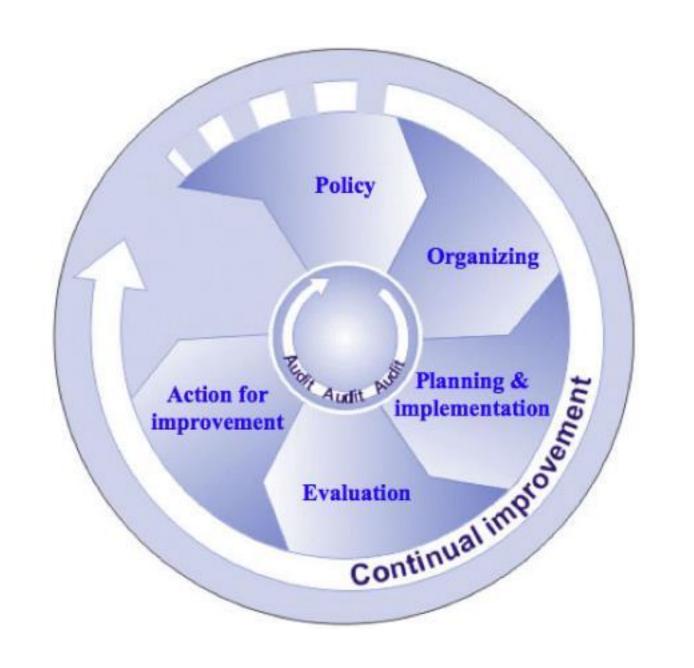
Regulations

Factories and Machinery (Safety, Health and Welfare) Regulations 1970 Occupational Safety and
Health (Notification of
Accident, Dangerous
Occurrence, Occupational
Poisoning and
Occupational Disease)
Regulations 2004

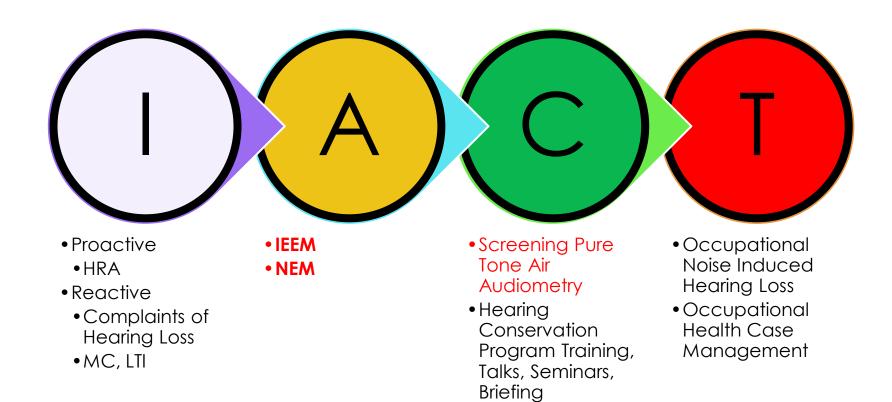
Factories and Machinery (Noise Exposure) Regulations 1989

Guidelines

Guidelines on Occupational Health Services 2005 Guidelines on Occupational Safety and Health Management Systems (OSHMS) 2014 What we really have to do?
Hearing
Conservation
Program



Hearing Conservation Program



Factories and Machinery (Noise Exposure) Regulations 1989

Yearly



R22(a) Employee Exposure Monitoring

- R5(1) ≥90dB(A) or ≥First Schedule
- R5(2) 115dB(A)



R22(b) Baseline Audiogram

- Hearing Impairment
- Standard Threshold Shift (NIHL pattern?)

2 yearly



R22(c) Employee Exposure Monitoring

≥85dB(A) but <90dB(A)

Medical Surveillance on Noise

Screening Audiometry

- Baseline
- Periodic
 - Annually
 - 2 yearly
- Retest



Normal?! (Hearing loss!?)

Standard Threshold Shift

Hearing Impairment

± NIHL pattern

Audiogram Interpretations

•Standard Threshold Shift

 means an average shift of more than 10 dB at frequencies of 2000, 3000 and 4000 Hz relative to the baseline audiogram in either ear;

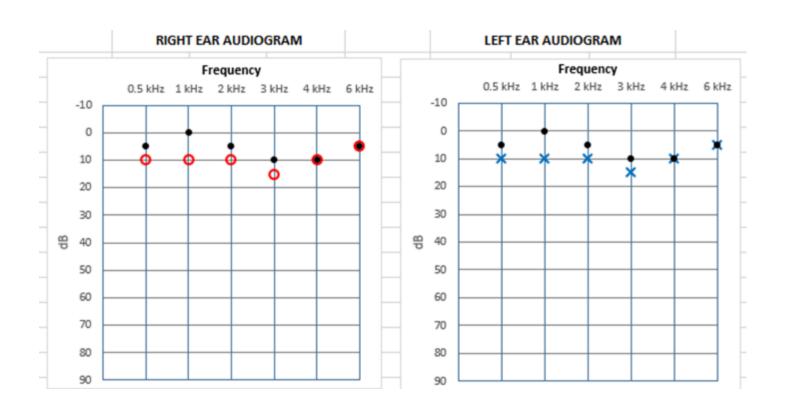
Hearing Impairment

 means the arithmetic average of the permanent hearing threshold level of an employee at 500, 1000, 2000 and 3000 Hz which is shifted by 25 dB or more compared to the standard audiometric reference level

R2. Interpretation

Audiogram
Chronology of
ONIHL of a
Worker

Normal?!

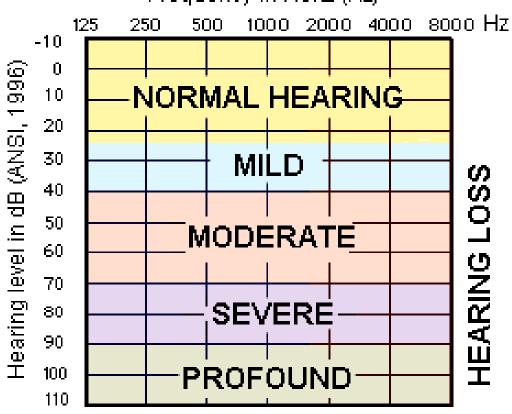






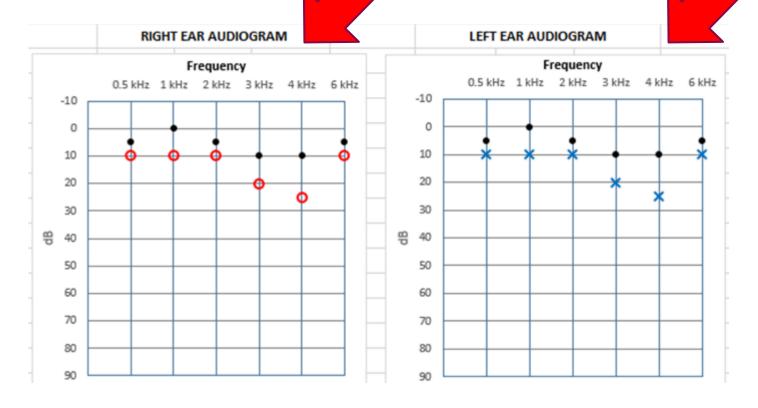
AUDIOGRAM

Frequency in Hertz (Hz)



An example of one classification system for degree of hearing loss

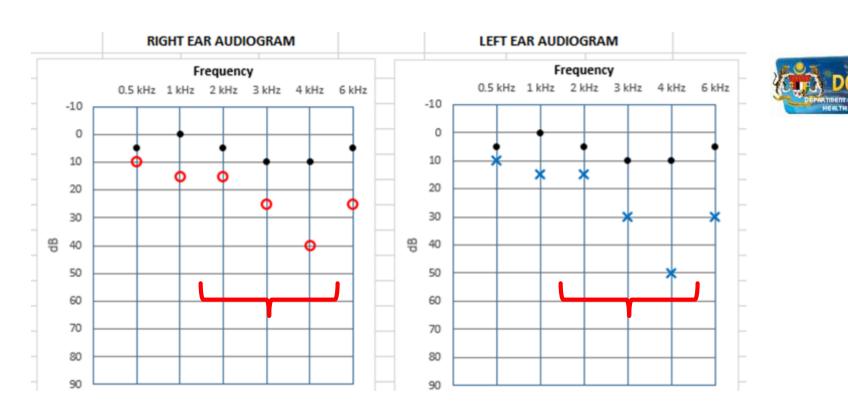
Normal?! (Hearing loss!?)



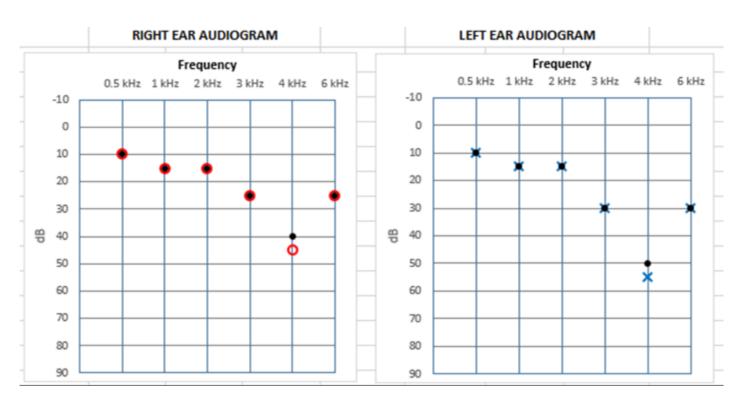




Standard Threshold Shift



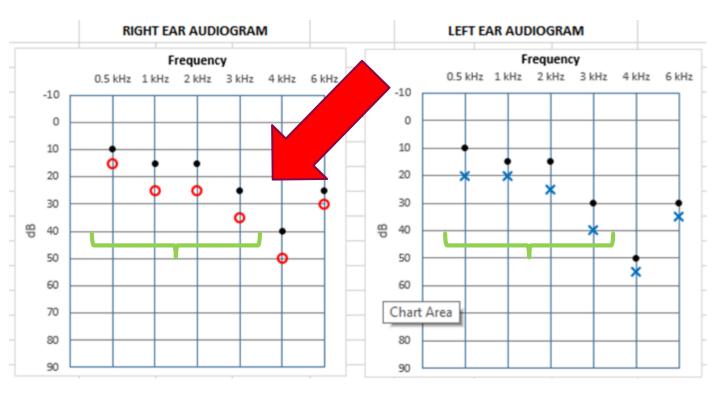
Question







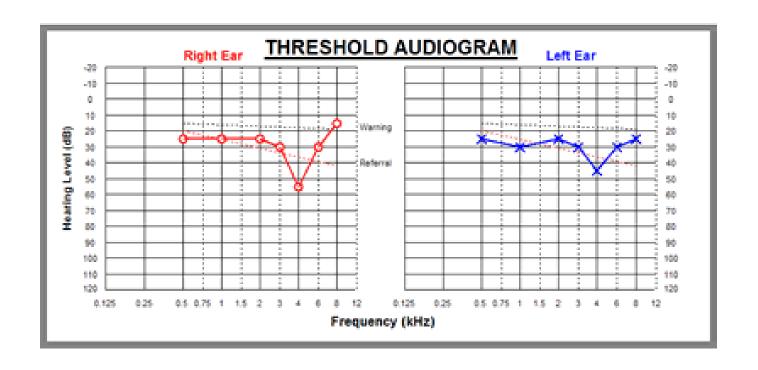
Hearing Impairment





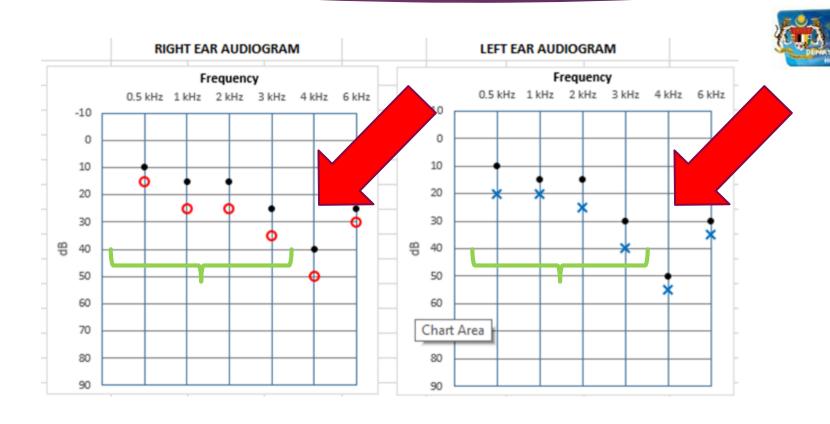






Noise Induced Hearing Loss Pattern

ONIHL on Diagnostic Audiometry





Audiogram Interpretations & Recommendations

Normal & Hearing loss

Continue Hearing Conservation Program

I ACT for Occupational Noise Induced Hearing Loss (ONIHL)

- Hearing Impairment & Standard Threshold Shift ± NIHL pattern
- Rule out other causes
- Reinforce Hearing Conservation Program
- "False Protection"
- Feedback Loop
- Occupational Health Case Management



Occupational Health Case Management

Occupational Medicine

Occupational Health

Medical

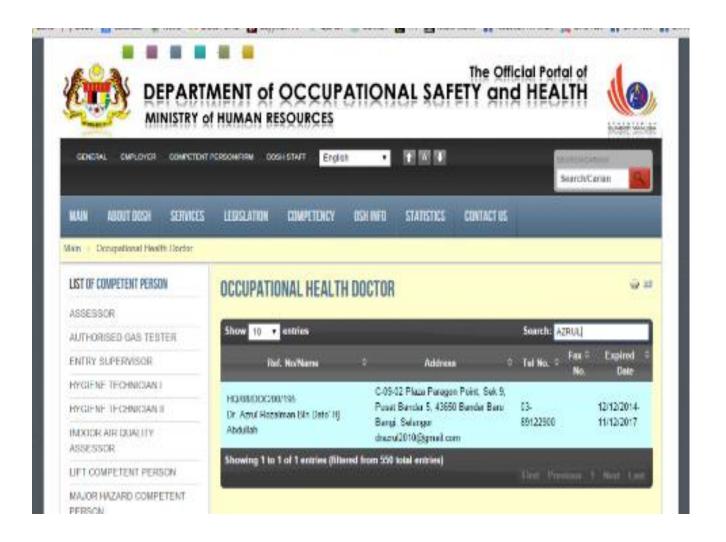
Surgical

Psychiatric

Consultation

Physical Examination





OSHA S28; Medical surveillance Occupation al Health Doctor

PERSONAL DATA PROTECTION ACT 2010 Processing of sensitive personal data

S40 (1)(b)(iv) for medical purposes and is undertaken by—

- (A) a healthcare professional; or
- (B) a person who in the circumstances owes a duty of confidentiality which is equivalent to that which would arise if that person were a healthcare professional;

Hearing Conservation Program

