

Editorial

Volume 18 Number 2, August 2019

FMA (Noise) 1989 to OSHA (Noise) 2019 - Is it Worth the Wait?

Occupational health practitioners in our country were heartened following the gazettelement of the new regulation with regard to occupational noise exposure in alignment with the Occupational Safety and Health Act (OSHA 1994) by the Attorney General's Chamber in early June this year.

It took almost two decades for the Factory Machinery Act (Noise Exposure) to be finally revoked.^{1,2} The new regulation is expected to play a crucial role in further curbing occupational noise-induced hearing loss (NIHL), a disease that has consistently been the most notified to Department of Occupational Safety and Health (DOSH) and one of the most compensated of occupational diseases Social Security Organization (SOCSO). This piece is a brief summary of the regulation and its' impact on the relevant players and stakeholders in the occupational safety and health fraternity.

The new regulation is now designated as Occupational Safety and Health Act (Noise Exposure) 2019.² OSHA (Noise) 2019 began with the interpretation section where terms are defined, a few rather meticulously while several others remain ambiguous. This approach is not uncommon in medicolegal legislation, perhaps to give practitioners some degree of flexibility in carrying out the necessary.

This new regulation recognises and defines 'hearing loss', on top of the already familiar 'hearing impairment' and 'standard threshold shift'. Excessive noise is now set at 82 dB, whilst 115 dBA remains the maximum level that a person can be exposed to at work, and 140 dBC is the maximum impulsive noise allowed. Setting the exchange rate as 3 dB as opposed to the previous 5 dB is a timely action by DOSH in acknowledging the science behind the reasoning.

Identification of noise exposure has now become more stringent and has to be carried out annually in contrast to the earlier practise where it was done only when new machinery, equipment, process,

work or control measure was implemented. Non-compliance will risk being faced with a penalty of RM10,000 or a year's imprisonment. 'Noise risk assessments' conducted by 'noise risk assessors' are not restricted to identify exposed workers in noisy areas but also requires detailing on the recommendations to counter and control the exposure to this hazard.

Employers are also expected to educate their workers on the detrimental effects of noise exposure and send them for hearing screening. Training and instructions on proper usage of personal hearing protection (PHP) are also required yearly. There was substantial addition on the fittingness of the PHP without being too prescriptive.

The regulation strictly defines levels of noise that a worker can be exposed to. It calls for hazard control measures to be implemented from the top, commencing with engineering control followed by administrative control and then finally move to personal hearing protectors. 'Hearing protection zones' need to be identified and well delineated by appropriate warning signs.

OSHA (Noise) 2019 recommendation mandates new audiometric tests to be conducted in approved Audiometric Testing Centre (ATC), and all audiograms need to be interpreted and managed by occupational health doctors (OHD). Identification of noise-induced hearing loss, hearing impairment and permanent standard threshold shifts (PSTS) must be notified within a stipulated period. Finally, the regulation underscores the importance of record keeping and details on the duration, continuity and disposal of related records.

As an Audiological Physician as well as an OHD, I would like to highlight some pertinent information on the audiometric tests in regulations 9 and 10 of OSHA (Noise) 2019. It is a very commendable move to standardize audiometric tests by ensuring that they are carried out at DOSH-approved audiometric testing centres (ATC) and screening audiograms are

interpreted exclusively by certified OHDs. Additionally, these OHDs are then expected to diagnose and notify, treat and/or refer accordingly. He or she must thenceforth notify DOSH within 7 days of making a diagnosis of an occupationally-related hearing abnormality. The ATC has 30 days to submit the report to the employer, who in turn should inform their employee of their results within 21 days. Based on this report the employer has several options. He/she can request a repeat of the test to rule out temporary threshold shifts within 3 months of receiving the report, notify DOSH for any PSTS, NIHL or hearing impairment found amongst the workers and take measures to protect the workers hearing from further deterioration. These measures must include but should not be limited to providing personal hearing protector (PHP) and training the workers on its proper usage.

The threat of a RM10,000 fine and or a year's imprisonment is a deterrent to potential offenders. The cost of the audiometric test must not be borne by the employee and that workers must adhere to the 14-hour quiet confinement period before doing the test, quiet being less than 80dBA. It also highlights the necessity to achieve this without the aid of hearing protectors. A worker must have the test done within 3 months of working in areas exceeding the noise limit.

It is indeed heartening to note that OSHA (Noise Exposure) 2019 could be the impetus for the better. This new regulation has already made us cognisant of the shortage of OHDs and the need to have more of them. The total number of certified OHD is only around 1149 according to the latest DOSH website. This places an extra burden on the current OHDs cadre considering the ever-increasing work force in Malaysia and an estimated 30% of them known to be at risk of developing NIHL.^{3,4} OHD's are expected to identify NIHL, hearing impairment and permanent standard threshold shift cases by reading their screening audiogram and in addition notify the authority within 7 days upon making a diagnosis.

OSHA (Noise Exposure) Reg 2019 has finally granted the OHDs, the long overdue legal authority to diagnose and subsequently manage workers with occupational NIHL which is commendable. The

relevance is obvious as the OHDs possess the ability to understand and negotiate the intricacies of managing these patients from an occupational perspective. It is incumbent on OHDs to empower themselves with every aspect of knowledge regarding NIHL and demonstrate their competence to the relevant stakeholders. Consequentially, as confirmation of sensorineural hearing loss cannot be made with using only screening audiograms, the need for diagnostic pure tone audiometry and inevitably the role of audiologists will need to be formally recognised and developed sooner rather than later.

In conclusion, the OSHA (Noise Exposure) Regulation 2019 is long due and its changes are expected to benefit workers at risk of developing noise-induced hearing loss specifically, and occupational health in general.

REFERENCES

1. Factories and Machinery Act 1967 [Act 139] P.U. (A) 1/1989, Factories and Machinery (Noise Exposure) Regulations 1989
2. Occupational Safety And Health Act 1994. Occupational Safety and Health (Noise Exposure) Regulation 2019
3. Department of Safety and Health Malaysia Annual Report 2017
4. Concha-Barrientos, M., Campbell-Lendrum, D., & Steenland, K. (2004). Occupational noise: assessing the burden of disease from work-related hearing impairment at national and local levels (Vol. 9). OMS.

Associate Professor Dr. Ailin Razali

MBBS, MSc, PhD, OHD (DOSH), CMIA (NIOSH), CIME (ABIME)

Ear and Hearing Clinic,

ORL-HNS Department, Kulliyah of Medicine

International Islamic University Malaysia Jalan Sultan

Ahmad Shah, Bandar Indera Mahkota 25200 Kuantan,

Pahang Darul Makmur.