

Industrial Noise

Threshold limit values for physical agents for 1969

These threshold limit values refer to levels of physical agents and represent conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect. Because of wide variations in individual susceptibility, exposure of an occasional individual at, or even below, the threshold limit may not prevent annoyance, aggravation of a pre-existing condition, or physiological damage.

Threshold limit values refer to levels of exposure for a 8-hour workday for a 40-hour work week. Exceptions are those limits which are given a ceiling value (C). They should be used as guides in the control of health hazards and should not be used as fine lines between safe and dangerous levels of exposures.

These threshold limits are based on the best available information from industrial experience, from experimental human and animal studies, and when possible, from a combination of the three.

These limits are intended for use in the practice of industrial hygiene and should be interpreted and applied only by a person trained in this discipline. They are not intended for use, or for modification for use, (a) in the evaluation or control of the levels of physical agents in the community, (b) as proof or disproof of an existing physical disability, or (c) for adoption by countries whose working conditions differ from those in the U S A.

These values are reviewed annually by the Committee on Threshold Limits for Physical Agents for revisions or additions, as further information becomes available.

Ceiling value. There are some physical agents which produce physiological response from short intense exposure and whose threshold limit is more appropriately based on this particular response. Physical agents with this type of response are best controlled by a ceiling "C" limit which is a maximum level of exposure which should not be exceeded.

Notice of intent. At the beginning of each year, proposed actions of the Committee for

the forthcoming year are issued in the form of a "Notice of Intent." This notice provides not only an opportunity for comment, but solicits suggestions of physical agents to be added to the list. The suggestions should be accompanied by substantiating evidence.

As Legislative code. Although the Conference does not consider the Threshold Limit Values appropriate matter for adoption in legislative codes and regulations, it recognizes that the values may be so used. If so used the intent of the concepts contained in the Preface should be maintained and provisions should be made to keep the list current.

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Threshold limit values for noise for 1969

These threshold limit values refer to sound pressure levels that represent conditions under which it is believed that nearly all workers may be repeatedly exposed without adverse effect on their ability to hear and understand normal speech. The medical profession^a has defined hearing impairment as an average hearing threshold level in excess of 15 decibels (ANSI Z24.12-1952) at 500, 1000, and 2000 Hz, and the limits which are given have been established to prevent a hearing loss in excess of this value. These values should be used as guides in the control of noise exposure and, due to individual susceptibility, should not be regarded as fine lines between safe and dangerous levels.

Continuous or intermittent. The sound level shall be determined by a sound level

^a"Guides for the Evaluation of Hearing Impairment" *Transactions of the American Academy of Ophthalmology and Otolaryngology*, pp 167-8, March-April, 1959.

"Guides to the Evaluation of the Permanent Impairment, Ear, Nose, Throat and Related Structures" *Journal of the American Medical Association*, 197:489 August 1961.