

Now Hear This...

Volume 3, No. 1

Spring 2000

Work Place Inspections

Do you ever wonder if anything ever *really* happens to all those reports of known or suspected occupational noise-induced hearing loss (NIHL) you so faithfully send in to the State each month? Well, the answer is Yes! When a report of known or suspected occupational NIHL is sent to the State, the report is reviewed for completeness and a letter is sent to the patient asking them to complete a 10-15 minute telephone-administered questionnaire about their work history and exposure to noise. If a patient agrees to be interviewed, questions about their three most recent noisy jobs are asked. If the patient currently or has recently worked in hazardous noise that is not being monitored by the company, a Michigan Occupational Safety and Health Administration (MIOSHA) enforcement inspection may be conducted. The purpose of such an inspection is to: 1) determine noise levels at the facility; 2) determine the facility's compliance with the Michigan noise standard (if noise levels are ≥ 85 dBA); 3) assess the number of workers affected by noise at the work place; 4) and report the findings back to the facility, and to the union or worker health and safety committee if no union exists. Any violations of Michigan health and safety standards must be corrected and proof must be sent to the State.

Since 1993, Michigan's special focus on occupational NIHL has helped to identify and initiate 60 company inspections for compliance with the noise standard. Twenty-five of those 60 companies had noise levels of 85 dBA or greater and were in violation of at least some aspect of the noise standard. There were over 4,200 employees similarly exposed to noise as the index cases that were interviewed at the 25 companies where noise levels were 85 dBA or greater who benefitted from these inspections. The ideal way to prevent work-related NIHL is to control noise at its source. Surveillance of workers to identify work-related NIHL highlights work settings where these controls have not been implemented. Michigan's surveillance system to identify where occupational NIHL occurs and prevent further NIHL among those workers affected remains a top MIOSHA priority.

In the last few years, hearing loss from noise at work, from environmental noise, and from ototoxic agents has received nationwide attention. The *Wise Ears!* campaign, sponsored by the National Institute on Deafness and Other Communication Disorders (NIDCD), along with the National Institute for Occupational Safety and Health (NIOSH) and other local, state and national agencies is an excellent resource and example of the work that is being done to increase awareness and concern about this pervasive public health issue. For more information on the *Wise Ears!* campaign, visit their web site at: <http://www.nih.gov/nidcd/health/wise/index.htm>. Or, you may call us toll-free at 1-800-446-7805 to request more information.

The next few pages of this issue of *Now Hear This* contain an actual copy of a recent inspection that was initiated because a Michigan worker was reported to the occupational disease surveillance system.



State of Michigan
John Engler, Governor

Department of Consumer & Industry Services
Kathleen M. Wilbur, Director

On _____ in response to an occupational disease report that indicated one of your current or past employees may have occupationally induced hearing loss, we conducted an investigation in your _____ manufacturing plant to evaluate employee exposure to noise.

The Occupational Health Division receives occupational disease report forms in accordance with the Michigan Public Health Code (i.e., Part 56 of the Public Act 368), which requires physicians, hospitals, clinics, or employers to report all known or suspected cases of occupational diseases. As a provision of Part 56, the Occupational Health Division upon receiving an occupational disease report form has authority to investigate the report to determine if the illness/disease is related to workplace exposures. Enclosed are copies of Part 56, a letter from our Director explaining the occupational disease reporting requirements, and an occupational disease report form.

This investigation was also done in conjunction with our Occupational Health Division's Sentinel Event Notification System for Occupational Risks (SENSOR) program. The SENSOR program is an occupational disease surveillance system that specifically focuses upon noise-induced hearing loss and occupational asthma.

During an opening conference held with you; _____ Plant Supervisor; _____ Supervisor; _____ Union Safety Representative, we explained the purpose and procedure of our investigation. Subsequently, we were accompanied by the above persons during our investigation. We also discussed conditions of the work environment with employees on the worksite.

REFERRAL ITEM

Part 56 of Public Act 368 of 1978, copy enclosed, requires a physician, hospital, clinic, or employer to report known or suspected cases of occupational diseases or workplace aggravated health conditions to the Michigan Department of Consumer and Industry Services within 10 days after the discovery. In accordance with this requirement, the Department was notified of a current or former employee of _____ who was reported to have experienced occupational noise induced hearing loss. Following this report, the case was reviewed by Dr. Ken Rosenman, M.D. Dr. Rosenman is under contract with MIOSHA's Occupational Health Division for the SENSOR (Sentinel Event Notification System for Occupational Risks) program. He referred this case to our Division which initiated the inspection of your workplace.

In _____ you were cited for a violation of R325.60107, Rule 7(1) (copy enclosed) for failure to establish and administer a continuing hearing conservation program. You submitted adequate abatement documentation for that citation and the case was closed. On _____ we documented through noise dosimetry studies that employees are still exposed to noise above the action level (i.e., 85 dBA for an eight-hour, time-weighted average [TWA]) and potentially the permissible limit (i.e., 90 dBA for an eight-hour TWA). See enclosed Noise Data Sheets. However, our investigation revealed that you did not continue to administer a complete hearing conservation program. Specifically, you did not conduct audiometric testing; did not conduct annual noise training; and did not post the Noise Standard. These violations of Rules R325.61112, Rule 12(1); R325.60123, Rule 23(2); and R325.60124, Rule 24(1) (copy enclosed) constitute Items Nos. 1a, 1b, and 1c of the enclosed Citation. These violations are deemed willful due to the apparent plain indifference to comply with the requirements of the rules.

MIOSHA JOB POSTER

The walkaround survey revealed the Michigan "Safety and Health Protection on the Job" poster was adequately displayed in the workplace in accordance with R408.22311.

INJURY AND ILLNESS RECORD KEEPING

During our investigation, it was determined that the company was adequately maintaining the MIOSHA 200 form (i.e., Log and Summary of Occupational Injuries and Illnesses) or its equivalent for the establishment. We also determined that you had posted a copy of the annual summary of the log in the workplace.

SUMMARY

As a result of our investigation, we are issuing the enclosed citation for violations of MIOSHA's regulations. The enclosed citation must be posted at or near the location of the violations for a minimum of three (3) days or until the items have been corrected, whichever is later. If abatement cannot be achieved by the date specified, you may request an extension in writing prior to the abatement date. When compliance is achieved, you must sign, date, and return the Abatement Copies, as well as evidence of abatement, to the Department in Lansing. For more detailed information concerning citation procedures, refer to pages 1 - 3 of the citation.

Should you have any questions regarding this report or other occupational health-related matters, please do not hesitate to contact us.

NOISE DATA SHEET

Michigan Department of
Consumer & Industry Services
Bureau of Safety and Regulation
Occupational Health Division

Permissible Noise Exposure Limit	Action Level	Impact/Impulse Limit	Equipment
90 dBA (100%)	85 dBA (50%)	140 dB	Quest Q300 Noise Dosimeter.

Identification/Description	Time	Results	Type	Exposure	Note
Hearing zone of while working at	7:03 am to 11:49 am & 12:28 pm to 3:16 pm	115.1% (91.4 dBA) 99.38% (90.3 dBA)	AL TWA	121.4% (91.4 dBA) 104.8% (90.3 dBA)	1,5 2,5
Hearing zone of while welding, grinding, and using pneumatic wrench.	7:15 am to 11:53 am & 12:25 pm to 3:17 pm	73.56% (88.2 dBA) 57.66% (86.5 dBA)	AL TWA	78.40% (88.2 dBA) 61.45% (86.5 dBA)	1,5 4,5
Hearing zone of while spray painting.	6:56 am to 11:52 am & 12:24 pm to 3:17 pm	112.4% (91.0 dBA) 105.6% (90.6 dBA)	AL TWA	114.8% (91.0 dBA) 107.9% (90.6 dBA)	1,5 2,5
Hearing zone of while spray painting.	6:57 am to 11:51 am & 12:27 pm to 3:18 pm	129.3% (92.1 dBA) 124.2% (91.8 dBA)	AL TWA	133.2% (92.1 dBA) 127.9% (91.8 dBA)	1,5 2,5
Hearing zone of while operating shear, welding, and grinding.	7:12 am to 11:52 am & 12:28 pm to 3:17 pm	58.60% (86.6 dBA) 42.28% (84.3 dBA)	AL TWA	62.51% (86.6 dBA) 45.10% (84.3 dBA)	1,6 4,6
Hearing zone of while operating shear.	7:17 am to 11:53 am & 12:24 pm to 3:17 pm	19.61% (78.7 dBA) 9.75% (73.7 dBA)	AL TWA	20.94% (78.7 dBA) 10.41% (73.7 dBA)	3,6 4,6

Note 1: Employee exposure exceeds the action level.
 Note 2: Employee exposure exceeds the limit. However, no citation due to instrument error factor.
 Note 3: Exposure does not exceed the action level.
 Note 4: Exposure does not exceed the limit.
 Note 5: Hearing protection worn.
 Note 6: No hearing protection worn.

Permissible Noise Exposure Limit (TWA) = Time-Weighted Average of continuous noise using 90 dB threshold
 Action Level (AL) = time weighted average of continuous noise using 80 dB threshold
 Noise Level (SPL) = continuous noise level reading recorded in "A"-weighted slow response (dBA)
 Impact/Impulse (IMP) = exposure limit not to be exceeded during any part of the workday
 Results = noise level at the indicated time (% noise dose or dBA)

Exposure = employee's exposure (% dose or dBA); compare it to the limit
 dB (decibel) = a sound pressure level, fast response
 dBA = a sound pressure level, "A"-weighted scale, slow response
 NA = not applicable

Now Hear This...

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Michigan Law Requires the Reporting of Known or Suspected Occupational NIHL
Reporting can be done by:
FAX (517) 432-3606
Telephone 1-800-446-7805
E-Mail Roseman@msu.edu
Mail MDICIS Occ. Health Division
PO Box 30649
Lansing, MI 48909-8149
Suggested Criteria for Reporting Occupational NIHL
1. A history of significant exposure to noise at work; AND
2. A STS of 10dB or more in either ear at an average of 2000, 3000 & 4000 Hz.
OR
3. A fixed loss.*
*Suggested definitions: a 25dB or greater loss in either ear at an average of 500, 1000 & 2000 Hz; or 1000, 2000 & 3000 Hz; or 3000, 4000 & 6000 Hz; or a 15dB or greater loss in either ear at an average of 3000 & 4000 Hz.

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Now Hear This is published quarterly by
Michigan State University-College of Human
Medicine with funding from the Michigan
Department of Consumer and Industry Services
and is available at no cost. Suggestions and
comments are welcome.
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