
MIOSHA

General Industry Safety and Health Division
Michigan Occupational Safety and Health Administration
Department of Licensing and Regulatory Affairs

DIVISION INSTRUCTION

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GISHD-COM-06-2R3

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SUBJECT: Noise Inspections

- I. Purpose. This instruction establishes policies and procedures for conducting noise inspections.
- II. Scope. This instruction applies to the General Industry Safety and Health Division (GISHD).
- III. References.
 - A. Administrative Rule Part 11. /R408.22101 et seq., [Recording and Reporting of Occupational Injuries and Illnesses](#).
 - B. Executive Office of the President, Office of Management and Budget, [North American Industry Classification System \(NAICS\) Manual](#), 2002.
 - C. Executive Office of the President, Office of Management and Budget, [Standard Industrial Classification \(SIC\) Manual](#), 1987.
 - D. Industrial Hygiene Technical Manual, Section II, Chapter 5, Noise Measurement, July 1997.
 - E. [MIOSHA Field Operations Manual \(FOM\)](#), as amended.
 - F. Michigan State University and MIOSHA, 2008 Annual Report on Work-Related Noise-Induced Hearing Loss in Michigan, August 24, 2009.
 - G. Occupational Health Standard Part 380. /R325.60101 et seq., [Occupational Noise Exposure](#).
- IV. Distribution. MIOSHA Staff; OSHA Lansing Area Office; S-drive Accessible; MIOSHA Messenger; and Internet Accessible.
- V. Cancellations. All previous versions of this division instruction.
- VI. History. History of previous versions include:

GISHD-COM-06-2R2, March 14, 2012.
GISHD-COM-06-2R1, March 11, 2009.
GISHD-COM-06-2, December 4, 2006.
- VII. Contact. [Adrian Rocskay](#), Division Director.
- VIII. Originator. Adrian Rocskay, Division Director.
- IX. Background. Noise-induced hearing loss (NIHL) is a significant cause of occupational and recreational disability. According to Michigan State University, there were 15,815 cases of work-related NIHL in Michigan between 1999 and 2008. The strategies to

reduce the incidence of NIHL include both enforcement and outreach activities. This instruction covers the enforcement activities.

X. Significant Changes.

- A. References to expired strategic plans were eliminated.
- B. In Appendix A, the citation classification was changed from other-than-serious to serious for the situation where the noise exposure was between 85 DBA and 90 DBA, hearing protection was worn, and there was no hearing conservation program.

XI. Enforcement Plan. Enforcement is accomplished by conducting noise inspections. In a noise inspection, the Industrial Hygienist/Safety Officer (IH/SO) determines the employer's compliance with Part 380, [Occupational Noise Exposure Standard](#), and the paragraphs of Part 11, [Recording and Reporting of Occupational Injuries and Illnesses](#), dealing with recording standard threshold shifts.

- A. The IH/SO will conduct a noise inspection whenever noise is a complaint or referral issue, regardless of the SIC/NAICS code.
- B. The IH/SO should conduct a noise inspection if noise is a potential serious hazard, regardless of the complaint or referral issues or SIC/NAICS code. Eliminating serious safety and health hazards in the workplace is a primary task of MIOSHA. Noise is a serious hazard if the violation would result in a serious citation. Consult [Appendix A](#) for guidelines on the classification of noise citations.
- C. During traditional wall-to-wall programmed inspections, the IH will conduct a noise inspection in accordance with [Section XII](#) of this Instruction. If the SO determines that noise is a serious hazard in any safety inspection, the SO should collect basic information and, as appropriate, make an Intra-Office Assistance (IOA) Request to a Health Supervisor.

XII. Inspection Procedures.

- A. Noise Inspection by an IH.
 - 1. Noise monitoring by the IH. The IH will determine if noise exposures equal or exceed the action level for [Part 380](#). At a minimum, sound level readings are to be used to screen for noise exposures at or above the action level. Noise exposures can be estimated from sound level readings by factoring in the number of hours the employees are exposed per day, obtained from employee interviews. An IH can use this information to plan full shift monitoring. The IH must use his/her own monitoring results to determine noise exposures; the IH cannot rely solely on the employer's monitoring. If the employer has a complete hearing conservation program and all feasible engineering controls, the IH's noise measurements are not necessary.
 - 2. Full-shift monitoring versus instantaneous monitoring. Full-shift monitoring is needed to sustain most noise citations (e.g., citations for no hearing conservation program, for missing program elements, or for lack

of feasible engineering controls). Full-shift measurements are taken with a noise dosimeter.

3. Technical information on conducting noise measurements can be found in Section II, Chapter 5 of the Industrial Hygiene Technical Manual.
4. If noise exposures equal or exceed the action level, the IH will determine the employer's compliance with [Part 380](#). Typically, when evaluating employer compliance with Part 380, an IH will focus on the most important portions of Part 380, which are noise monitoring, engineering controls, hearing protection, audiometric testing, follow-up of standard threshold shifts, noise training, posting of the standard, and recordkeeping. Part 380 can be looked at in more detail as deemed necessary by the IH and supervisor. All noise-related complaint and referral issues must be addressed, regardless of where they appear in Part 380. [Appendix B](#) contains an optional checklist that the IH can use to evaluate the employer's compliance with Part 380.
5. The IH must determine if the employer is properly recording standard threshold shifts on the injury and illness log, per Part 11, [Recording and Reporting of Occupational Injuries and Illnesses](#).
6. If the inspection indicates noise exposures below the action level, the IH does not have to examine the employer's compliance with Part 380 because Part 380 only applies if the exposure is at or above the action level.
7. Where appropriate, the IH will provide information on noise exposure to the establishment. The following MIOSHA web address contains several CET publications on noise exposure that may be referred to or handed out: [LARA - Occupational Health Publications](#).
8. To account for the ± 2 dBA accuracy of the noise measuring instruments, the IH's noise monitoring results must equal or exceed 87 dBA for the action level and 92 dBA for the permissible noise exposure.

B. Noise Inspection by SO.

1. The SO will collect information to determine if an IOA request to an IH for Part 380 is necessary. If it appears that noise exposures are at or above the action level and the employer does not have a hearing conservation program, the SO should make an IOA request. Similarly, if the noise exposures are at or above the permissible noise exposure level and the employees are not wearing hearing protection, the SO should make an IOA request.
2. Noise exposure estimation. If the SO has a sound level meter, sound level meter readings can be collected and factored with the number of hours exposed per day obtained from employee interviews. For those without sound level meters, a good rule of thumb is that if the noise is loud enough

to interfere with normal conversation, then the noise level likely exceeds 85 dBA.

- C. Citations. The IH will follow the [FOM](#) when documenting violations and issuing citations to employers. Guidelines for determining the classification of noise citations are found in [Appendix A](#) of this instruction.

Appendix A

Noise Citation Classification Guidelines

How is the noise standard cited under the following circumstances?

1. Noise exposure \geq 90 dBA (92 dBA to account for instrument accuracy), no hearing protection worn, and no Hearing Conservation Program (HCP).
 - Two violations would exist. A Rule 4 violation for overexposure and possible engineering/administrative controls and a Rule 7 violation for lack of an HCP. Both violations would be serious, with high severity, greater probability.
2. Noise exposure \geq 90 dBA (92 dBA), hearing protection worn, and no HCP.
 - Cite Rule 7 for lack of an HCP as serious, with high severity, lesser probability. Rule 4 may be cited for lack of engineering controls where reasonably feasible engineering controls can be shown. Engineering controls in this scenario are typically cited as other-than-serious.
3. Noise exposure \geq 85 dBA (87 dBA) and $<$ 90 dBA (92 dBA), no hearing protection worn, and no HCP.
 - Rule 7 cited for lack of HCP as serious, with high severity, greater probability.
4. Noise exposure \geq 85 dBA (87 dBA) and $<$ 90 dBA (92 dBA), hearing protection worn, and no HCP.
 - Rule 7 cited for lack of HCP as serious, with high severity, lower probability.
5. Always cite Rule 4 for engineering controls when noise exposure is $>$ 100 dBA (102 dBA).

Additional Notes:

1. Rule 7 can be cited with the abatement required, specifying what the department needs for documenting abatement.

Example:

Abatement Required:

Administer a continuing effective hearing conservation program as described in R325.60108 to R325.61027 for all employees who are exposed to noise equal to or in excess of the action level. Make copies of the noise rules available to affected employees or their representatives and also post a copy in the workplace. Submit to the department an example of an audiometric test conducted on an employee and a list of names of employees who have been trained.

2. If the employer has implemented an HCP with a single deficiency (such as failure to follow-up on a Standard Threshold Shift (STS)), the specific rule may be cited serious or other-than-serious depending on noise levels or the specific incident.

Appendix B Noise Exposure Standard Checklist

Date: _____

Inspection Number: _____

Establishment Name: _____

Noise Exposure Standard Checklist

	Yes	No	NA	Comments
Monitoring				
1. Was there information indicating employee exposure may be ≥ 85 dBA?				
2. Did the employer develop and implement a noise monitoring program?				
Noise Exposure Determination (Include all noise from 80 dBA to 130 dBA)				
3. Was all impact/impulse noise < 140 dB?				
4. Was employee's noise exposure < 85 dBA? (If "Y" to this and previous questions, no further action is required.)				
5. Was employee's noise exposure ≥ 85 dBA? (80 dB threshold)				
6. Was employee's noise exposure > 90 dBA? (90 dB threshold)				
7. Did the employer establish a Hearing Conservation Program?				
Noise Exposures and Controls (When the Permissible Noise Exposure is exceeded)				
8. Did employer use all feasible engineering controls?				
9. Did employer use all feasible administrative controls?				

	Yes	No	NA	Comments
Audiometric Testing (When employee exposures are \geq 85 dBA)				
10. Did employer establish an audiometric testing program?				
11. Did employer maintain an audiometric testing program?				
Audiograms (When employee exposures are \geq 85 dBA)				
12. Did employer establish a valid baseline audiogram within six (6) months? Or within one (1) year for mobile van?				
13. Did employer provide an annual audiogram?				
Audiogram Evaluation				
14. Was the annual audiogram compared to the baseline audiogram?				
Audiogram Evaluation and Follow-up (When an STS is found)				
15. Was the employee informed in writing of the STS within 21 days of the determination?				
Audiometric Test Requirements (When employee exposures are \geq 85 dBA)				
16. Was the audiometer calibrated acoustically on an annual basis?				
Hearing Protectors (HP)				
17. Did employer ensure the use of HP by employee exposed to $>$ 90 dBA? (90 dB threshold)				
18. Did employer ensure the use of HP by employee exposed to \geq 85 dBA and had no baseline audiogram? (80 dB threshold)				
19. Did employer ensure the use of HP by employee exposed to \geq 85 dBA and has STS? (80 dB threshold)				

	Yes	No	NA	Comments
20. Did employer provide training in the use and care of HP?				
Employee Training (When employee exposures are >85 dBA)				
21. Did employer institute a training program for the affected employee?				
22. Was the training program repeated annually?				
23. Was a copy of the noise standard available and posted?				
Recordkeeping and Records				
24. Did employer record any STS as an occupational illness on the MIOSHA 300 Log?				
25. Did employer retain noise exposure measurement records for 2 years?				
26. Did employer retain audiometric test records for the duration of the employee's employment?				