

# Now Hear This . . .



Volume 10, No. 2

Summer 2007

## Excerpts from the 2006 Annual Report on Work-Related Noise-Induced Hearing Loss

The 13<sup>th</sup> annual report on work-related NIHL in Michigan will be released this summer. The report summarizes the results of the State's ongoing program to track occupational noise-induced hearing loss and noise exposure in the workplace. One of the most important outcomes of this program is to identify noise exposure in Michigan work places where hearing conservation programs are deficient or non-existent. Through Michigan OSHA enforcement inspections, the State is able to protect workers from developing hearing loss and prevent further hearing loss among those exposed to high noise levels. This issue of *Now Hear This* highlights some of the findings from the surveillance program. The full report will be available on our website [www.oem.msu.edu](http://www.oem.msu.edu) or can be obtained by returning the postage paid post card.

### Audiologist Licensure

As of July 2007, 461 audiologists have been granted licensure by the State of Michigan. We wish to remind audiologists that licensed health care providers in Michigan are required to report all known or suspected noise-induced hearing loss, to the Michigan Department of Labor and Economic Growth. Reporting can be done by the method that is most convenient for the practitioner, see the back panel of this newsletter for ways to report. More information on the reporting requirements can be found at [www.oem.msu.edu](http://www.oem.msu.edu).

### Individuals with Noise-Induced Hearing Loss in Calendar Year 2006: Industry of Individuals Reported

Table 1 shows the number of individuals reported by industry. Reports are received on standard threshold shifts from audiologists providing hearing conservation programs and fixed loss by audiologists seeing individual patients with hearing loss who have or have had work-related noise exposure. Auto manufacturing (Transportation (37)) and industries associated with it such as foundries (primary metals (33)) and metal fabrication (34) are the most common industries where individuals reported with hearing loss have worked. The lack of reports from other noisy industries such as farming are presumed to be secondary to the lack of hearing conservation programs for farmers and the decreased likelihood of farmers seeking an audiological evaluation.

*Available in August...*

Work-Related Noise-Induced  
Hearing Loss in Michigan (2006)

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**Table 1. Individuals with Noise-Induced Hearing Loss in Calendar Year 2006: Industry of Individuals Reported**

Standard Industrial Classification (SIC)*	Number of		STS***		Fixed Loss****	
	Individuals	Percent	Individuals	Percent	Individuals	Percent
Agricultural Production & Services (01-08)	4	0.3	0	0.0	4	0.5
<i>Mining (10-14)</i>	2	0.1	2	0.3	0	0.0
<i>Construction (15-17)</i>	24	1.7	0	0.0	24	3.1
<i>Manufacturing (20-39)</i>						
Food and Kindred Products (20)	14	1.0	9	1.4	5	0.7
Printing and Publishing (27)	1	0.1	0	0.0	1	0.1
Chemicals (28)	14	1.0	9	1.4	5	0.7
Rubber and Misc. Plastics Products (30)	31	2.2	31	4.7	0	0.0
Stone/Clay/Glass (32)	1	0.1	0	0.0	1	0.1
Primary Metals (33)	186	13.0	8	1.2	178	23.3
Metal Fabrication (34)	90	6.3	84	12.7	6	0.8
Machinery (35)	3	0.2	1	0.2	2	0.3
Electronics (36)	7	0.5	6	0.9	1	0.1
Transportation (37)	890	62.4	470	71.0	420	55.0
Measuring, Analyzing, Crtl Instr. (38)	1	0.1	0	0.0	1	0.1
Miscellaneous Mfg Industries (39)	15	1.1	3	0.5	12	1.6
<i>Transport./Comm. Svcs. (40-49)</i>	37	2.6	2	0.3	35	4.6
<i>Retail Trade (50-59)</i>	4	0.3	0	0.0	4	0.5
<i>Finance, Insurance &amp; Real Estate (60-67)</i>	2	0.1	0	0.0	2	0.3
<i>Services (70-89)</i>						
Hotels (70)	1	0.1	0	0.0	1	0.1
Business Services (73)	1	0.1	0	0.0	1	0.1
Automotive Repair Services (75)	3	0.2	0	0.0	3	0.4
Health (80)	8	0.6	0	0.0	8	1.0
Education (82)	45	3.2	27	4.1	18	2.4
Social Services (83)	1	0.1	0	0.0	1	0.1
Membership Organizations (86)	2	0.1	0	0.0	2	0.3
Engineering/Management (87)	2	0.1	0	0.0	2	0.3
Private Households (88)	1	0.1	0	0.0	1	0.1
<i>Public Administration (91-97)</i>						0.0
Government (91)	22	1.5	5	0.8	17	2.2
Police (92)	7	0.5	0	0.0	7	0.9
Admin. Economic Programs (96)	7	0.5	5	0.8	2	0.3
<b>Total</b>	<b>1,426</b>	<b>100.0</b>	<b>662</b>	<b>** 100.0</b>	<b>764</b>	<b>** 100.0</b>

\*Standard Industrial Classification (1987 Manual).

\*\*SIC was unknown for 11 individuals reported by employer based programs and 135 individuals reported by non-employer based health professionals.

\*\*\*STS=Standard Threshold Shift, reported by employer based programs.

\*\*\*\*Fixed=reported by non-employer based health professionals.

## Estimates of the Number of Blue-Collar Workers in Michigan Exposed to Excessive Noise by Industry

Table 2 is based on the distribution of blue-collar workers in Michigan industries and the percentage of blue-collar workers in those industries that the National Institute for Occupational Safety and Health (NIOSH) has estimated are exposed to noise at or above 85 dBA. The estimate of 203,000 exposed workers does not include all at risk workers since certain industries such as farming were not included in the NIOSH survey.

**Table 2. Estimates of the Number of Blue-Collar Workers in Michigan Exposed to Excessive Levels of Noise, by Industry Type**

<b>Industry (SIC)*</b>	<b>Total No. of Workers**</b>	<b>% Exposed to Noise***</b>	<b>No. Workers Noise-Exposed</b>
<b>MINING</b>			
Oil and Gas Extraction (13)	1,600	23.1	370
<b>CONSTRUCTION</b>			
General Building Contractors (15)	31,000	15.8	4,898
Heavy Construction (16)	15,600	24.0	3,744
Special Trade Contractors (17)	108,600	15.6	16,942
<b>MANUFACTURING</b>			
Food and Kindred Products (20)	26,900	28.9	7,774
Textile Mill Products (22)	1,000	42.6	426
Apparel and Other Textiles (23)	15,100	13.9	2,099
Lumber and Wood Products (24)	13,400	41.3	5,534
Furniture and Fixtures (25)	28,200	28.3	7,981
Paper and Allied Products (26)	13,900	33.8	4,698
Printing and Publishing (27)	22,800	21.4	4,879
Chemicals and Allied Products (28)	20,100	17.3	3,477
Petroleum and Coal Products (29)	800	19.9	159
Rubber and Plastics (30)	43,200	22.8	9,850
Leather (31)	3,000	6.5	195
Stone, Clay and Glass (32)	14,200	21.5	3,053
Primary Metals (33)	28,100	32.7	9,189
Fabricated Metals (34)	96,000	29.3	28,128
Industrial Machinery (35)	80,700	14.9	12,024
Electronic Equipment (36)	25,600	8.1	2,074
Transportation Equipment (37)	188,300	18.2	34,271
Instruments and Related (38)	9,400	8.7	818
Miscellaneous Manufacturing (39)	5,200	9.4	489
<b>TRANSPORTATION</b>			
Freight (42)	41,500	7.0	2,905
<b>TRADE</b>			
Wholesale Durable Goods (50)	113,200	20.9	23,659
Wholesale Nondurable Goods (51)	57,100	5.3	3,026
Retail (55)	71,900	1.4	1,007
<b>SERVICES</b>			
Business (73)	278,800	1.5	4,182
Automotive Repair and Parking (75)	33,900	10.6	3,593
Health Services (80)	324,700	0.6	1,948
<b>TOTAL</b>	<b>1,713,800</b>	<b>11.9</b>	<b>203,391</b>

\*Standard Industrial Classification (1987 Manual).

\*\*Source: Bureau of Labor Statistics, Michigan Employment Security Commission, Current Employment Statistics. 2001 Annual Report of Michigan Production/NonSupervisory Workers.

\*\*\*Source: National Institute for Occupational Safety and Health, Criteria for a Recommended Standard, Occupational Noise Exposure Revised Criteria 1998. June 1998, DHHS (NIOSH) Publication No. 98-126, Table 2-1. Percentages are estimates based on data collected in the National Occupational Exposure Survey (NOES). Excessive noise is defined as at or above 85dBA.

Now Hear This...

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Address service requested.

In this issue:

v10n2: Excerpts from the 2006 Annual Report on  
Work-Related Noise-Induced Hearing Loss

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1. A history of significant exposure to noise at work; AND
  2. A STS of 10 dB or more in either ear at an average of 2000, 3000 & 4000 Hz. And the employee's total hearing level is 25 dB or more at the same three frequencies. OR
  3. A fixed loss.\*
- \*Suggested definitions: a 25 dB 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 15 dB or greater loss in either ear at an average of 3000 & 4000 Hz.

**Suggested Criteria for Reporting Occupational NIHL**

Internet  
www.oem.msu.edu  
E-Mail  
ODREPORT@ht.msu.edu  
FAX  
517-432-3606  
Telephone  
1-800-446-7805  
Mail  
MIOSHA-MTS Division  
P.O. Box 30649  
Lansing, MI 48909-8149

Michigan Law Requires the  
Reporting of Known or Suspected  
Occupational NIHL  
Reporting can be done by:

**Project SENSOR Staff**  
**At the Michigan Occupational  
Safety & Health Administration  
(MIOSHA)**  
Douglas J. Kalinowski, Director MIOSHA  
Project SENSOR, Co-Director  
John Peck, M.S., Director MTS Division  
Byron Panasuk, IH.  
Project SENSOR Specialist  
**At Michigan State University—  
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