WORK-RELATED
HEARING LOSS FACT SHEET
We have developed a fact sheet for patients where you think that exposure to noise at work has been a significant contributor to the patient's hearing loss.

The fact sheet discusses potential treatment/management options and the State's interest in receiving a report on patients where work-related noise is a significant contributor to hearing loss (for ways of reporting, see back panel).

If you are interested in receiving copies of the fact sheet for distribution in your practice, please call us at 1-800-446-7805 or email us at Rosenman@msu.edu

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Excerpts from the 2000 Annual Report
Occupational Noise-Induced Hearing Loss in Michigan

2000 Occupational Disease Reports for NIHL

Figure 1 shows the number of reports of hearing loss since 1985. Approximately 10% of all occupational disease reports submitted to the Michigan Department of Consumer and Industry Services are for hearing loss. Because of increased awareness of the reporting law by employers and health care providers there has been an increase in the overall number of reports received since 1989, and an increase in the number of non-company reports received, especially since 1994. In the year 2000, there were 2,254 reports of work-related hearing loss submitted to the Michigan Department of Consumer and Industry Services. Of the 2,254 reports submitted in the year 2000, 1,214 were submitted by company medical departments. The other 1,040 reports were submitted by private-practice audiologists and otolaryngologists.

Industry

Table 1 shows the most recent industries in which the interviewed patients were exposed to noise by reporting period (1992-1995 and 1996-2000), and whether the company provided regular hearing tests for their employees. The percentages of companies where the patient reported they did receive regular hearing testing ranged from 0% to 100% within industry types. Overall within each time period, 44% of the most recent companies where the patients were exposed to noise regularly tested their employees' hearing. The number of companies in Table 1 are not unique companies; more than one patient may have worked at the same company. Therefore, the company would have been counted more than once.
Inspections
In the year 2000, there were also industrial hygiene inspections assessing noise exposures that were conducted independently of those referred for inspections based on the patient interviews as part of Project SENSOR. In Michigan, limited scope complaint or referral MIOSHA inspections normally will include review of compliance with the noise standard if the company under investigation clearly has excessive noise levels and employees are observed not wearing hearing protection. During the 854 inspections conducted in the year 2000, 82 facilities received a citation for a violation of the noise standard. These facilities were generally small. Table 2 describes the companies that were cited for violations of sections of the noise standard.
Table 1. All Interviewed Patients with a Fixed Hearing Loss: Type of Industry and Performance of Regular Hearing Testing at Most Recent Company Exposed to Noise: Michigan 1992-1995 and 1996-2000*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Production &amp; Services (01-07)</td>
<td>24</td>
<td>(14)</td>
<td>50</td>
<td>(7)</td>
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<tr>
<td>Construction (15-17)</td>
<td>46</td>
<td>(3)</td>
<td>361</td>
<td>(9)</td>
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<tr>
<td>Manufacturing (20-39)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Food (20)</td>
<td>15</td>
<td>(50)</td>
<td>17</td>
<td>(69)</td>
</tr>
<tr>
<td>Wood (24)</td>
<td>7</td>
<td>(29)</td>
<td>14</td>
<td>(8)</td>
</tr>
<tr>
<td>Furniture (25)</td>
<td>---</td>
<td></td>
<td>10</td>
<td>(33)</td>
</tr>
<tr>
<td>Paper (26)</td>
<td>10</td>
<td>(37)</td>
<td>36</td>
<td>(79)</td>
</tr>
<tr>
<td>Printing (27)</td>
<td>3</td>
<td>(0)</td>
<td>17</td>
<td>(36)</td>
</tr>
<tr>
<td>Chemicals (28)</td>
<td>10</td>
<td>(89)</td>
<td>24</td>
<td>(58)</td>
</tr>
<tr>
<td>Rubber (30)</td>
<td>16</td>
<td>(45)</td>
<td>18</td>
<td>(64)</td>
</tr>
<tr>
<td>Stone/Clay/Glass (32)</td>
<td>15</td>
<td>(14)</td>
<td>13</td>
<td>(45)</td>
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<tr>
<td>Primary Metals (33)</td>
<td>37</td>
<td>(45)</td>
<td>437</td>
<td>(54)</td>
</tr>
<tr>
<td>Metal Fabrication (34)</td>
<td>52</td>
<td>(59)</td>
<td>109</td>
<td>(63)</td>
</tr>
<tr>
<td>Machinery (35)</td>
<td>40</td>
<td>(48)</td>
<td>76</td>
<td>(31)</td>
</tr>
<tr>
<td>Transportation (37)</td>
<td>230</td>
<td>(58)</td>
<td>787</td>
<td>(61)</td>
</tr>
<tr>
<td>Miscellaneous Manufacturing (39)</td>
<td>8</td>
<td>(33)</td>
<td>49</td>
<td>(23)</td>
</tr>
<tr>
<td>Transport./Comm. Services (40-49)</td>
<td>58</td>
<td>(57)</td>
<td>200</td>
<td>(56)</td>
</tr>
<tr>
<td>Trade (50-59)</td>
<td>13</td>
<td>(14)</td>
<td>51</td>
<td>(10)</td>
</tr>
<tr>
<td>Services (70-89)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive Repair (75)</td>
<td>14</td>
<td>(22)</td>
<td>23</td>
<td>(0)</td>
</tr>
<tr>
<td>Health (80)</td>
<td>9</td>
<td>(43)</td>
<td>34</td>
<td>(31)</td>
</tr>
<tr>
<td>Education (82)</td>
<td>25</td>
<td>(11)</td>
<td>138</td>
<td>(50)</td>
</tr>
<tr>
<td>Public Admin. (91-97)</td>
<td>78</td>
<td>(31)</td>
<td>198</td>
<td>(31)</td>
</tr>
<tr>
<td>Total</td>
<td>742***</td>
<td>(44)</td>
<td>2719</td>
<td>(44)</td>
</tr>
</tbody>
</table>

*For complete table, see 2000 Annual Report, Table 5 page 23.


***There were 29 companies for patients from 1992-1995 with an unknown SIC, and 26 companies for patients from 1996-2000 with an unknown SIC.

Table 2. Violations of the Noise Standard in Michigan: MIOSHA Inspections Conducted 01/01/2000 to 12/31/2000

<table>
<thead>
<tr>
<th>Standard Violated</th>
<th>Number of Citations</th>
<th>Percent*</th>
<th>Percent**</th>
</tr>
</thead>
<tbody>
<tr>
<td>No hearing conservation program</td>
<td>46</td>
<td>(56.1)</td>
<td>(44.2)</td>
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<tr>
<td>Noise monitoring</td>
<td>15</td>
<td>(18.3)</td>
<td>(14.4)</td>
</tr>
<tr>
<td>Exceeded noise level</td>
<td>13</td>
<td>(15.9)</td>
<td>(12.5)</td>
</tr>
<tr>
<td>Training</td>
<td>13</td>
<td>(15.9)</td>
<td>(12.5)</td>
</tr>
<tr>
<td>Access to medical records</td>
<td>9</td>
<td>(11.0)</td>
<td>(8.7)</td>
</tr>
<tr>
<td>Any audiometric testing, evaluation or follow-up</td>
<td>6</td>
<td>(7.3)</td>
<td>(5.8)</td>
</tr>
<tr>
<td>Provide hearing protection</td>
<td>2</td>
<td>(2.4)</td>
<td>(1.9)</td>
</tr>
</tbody>
</table>

*A company may be cited for more than one type of violation, therefore these percentages are based on a total of 82 companies cited.

**Percentages based on a total of 104 violations.
**Advisory Board**

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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 ODREPORT@ht.msu.edu  
Web www.chm.msu.edu/oem  
Mail MDCIS 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.*
Now Hear This...

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Address service requested.

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