According to OSHA
WHAT IS THE PURPOSE OF NOISE MONITORING?

- Employees must be placed in a hearing conservation program if they are exposed to average noise levels of 85 dB or greater during an 8 hour workday.
- It may be necessary to measure or monitor the actual noise levels.
Figure G-9

The graph represents the equivalent A-weighted sound level (y-axis) in decibels (in dB) plotted against the band center frequency in cycles per second (x-axis). The graph includes curves for different octave band sound pressure levels, with the y-axis ranging from 80 to 140 dB and the x-axis ranging from 100 to 5000 Hz, showing how sound pressure levels vary with frequency.
Protection against the effects of noise **shall be provided** ...

- when levels exceed those in the Table.

<table>
<thead>
<tr>
<th>Duration/day</th>
<th>Sound Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 hours</td>
<td>90 dba slow</td>
</tr>
<tr>
<td>4 hours</td>
<td>95 dba slow</td>
</tr>
<tr>
<td>2 hours</td>
<td>100 dba slow</td>
</tr>
<tr>
<td>1 hour</td>
<td>105 dba slow</td>
</tr>
<tr>
<td>½ hour</td>
<td>110 dba slow</td>
</tr>
<tr>
<td>¼ hour or less</td>
<td>115 dba slow</td>
</tr>
</tbody>
</table>
Protection against the effects of noise **shall be provided**...

- When employees are subjected to sound exceeding the Table then...
  - Administrative Controls or
  - Engineering Controls

If administrative and engineering fail, then...

- **Personal Protective Equipment shall be provided**
Hearing Conservation Program

- Shall administer a continuing, effective Hearing Conservation Program, when...
  - 8-hr TWA equals or exceeds 85 dba slow
  - 85 dba = “action level”
Excess Risk Estimates (%) for Hearing Impairment

Average Occupational Noise Exposure in Decibels (40-yr lifetime)

- 72 NIOSH 0.5-1-2-kHz
- 96 NIOSH 0.5-1-2-kHz
- 96 NIOSH 1-2-3-kHz
- 96 NIOSH 1-2-3-4-kHz