



From the International Association of Drilling Contractors

## ALERT 98-05

## **Exposure to Noise**

Here are some examples of exposures to noise measured by an operator:

Rig floor with squeaking drawworks brake	99 dBA
Rig floor drilling ahead	90-97 dBA
Offshore pump room with 2 pump running	101 dBA
Beside 2 mud pumps running on land rig	90 dBA
Offshore engine room with 2 engines running	110 dBA
Beside engine skid with 3 engines running on land rig	102 dBA
Standing next to mud tanks	88 to 92 dBA
Standing next to shale shakers	85 to 95 dBA
On offshore pipe rack with auxiliary top drive equipment running	93 dBA
Inside offshore office	74 dBA
Inside crew boat	89 dBA
Approaching helicopter with engines running, rotors moving	102 dBA

## By comparison, the U.S. Occupational Safety & Health Administration requires a hearing protection program wherever noise exposure is above a time weighted average of *85* dBA.

The above readings provide examples of common noise sources. Actual exposure to noise will vary from rig to rig due to machinery types and relative distances from the noise source.

The operator offered the following suggestions to minimize hearing loss through exposure to noise:

- 1. If practical, engineer the noise out using mufflers, noise barriers, and sound-deadening devices.
- 2. Wear hearing protection when exposed to noise. This *always* means in areas where signs note that hearing protection is required. However, as a rule of thumb, hearing protection is also probably needed anywhere where you need to raise your voice to be heard.
- 3. Move the work station(s) away from the noise source, if possible. By doubling the distance from the noise source you reduce your exposure as much as 6 dBA.
- 4. Limit employee exposure to noise whenever possible.

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.