

How do I determine whether noise levels are dangerous to employees working in different areas within my factory?

Under the Control of Noise at Work Regulations 2005 the noise can begin to be considered dangerous is 80dB as an 8-hour average for the working shift. There are a few 'rules of thumb' you can use based on conversation level to give you an idea of likely noise exposure. These are detailed on the table below.

Test	Probable Noise Level	A risk assessment will be needed if the noise is like this for more than:
The noise is intrusive but normal conversation is possible	80dB	6 Hours
You have to shout to talk to someone 2m away	85dB	2 Hours
You have to shout to talk to someone 1m away	90dB	45 Minutes

So from the table above if an employee is exposed to over 80dB for more than 6 hours there is a chance that with this rough estimate they could be over the 80dB exposure value for 8 hours. If this is the case then a full risk assessment should be performed to assess the noise risk. The risk assessment can use known dB outputs from machinery that manufacturers should provide with their machines, together with known exposure times for employees to estimate the overall exposure. It may be difficult to estimate the exposure in this manner, perhaps because of complex work patterns or because the noise from machines is intermittent. If this is the case then measurements should be performed, especially if the exposure level is likely to be above 85dB. To do this either a hand held sound level meter can be used or a noise dosimeter. A noise dosimeter is a noise monitor that is worn by an employee so is recommended for employees who are either very mobile (e.g. fork lift truck drivers) or for those that work in dangerous environments where it would be otherwise dangerous to monitor with a sound level meter. If a noise dosimeter is worn for an entire shift then a measurement of the noise dose can be taken directly from the dosimeter.

There are many aspects to consider with the Control of Noise at Work Regulations. Least of all that assessing the noise exposure is a means to an end in that it should be used to make an action plan to control noise at source to a level that is of minimum risk. A copy of the latest guidance to go with the latest noise at work regulations is available from HSE books.