

## Hand-Arm Vibration Notes for Risk Assessment in the Paper Industries

**1. Who could this apply to?** – Operators who regularly and frequently use: hand held power tools, hand-guided power equipment and powered machines that process hand-held materials.

We have not identified many occupations in the Paper Industries that meet these criteria, some that have been suggested for consideration are:

- The use of **power tools** or **air powered tools** in e.g. **pallet making** or repair, **forme making** or repair; **stripping tools**; **nail and stitching guns**; maintenance activities including **drilling, sawing or grinding**.
- The **hand feeding** of machines where vibration could be transmitted through the materials being processed e.g. **hand stitching, hand cutting machines** processing board, reels, cores or wooden components.

**2. Hand-arm vibration** can be defined as:

Vibration that is transmitted from work process into workers' hands and arms, which can be transmitted by operating the categories of tools identified in 1. above

**3. Hand-arm vibration and the likelihood of resultant health effects:**

Hand-arm vibration causes a range of conditions collectively known as hand-arm vibration syndrome as well as specific diseases such as carpal tunnel syndrome.

**4. Employees at particular risk**

None of the jobs identified as most likely to be at risk are known to be employed as part of the Paper Industries and contractors involved in construction are the most likely site visitors who could be affected. The types of hand-held power tools that might be used, by maintenance staff for instance, include: hammer drills, impact wrenches, pedestal grinders and powered sanders.

**5. Risk Assessment**

Can be undertaken by a combination of observation, talking to employees and their supervisors and studying manufacturer's information / handbooks. Evidence that suggests the existence of hand-arm vibration includes:

- Processes that involve regular exposure to vibration (e.g. from the examples of tools listed above). Exposure levels to monitor are:

Tool Type	High Risk	Medium Risk
Hammer action	Operate for more than about one hour per day	Operate for more than about 15 minutes per day
Some rotary and other action	Operate for more than about two hours per day	Operate for more than about one hour per day

- Tool or machine manufacturer's handbook gives warning of vibration risks
- Employees report any process that produces high levels of vibration or uncomfortable strains on hands or arms
- Employees report suffering any of the hand-arm vibration syndrome symptoms

This information should enable you to do a basic risk assessment, which will enable you to decide whether exposures are likely to exceed the exposure action and limit values. Alternatively, you may use vibration data available from manufacturers, HSE guidance or to have measurements taken.

**6. Controlling the Risk**

Should you identify that you have a risk or potential risk you will have to take steps to control it. These could include alternative work methods, an equipment purchasing and replacement policy, work design, work schedules, maintenance and appropriate protective work clothing (where appropriate).

You will also need to consider arrangements for Health Surveillance, Information, Training and Instruction.

Information source HSE INDG175 (rev1) 06/05, the leaflet and other information can be downloaded from the HSE web site at: [www.hse.gov.uk/vibration/index.htm](http://www.hse.gov.uk/vibration/index.htm)