Vibration

Most construction plant, tools and equipment vibrate.

Regular prolonged exposure to vibration can affect your health – most people are aware of hand-arm vibration and its effects are understood.

Awareness of whole-body vibration and its effects is also starting and is something we need to consider.

Reducing exposure is relatively easy
Dealing with the symptoms is not

General

- First consideration is always – do I need to do that task with that piece of equipment?
- Changing the method may be an option, eg: using a machine-mounted breaker rather than a hand-held tool.
- Careful selection of the equipment can have a big impact – choose the tool with the least vibration.
- Keep all plant and equipment well maintained – any issues – report.

Hand-arm Vibration

- Know how the work has been planned – in your method statement. The most effective control, having considered the method and the tool, is to limit the amount of time using the tool – know your time limit and stick to it.
- Always let the tool do the work for you. Grip the handle as lightly as possible whilst ensuring sufficient grip is maintained.
- Cold is a contributory factor. Keep warm, wearing gloves if necessary, but remember gloves do not actually lessen the vibration, even if they say they do.
- Smoking is also a factor. If you are a smoker, you are at increased risk of vibration white finger.
- Don't use blunt tools - keep tools sharp and use the right tool for the job.
- The first signs may simply be a tingling in the fingers leading to loss of sensation, pain in cold weather and the telltale white fingers.

  Report as soon as you suspect a symptom.

Whole-Body Vibration

- An issue when operating plant such as dozers, scrapers, skid-steer loaders, pavers and crushers.

- Some simple precautions can make a big difference for all types of plant:-

  - keep to established vehicle routes
  - keep to the speed limits
  - keep to the smooth routes – report any rutting/potholes
  - set the plant up properly – set seat dampers for your weight if fitted

- For the high-risk plant detailed above, know how the work has been planned – in your method statement – and stick to it.

Questions:

1 What are the types of vibration?
2 What tools and plant pose this risk?
3 What are the precautions?

Further Information:- CIP Manual, Sections 13 & 25