
TOOLBOX TALK

Hand-Arm Vibration

Workers need to be protected against excessive exposure to hand-arm vibration. Prolonged exposure to hand-arm vibration can cause a range of symptoms, known as hand-arm vibration syndrome (HAVS).

Effects of hand-arm vibration:

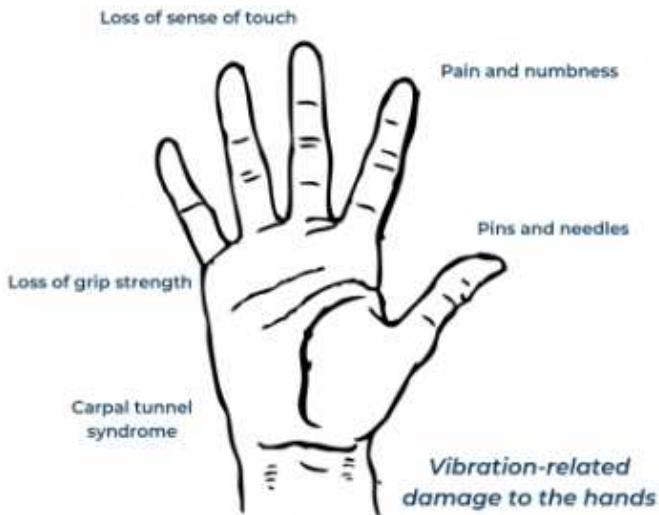
Symptoms include tingling, pins and needles, loss of feeling in the fingers, pain and throbbing in the fingers, loss of manual dexterity, painful joints and, in particular, pain when the hands warm up after getting cold.

Prolonged exposure to hand-arm vibration can cause damage to blood vessels, nerves, tendons, ligaments, muscles and bones. It can also lead to irritation, fatigue and loss of concentration. These effects are likely to affect a person's attention to safety and therefore, increase the likelihood of an accident occurring.

Carpal tunnel syndrome (CTS) is also caused by hand-arm vibration and causes severe nerve pains in the palm of the hands, which is often worse at night.

The long-term effects of hand-arm vibration are often irreversible, causing sufferers pain and affecting their quality of life. This can be due to the damage caused to blood vessels, nerves, muscles tendons and body organs.

Excessive hand arm vibration can lead to 'Vibration White Finger', resulting in damaged blood vessels, circulatory problems and pain.



Sources of hand-arm vibration:

Hand-arm vibration is generated by prolonged use of both rotating and percussive hand-held tools. Some tools such as hammer drills are both rotary and percussive.

Below is a list of power tools that generate levels of vibration:

- Multi tool
- Impact driver
- Hammer drill
- Circular saw
- Chopsaw
- Jigsaw



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Tips for reducing vibration exposure:

- Advances in technology are leading to newer tools being equipped or manufactured with vibration absorbing features. Aim to select low-vibration or vibration-reduced tools, wherever possible.
- When using vibrating tools, take regular breaks. If working in a cold environment, warm your hands up and exercise your fingers during breaks. Cold temperatures can exacerbate HAVS symptoms and make you more susceptible to problems.
- Always use the correct tool, with sharp blades / drill bits as this will help reduce vibration. Blunt blades mean that greater force has to be applied to the tool, which increases vibration.
- Adopt a good technique when using hand-held tools. Use a lighter grip as this will limit the amount of vibration transmitted from the tool to the hand.
- Do not grip too tightly or apply excessive force, let the tool do the work.
- Keep hands warm and dry by wearing gloves. However, do not rely on anti-vibration gloves as they have little effect on vibration.
- Always keep tools fully maintained. Older tools may vibrate more because rotating parts become unbalanced or cutting parts deteriorate over time. Regularly servicing tools can help limit the amount of vibration a tool produces.
- When using a tool which causes vibration, break the job up with other work activities. Don't aim to multi-tool multiple skirtings consecutively!



Personal Safety:

Always wear your task related PPE, as outlined within the Spacepro RAMS.



If you think you are suffering ill effects from vibration, cease the activity, speak to your Regional Installation Manager and if necessary, seek medical advice.