

Major Contractors Group Healthcare in Construction



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Toolbox Talk 3

HAND ARM VIBRATION SYNDROME

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Presenters Notes

Visual Aids

HAND ARM VIBRATION SYNDROME

INTRODUCTION

Workers who's hands are regularly exposed to high levels of vibration may suffer from a variety of work-related injuries to the hands and arms, including impaired blood flow and nerve damage. In extreme cases, swelling and pain in joints as well as damage to muscles may occur. Collectively the injuries and the symptoms they cause are know as **Hand Arm Vibration Syndrome**. The most common descriptive term is "Vibration White Finger".

Despite the fact that the minor, early manifestations of HAVs are tolerable, it can progress to a very painful and disabling disorder and is widespread in the Construction Industry.

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Vibration White Finger

Personal Notes:



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VIBRATION

WHITE

FINGER

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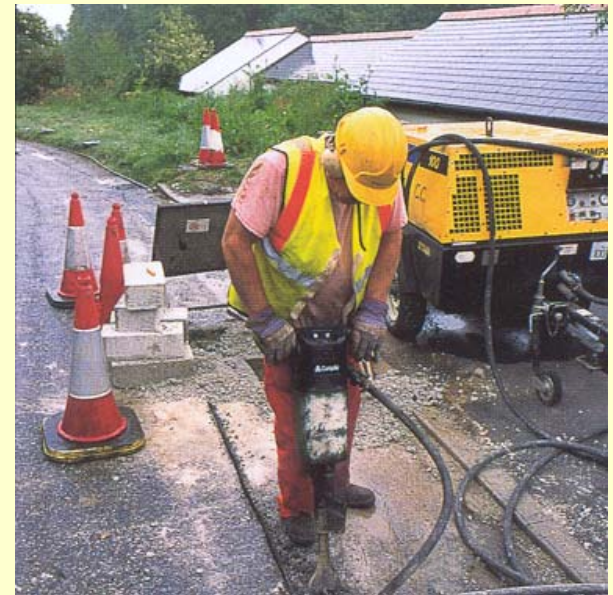
CAUSES

Use of hand tools or holding objects in contact with vibrating machinery (Fig 1 & 2).

- ◆ Grinding and sanding tools
- ◆ Percussive hammers and chisels
- ◆ Concrete breakers and drills
- ◆ Chain saws
- ◆ Hand-held tools
- ◆ Powered riveting tools



Fig. 1



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OTHER SYMPTOMS (Fig 3)

- ◆ Pins and needles ②
- ◆ Pain ② These may occur at other times e.g. when at rest
- ◆ Stiffness }
- ◆ Swelling in the joints of the hands and wrists, elbows and shoulders
- ◆ Loss of strength in the hands and arms

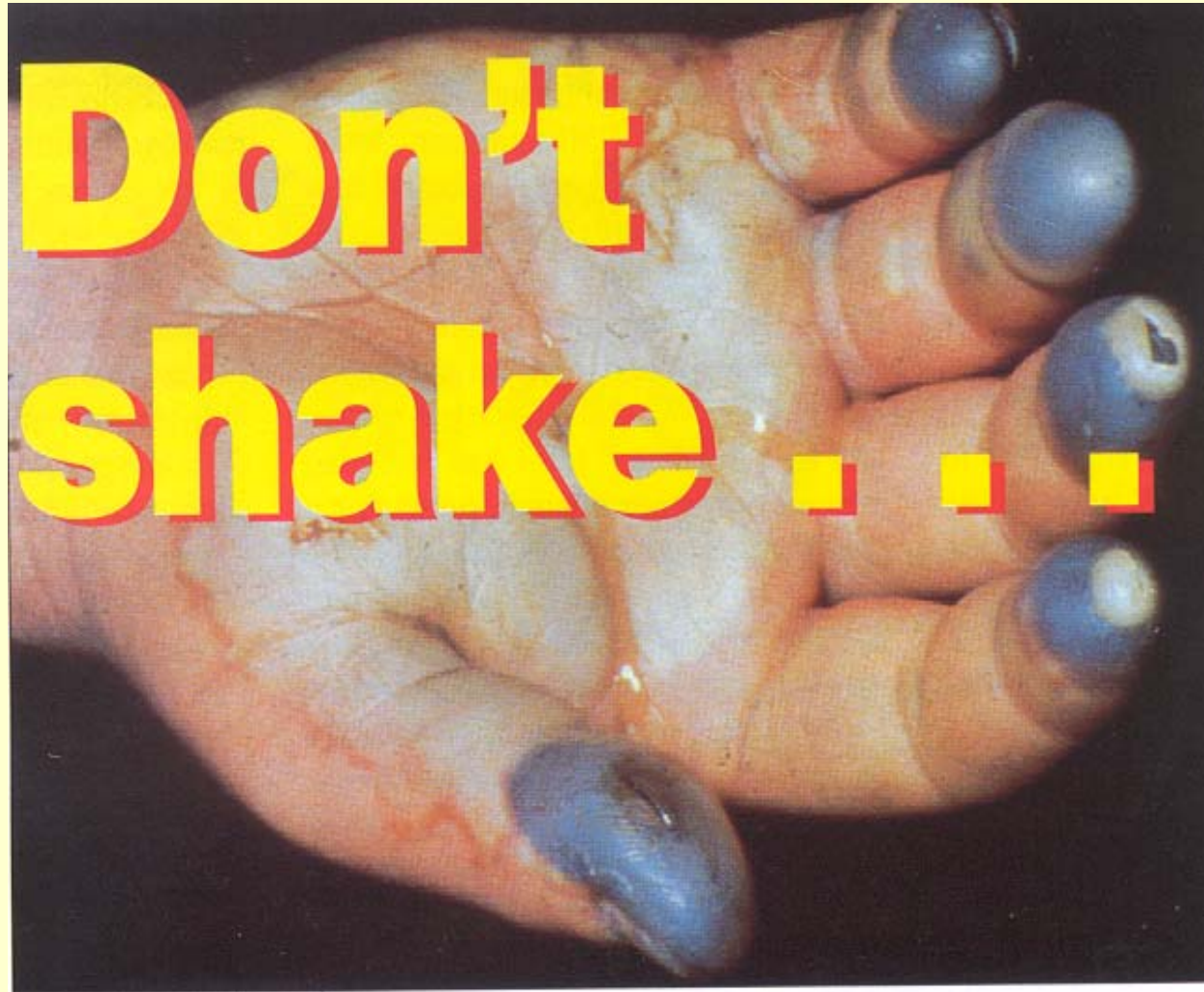


All the above symptoms and signs are progressive if exposure to vibration continues without attempts to modify the task or exposure to vibration through risk assessments.

In severe cases irreparable damage will lead to loss of use of hands and possible amputation of fingers.

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Figure 3

Presenters Notes

Visual Aids

IDENTIFYING THE PROBLEM (Fig 4)

Observations

- ◆ Tingling and numbness of the fingers
- ◆ In the cold and wet, do fingers go white, then red, then painful?
- ◆ You can't feel things with your fingers
- ◆ Loss of strength in the hands

Action Points

- ◆ Can the job be carried out a different way
- ◆ Use low vibrating tools
- ◆ Use the right tool for the job
- ◆ Ensure tools are maintained to avoid vibration
- ◆ Keep cutting edges sharp
- ◆ Use appropriate PPE
- ◆ Keep warm and dry
- ◆ Massage and exercise your fingers
- ◆ Learn to recognise the signs



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