

A guide to HAVS

What is it?

HAVS stands for Hand Arm Vibration Syndrome. It is caused by vibration transmitted into the hands and arms when using hand-held powered equipment. Too much exposure can cause HAVS and carpal tunnel syndrome.

What are the health effects?

Individuals whose hands are regularly exposed to vibration may suffer from damage to the tissues of hands and arms, which causes the symptoms collectively known as HAVS

These symptoms include:

- numbness and tingling in the fingers
- reduced sense of touch and temperature, due to damage to nerves in the hand. This damage can make it difficult to feel, and to work with, small objects;
- periodic attacks during which the blood circulation in the fingers is impaired and parts of the fingers become white (blanched). This is sometimes known as 'vibration white finger', 'dead finger' or 'dead hand'. During these attacks the fingers feel numb. As blood circulation returns to normal, either by itself or after re-warming the fingers, they are typically throbbing, red and painful. Although vibration causes the condition, it does not bring on the attacks. The main trigger for these symptoms is exposure to the cold, eg being outdoors early on a winter's morning, or by localised or general body cooling in otherwise warm environments. Rarely, in very advanced cases, blood circulation may be permanently affected;
- joint pain and stiffness in the hand and arm. Grip strength can be reduced due to nerve and muscle damage.

An individual with HAVS may not experience the complete range of symptoms, eg there may be nerve damage symptoms without there being blood circulation problems and vice versa. The symptoms of HAVS are usually progressive as exposure to vibration continues, eg the effects on blood circulation are seen initially in the tips of the affected fingers, with changes spreading up the finger. The thumb may also be affected.

Carpal tunnel syndrome, a disorder of the hand and arm, which may involve tingling, numbness, pain and weakness in parts of the hand, can also be caused by exposure to vibration.

Attacks of 'white finger' will take place not only at work, but during other activities, especially if people get cold, such as when washing the car or watching outdoor sports. The damage to the hands may be irreversible.

After symptoms first appear, generally the longer an individual is exposed to vibration, the worse the symptoms become, although the rate of deterioration will vary from person to person.

How is it managed?

Health surveillance is about having procedures to detect work-related ill health at an early stage and acting on the results. The main aims are to safeguard the health of employees (including identifying and protecting people at increased risk), and also to check the long-term effectiveness of control measures.

In the case of hand-arm vibration, one of the specific aims is to prevent employees developing an advanced stage of HAVS associated with disabling loss of hand function. It is possible that individuals who are exposed to vibration may have mild symptoms of HAVS. If they are not aware that they have the disease, health surveillance can help them to recognise that the first symptoms of HAVS have started to develop.

How can I help reduce the risks?

It is your employer's responsibility to protect you against HAVS and carpal tunnel syndrome, but you should help by asking your employer if your job could be done in a different way without using vibrating tools and machines. If this cannot happen:

- Ask to use suitable low-vibration tools.
- Always use the right tool for each job (to do the job more quickly and expose you to less hand-arm vibration).
- Check tools before using them to make sure they have been properly maintained and repaired to avoid increased vibration caused by faults or general wear.
- Make sure cutting tools are kept sharp so that they remain efficient.
- Reduce the amount of time you use a tool in one go, by doing other jobs in between.
- Avoid gripping or forcing a tool or work piece more than you have to.
- Store tools so that they do not have very cold handles when next used.
- Encourage good blood circulation by:
 - keeping warm and dry (when necessary, wear gloves, a hat, waterproofs and use heating pads if available);
 - giving up or cutting down on smoking because smoking reduces blood flow; and
 - massaging and exercising your fingers during work breaks.

What else can I do?

- Learn to recognise the early signs and symptoms of HAVS
- Report any symptoms promptly to your employer or the person who does your health checks.
- Use any control measures your employer has put in place to reduce the risk of HAVS.
- Ask your safety representative for advice.

If there are signs of possibly HAVS symptoms you may be referred to Health Management for a referral.