

# There is help for hand arm vibration syndrome

## Miners among those with high risk of developing condition

Hand arm vibration syndrome (HAVS) — also known as "white hand", "white fingers" or "dead hand" — is a disease which can involve the blood flow, sense of touch and movement or gripping (holding) ability as well as musculoskeletal disturbances.

This condition was identified in 1882 by a French physician after he noted workers' fingertips turning white on exposure to the cold. This condition was studied in North America by Dr. Alice Hamilton in 1911.

It was not until 1983 that scientists agreed on a definition, which includes the circulatory; nervous and musculoskeletal systems.

Hand arm vibration is the transfer of vibration from a tool or work piece to a worker's hands and arms. The level of vibration is determined by measuring the acceleration of the tool or object being held by the worker.

Measuring the vibration is similar to measuring sound or noise levels. Daily exposure to vibrating tools, which are powered by compressed air, gasoline or electricity such as Jackhammers, chisels, chainsaws, grinders and riveters, can cause physical damage to the hands and arms.

Trades that are at a higher risk to vibration exposure include the construction, forestry, mining, quarrying and railway industries.

### Symptoms can start soon

Symptoms of HAVS can begin within months or take years after the exposure to vibration begins.

Symptoms of HAVS can include a bluish tinge of the skin of the fingers and hands; whitening of fingertips after cold or damp exposure, numbness with or without tingling (pins and needles), which can occur before, during or after whitening of the fingertips.

The attacks are more common in the winter, but may eventually occur year-round.

The entire length of the fingers may become involved; however, the palms of the hands are rarely affected. The sense of touch and pain perception may be reduced. A loss of the strength of the hands is frequently noticed.

If the early symptoms of HAVS are ignored, the symptoms may progress and interfere with work and home activities.

After reaching a level of severity, the disease tends to progress even after being removed from the vibration exposure.

The recommended treatment includes restoring the circulation by warming the hands.

Wearing warm clothing and keeping the trunk of the body warm can help reduce symptoms.

There is no therapy at present for the neurological symptoms, although, if the circulation is improved, some nerve recovery may occur.

Stop smoking.

Your doctor should assess, you to determine if being treated with medication could be a benefit to you.

To stop the progression of, the disease, it is often best to withdraw from the exposure or greatly reduce the amount, of time with the exposure.

Some professionals recommend wearing anti-vibration gloves to reduce the amount of vibration you are being exposed to. Controlling the source of the vibration is always the best preventative measure.

The joint health and safety committee at your workplace should be aware of HAVS and methods of preventing HAVS if there is regular use of vibrating equipment.

The committee should be able to recognize the signs of HAVS and report symptoms immediately.

The committee should also be aware of the impact overtime, shift work and double shifts may have on accelerating the symptoms.

Poorly functioning machinery should be reported and a proper tool maintenance schedule is recommended.

A review of the ergonomic aspects of tool use, including the use of personal protective; equipment, should be done by the committee on a regular basis.

If you think you may have HAVS, it is recommended you discuss the symptoms with your doctor.

■ **Donna Campbell is executive director of the Occupational Health Clinic (Sudbury). Her column appears periodically in The Sudbury Star. If you have an occupational health topic you would like addressed in a future column, contact the Occupational Health Clinics for Ontario Workers inc. in Sudbury at 523-2330.**