

Toolbox Talk

Name of Company _____

Date: ____ / ____ / ____

The Hazards of Vibration

Vibration from power tools such as chainsaws, grinders, jack hammers, sorting conveyors, drill motors, crushers, chippers, mowers and other equipment can cause serious injury to your hands when used over long periods of time. Workers in construction, shipyards, manufacturing, forestry, agriculture & food processing, stone cutters, and others are exposed to vibration by the tools they use.

Symptoms start with occasional tingling or numbness in the fingers which can progress to painful spasms of the hand which last anywhere from a few minutes to an hour. There can be a whitish coloration of the fingers, known as “finger blanching”. This affliction is known as Vibration White Finger Syndrome (VWF) or sometimes referred to as Hand-Arm Vibration Syndrome or HAVS.

As the condition progresses, the hands become weak, less sensitive to temperature, and make simple tasks like putting a nut on a bolt or trying to hold a screw or small part difficult. As the disease progresses, victims are often forced to reduce or eliminate activities at work and at home. Extreme cases have been known to result in gangrene of the fingertips requiring amputation.

If the hand is subjected to repeated vibrations over long periods of time, it damages the blood vessels and interferes with the flow of blood to the fingers. This deprives the skin and muscles of oxygen which causes them to eventually die. Factors that determine the development of HAVS include the intensity of the vibration, how tight the user grips the tool, how long the tool is used each day and how many months or years the tool is

continuously used. It appears that several hours of daily exposure over a period of months or years is required before the first symptoms appear. This is a progressive disease that can be reversed if corrective action is taken when symptoms are first recognized. Once it becomes permanent there is no cure, only medication which partially relieves the pain.

Some things that you can do to keep from developing this disease are:

- If you work outdoors in the cold, wear warm gloves to protect your hands and fingers.
- Let the tool do the work, grasping it as lightly as possible while still maintaining control. As much as possible, avoid awkward positions such as forcing the wrist forward.
- Consider using anti-vibration gloves which help dissipate the vibration over a much larger area of the hand. Gloves are also available that aid in gripping a tool so the worker can hold the tool without having to grip it so tightly.
- If you can, periodically change the tool to your other hand, or consider using a non-vibrating tool if feasible.
- Rotate the task among several members of the crew to reduce individual exposure.

SAFETY REMINDER

Smoking and cold exposure both can cause blood vessels to constrict, further impairing blood flow and increasing the risk of vibration-related injuries.

Names of attendees:
