PPE: Hand, Wrist, Fingers – Checklist



PREAMBLE

Our hands, wrists and fingers are valuable tools, the most valuable we'll ever own.

A hand injury, such as the loss of a finger, a broken bone, nerve damage, MSD, or skin disorder, can interfere with a worker's job performance and quality of life – and even end a career. Work-related hand injuries are also costly to the employer, in terms of lost work time and productivity, and higher insurance rates.

27 bones, 20 muscles and dozens of tendons and ligaments. Add blood vessels and nerves to feed and control the moving parts, and you have one of the more brain power than other body parts, your hands are involved in almost everything you do. Yet many things are done without any deliberate thought or anticipation of danger.

Because it is so well designed and useful, the hand is usually where the action is and is the part of the body most likely to be injured. In the Ontario mining industry, approximately 50% of all hand and finger injuries are cuts or puncture wounds. One out of every 10 hand injuries results from the improper use of hand tools and four out of ten injuries occur in the handling of materials. Among the leading causes of hand and finger injuries are failure to follow procedures, using the wrong tool for the job, inattention, and failure to wear personal protective equipment.

Traumatic injuries, contact injuries and repetitive motion injuries are the most common types of hand injuries.

Traumatic injuries can occur from the careless use of tools or machinery. Hands and fingers may get caught, pinched or crushed in chains, wheels, rollers, or gears. They may be punctured, torn or cut by spiked or jagged tools and edges that shear or chop.

Contact injuries can occur from contact with solvents, acids, cleaning solutions, flammable liquids and other substances that burn or injure tissue.

Safety precautions to minimize contact injuries include reading product labels and Material Safety Data Sheets, using the correct gloves or barrier cream, and

washing your hands frequently.

When tasks require repeated, rapid hand movements for long periods of time, repetitive motion injuries can occur. These injuries often disable the soft tissue and joints of the body. Examples of repetitive motion injuries include tendinitis, tenosynovitis, “tennis elbow,” carpal tunnel syndrome and white finger. To avoid muscle strain in your hands, change your grip, hand position or motion. If possible, alternate tasks to give your hands a rest.

White Finger is also known as Raynaud’s phenomenon due to HandArm Vibration exposure (HAVS). Workers exposed to vibration are the most likely to show signs of this disease. Repeated surveys find that about 50% of people using rock drills or other tools with high vibration have HAVS. Hand-held power tools such as chain saws, jackhammers and pneumatic rock drillers and chippers are the primary culprits. Damage can also extend to nerves, muscles, bones and joints of the hand and arm. This condition is a blood circulation and nerve disorder that is aggravated by the exposure to cold temperatures. Attacks can occur at work or at home, such a while fishing, golfing, or touching cold objects. Severe cases of Raynaud’s phenomenon may cause disability, and rare, severe cases can lead to a breakdown of the skin and gangrene