

SAFE WORK



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HAND INJURIES in Manitoba Workplaces

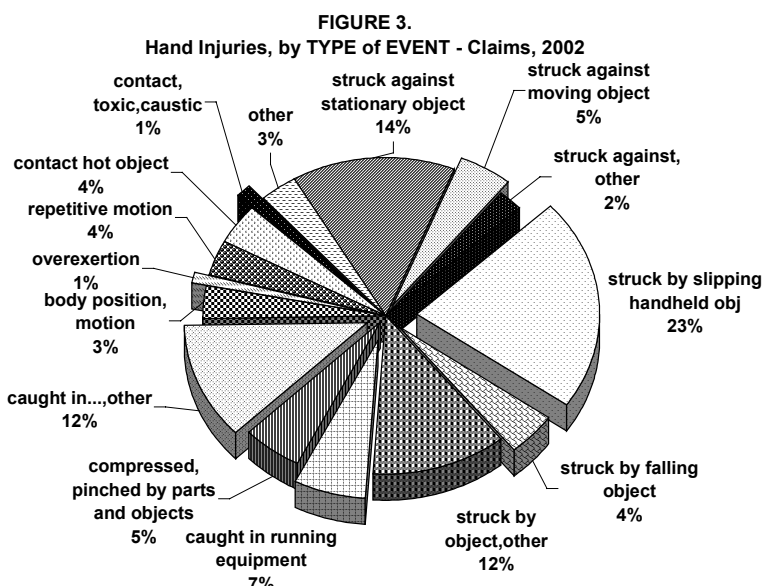
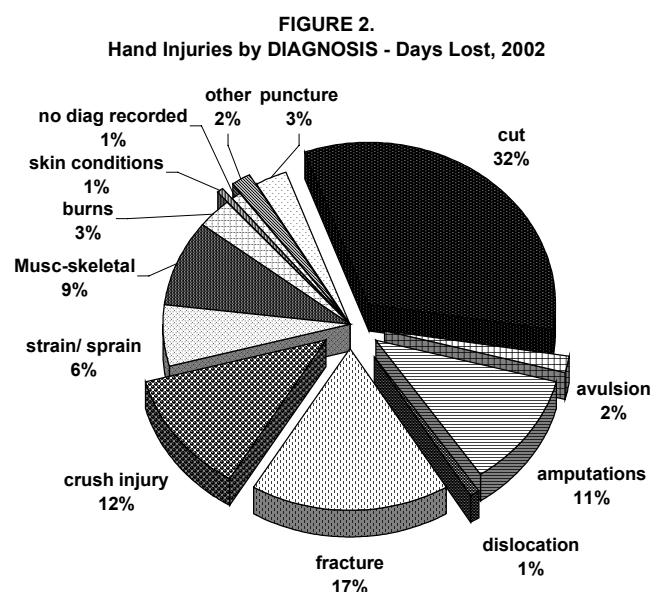
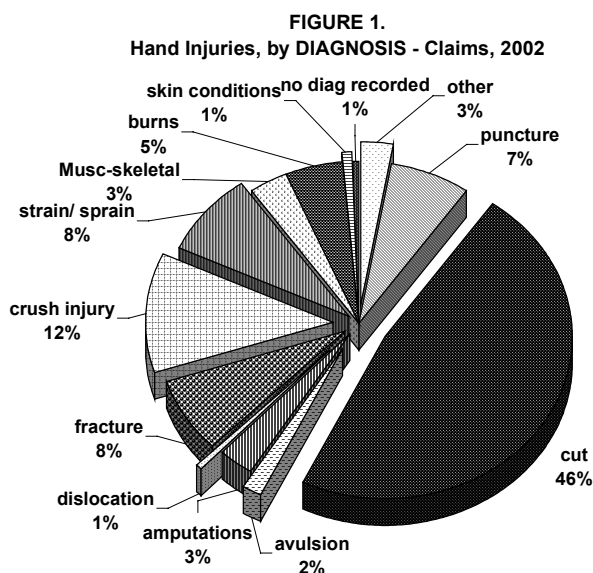
Almost one of every four Manitoba workplace injuries is hand related (23%). One-third of these injuries will result in an average of 15 days lost from work. In 2002, Manitoba workers reported over 8 thousand hand injuries to the Workers Compensation Board (W.C.B.), totaling close to 43,000 days lost from work.

1. WHO injures their hands?

More than 25% of all hand injuries occur to young workers age 15-24. The group of 15-19 year old workers suffers over 40% of their injuries to their hands. For 20-24 year olds, this drops to 30% of injuries, and gradually goes down to between 18-20% of injuries by age 35.

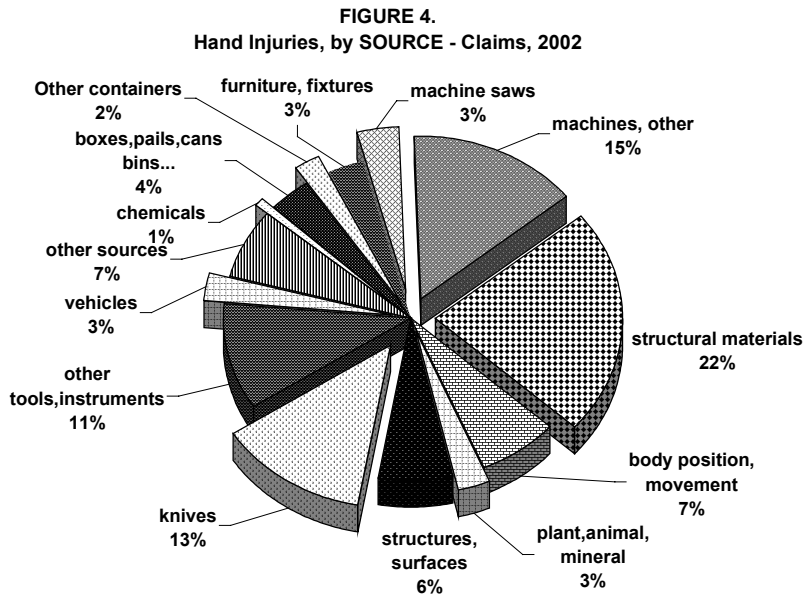
2. WHAT kinds of injuries happen while using your hands?

Although the most common timeloss injury is a cut (Figure 1), amputations, crush injury and fractures resulted in over 40% of the days lost from work due to hand injury in 2002 (Figure 2). Of these 600 serious injuries, over half of them were due to hands being caught in moving machinery and parts.



3. WHEN is the risk of hand injury increased?

Figure 3 shows that 84% of the timeloss hand injuries occur when the hand is either "struck by an object" (39%), "struck against an object" (21%), or "caught or compressed in, under or between rolling, sliding, moving parts" (24%). The single largest injury event category is being "struck by a slipping handheld object."



4. WHY are hands being injured?

Machines account for about 10% of the timeloss hand injuries. Within the machine group, 19% are due to stationary saws, the most frequent one being the table saw (53 cases in 2002). The remaining 90% of hand injuries occur when we work with objects that we may perceive to be of low risk for injury. Figure 4 presents a summary of the sources of hand injuries.

5. WHERE are the hand injuries occurring?

W.C.B. has grouped similar industries into more than 200 rate groupings for the purpose of assessing insurance premiums. Even though hand injuries occur across all

industries, Figure 5 presents a listing of only 9 of these sub-groups. These 9 industry groups account for just over 1/2 (52%) of the workforce covered by W.C.B. and they reported approximately 2/3 of all Manitoba injury claims in 2000. Although their hazards and injury experience are different, collectively, these groups had almost 3/4 of the hand injury claims in 2000. The right hand column in Figure 5 reads, "...In the restaurant sector, 47.2% of their claims are for hand injuries."

FIGURE 5.
Hand Injuries, by INDUSTRY SECTORS – Claims, 2000

| | % of WCB Covered Workers | % of Total Claims | % of Hand Injury Claims | Hand Injury Proportion |
|------------------------------|--------------------------|-------------------|-------------------------|------------------------|
| Restaurants | 6.1 | 6.0 | 13.0 | 47.2 |
| Mfg. Doors, Windows | 0.5 | 3.0 | 7.0 | 45.2 |
| Supermarkets, Grocery | 8.3 | 1.0 | 3.0 | 44.2 |
| Mfg. Furniture | 1.7 | 8.0 | 13.0 | 33.5 |
| Meat Packing | 0.8 | 5.0 | 7.0 | 28.1 |
| Mfg. Vehicles | 1.0 | 8.0 | 3.0 | 16.2 |
| Mining | 1.0 | 3.0 | 3.0 | 16.2 |
| Health Care | 12.6 | 15.0 | 10.0 | 13.5 |
| Self-Insured eg. City, Prov. | 15.1 | 16.0 | 10.0 | 13.3 |

What other factors are associated with these injuries?

All types of tools and equipment in daily use can be dangerous when used improperly. Several factors contribute to an increased risk of injury in these situations. They include a worker's inexperience, inadequate training, distractions during a task, inadequate lighting, not *having* or not *using* the correct tool for the job, rushing, horseplay, no lock out/tag out systems, and even left handed workers operating right handed tools or equipment. Other factors at the work site include poor identification and awareness of hazards, inadequate use of guards, and lack of safe operating procedures.

How can you protect your hands from injury?

There are many types of control measures available, depending on the task or hazard. When operating equipment, your hands should always be a safe distance away from the moving part to avoid unintended contact with these parts. An example is operating a radial arm saw – keeping your hands at a minimum 6" distance on either side of the blade would be considered a safe zone. If a safe work zone cannot be achieved, implement engineered control measures, such as light sensor guards, actuators, hold down or clamping mechanisms, physical guards, blocking, or push sticks to ensure safe work operations.

Personal Protective Equipment (PPE) for the hands come in many forms, each designated for specific hazards. Sometimes barrier type creams are used as a hand protection. Often gloves are used and are usually made from leather, cotton, rubber, synthetic rubbers and other man made materials, or combinations of these materials. When selecting hand PPE, remember to **carefully match the protection to the hazard and the task**. If in doubt about the selection for hand PPE, consult your safety supplier, material safety data sheets (MSDS), or your local Workplace Safety and Health Office. *It is NOT recommended to wear gloves if your hands are near moving equipment.*

If gloves are a requirement for your job function you should follow these steps:

- (a) Choose a material and style of glove that is best suited to the hazard and job.
- (b) Follow the manufacturer's instructions carefully.
- (c) Inspect and test gloves for defects before using them.
- (d) Ensure your gloves fit properly.
- (e) When working with chemicals, review the (MSDS) material safety data sheet. Remember to wash the gloves **before** taking them off.