PREVENTING COLD-RELATED INJURIES DURING THE WINTER By Dr. John A. Papa, DC, FCCPOR(C)

Physical activity during the winter season can place unique demands on the body that can predispose you to injury. The good news is there are strategies that can be employed to help prevent cold-related injuries.

Below are some of the common injuries that can occur during the winter season:

- Soft tissue injuries including sprains, strains, and contusions. Cold weather decreases the elasticity of soft tissues making them more prone to injury during activity. Ligaments and muscles in the back, upper and lower extremities are commonly injured. Falls in slippery conditions can also contribute to injury.
- Exposure injuries include frostbite and hypothermia and occur when individuals do not wear attire that is appropriate for the weather conditions and physical activity performed.



- Blisters can form due to the friction of wet gloves and/or wet socks with poorly fitting footwear.
- **Sun-related injuries** can also occur in the winter months and cause *sunburn* and *snow* blindness.
- **Technical injuries** can happen when physical activities are performed with: inadequate technique/training; unsuitable equipment; and/or poor preparation/planning.

Below are some of the strategies that can be used to prevent cold-related injuries:

- Warm up and prepare your body for physical activity by stimulating the joints and muscles, and increasing blood circulation. Also consider exercise training to help prepare you for winter activity.
- Dress for the elements by wearing insulated lightweight clothing with multiple layers. This will allow you to add or subtract layers as needed. Attire that is waterproof can help keep you dry and reduce the risk of heat loss. Insulated gloves, footwear, and headgear can also help keep you warm. Shoes and boots with solid treads and soles can help minimize the risk of awkward twisting, slips and falls.



- Protect yourself from the sun by applying sunscreen regularly. Your eyes should also be protected with UV blocking sunglasses.
- Use safe snow shoveling techniques. Get professional training and advice while learning
 the skills of a particular activity such as skiing or snowboarding to help minimize the chance
 of injury.

- Equipment considerations may include using an ergonomic snow shovel, having sporting equipment properly fitted for your body type, or wearing a helmet during activities.
- Preparation is critical. For example, be aware of changes in weather forecasts that can influence safety. Intermittent thaws and subsequent freezing can give way to ice build-up under foot increasing the risk of back twisting, slips and falls. Coarse sand or ice salt can help give your walkways and driveways more traction. Planning for physical activity is also important. For instance, adequate nutrition and hydration before, during, and after activity can optimize energy levels and improve



and after activity can optimize energy levels and improve overall physical functioning. This will help reduce fatigue and chance of injury.

Recognizing some of the common injuries that occur during the winter months and knowing which precautions to take can ensure that you enjoy physical activities safely in cold weather. For additional information on health and wellness, visit www.nhwc.ca.

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