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# Safe Cycling isn't Just for Kids

ycling is popular with Canadians of all ages. About 80 per cent of Canadian children 12 and under ride bikes. In addition, many adults ride bicycles to keep fit, for recreation and for transportation.

Overall, bicycling is a safe and enjoyable activity for riders of all ages who respect the rules of the road and keep a safety conscious attitude.

Bicycle crashes have gone down in line with the general drop in traffic fatalities. Statistically, a cyclist is safer than a motor vehicle driver or passenger — plus cycling offers positive health benefits.

## **Risk and the Adult Rider**

In 1997, there were 70 bicycle fatalities, which is 2.2 per cent of all vehicle fatalities. Of these, just over half were over 20 years of age. In 1984, almost twice as many cyclists were killed but the breakdown was quite different. Most victims were *under* 20 years old.\*

The lower rate of deaths and injuries for child cyclists is good news. Community bike safety programs and helmet use deserve much credit for this improvement.

Why has the proportion of adult casualties gone up? Demographics are likely a factor; the under-20 age group is now a smaller part of the population than it was 15 or 20 years

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ago. Nonetheless, adult cyclists cannot be complacent about safety. There is certainly room for improvement.

Head injuries, a factor in about 80 per cent of cyclist fatalities, can be largely prevented by wearing a helmet. Children must wear a helmet by law in most provinces. Adults, on the other hand, are given the choice whether or not to protect their head.

Would fewer adults be killed in bike crashes if more wore a helmet? The Canada Safety Council believes the answer is yes. Comparative eye injury rates for child and adult hockey players (see page 6) show the value of protective equipment. Helmets are designed to reduce the risk of permanent injury or death in the event of a fall or crash.

About 90 per cent of cycling fatalities are caused by cyclists being struck by motor vehicles. Children usually ride within their own



community. Adult cyclists are more likely to ride in heavy traffic or lessthan-ideal weather conditions. For instance, individuals who cycle to work or tour long distances increase their exposure to the hazards of traffic. Intersections can be particularly challenging.

Common sense dictates reducing your exposure to these hazards as much as possible. Often an alternate route can help you avoid heavy traffic. Traveling on a back road or bicycle trail might be less direct, but you will likely find it safer and more enjoyable. If weather creates difficult conditions, delay your outing or take alternate transportation.

### **Use Road Smarts**

A bicycle is classified as a vehicle which belongs on the road. Cyclists have the same rights and responsibilities as drivers of motor vehicles. You must obey the same rules of the road when riding your bike as you do when driving your car.

Traffic laws help road users predict each other's actions. Cyclists, like motorists, must ride on the right side of the road, be sober, stop for stop signs and red lights, signal turns, and yield to traffic that has the rightof-way.

Continued on page 4...

# **NHL Injuries Raise Concerns**

This has been a sobering winter for hockey fans:

January 29—A puck flies into the throat of Montreal Canadiens forward Trent McLeary, leaving his life in the balance. McLeary did not have neck protection.

*February 21*—When Marty McSorley clubs him in the head from behind, Donald Brashear's helmet comes loose. His head bounces off the ice several times, causing a concussion.

*March 11*—Toronto Maple Leaf Bryan Berard may lose sight in his right eye after being struck with a stick, likely ending his promising hockey career. Berard was not wearing a visor.

The Canada Safety Council has longstanding concerns about the NHL's intransigence when it comes to protective equipment. See page 6 for comment.

# PRESIDENT'S PERSPECTIVE

A CTV investigative report on W-5 in January found that ionization alarms did not immediately detect deadly smouldering fires.

In the minds of the public, this report challenged the fact that smoke alarms save lives. In 1974 Canada's annual fire fatality rate was 4.1 per 100,000 population. Now it's about 1.3, or about 400 fatalities a year, 80 per cent of which are in home fires. Smoke alarms are a major factor in this drop. During the mid 1970s and early 1980s, smoke alarms were promoted, then mandated in jurisdictions across Canada.

An independent report was commissioned by Health Canada's Product Safety Branch. That report concluded that the smoke alarms which W-5 found to be defective were in fact safe and reliable in all types of fire.

The problem is that few consumers are aware of the fact that not all smoke alarms are the same. Different types of smoke alarms detect specific types of fires.

A flaming fire burns combustibles quickly, spreads rapidly and generates a lot of heat but only a little smoke. Cooking fat or grease, flammable liquids, newspapers, paint, cleaning solutions all burn quickly and create more flames than smoke. The common *ionization* alarms studied in the CTV report typically respond first to fast flaming fires. They are best suited for rooms which contain highly combustible materials.

A smouldering fire produces a lot of smoke but little heat. It may smoulder for hours before bursting into flame. Large pieces of furniture, such as sofas, chairs, mattresses and counter tops, burn slowly and create more smoke than flames. *Photoelectric* type smoke alarms typically respond first to slow smouldering fires and are less prone to nuisance alarms near the kitchen area. These models are best suited for living rooms, bedrooms and near kitchens. Smoking is often a factor in smouldering fires, so if there is a smoker in the house we strongly recommend installing a photoelectric alarm in those areas.

For maximum protection, install at least one ionization and one photoelectric type smoke alarm (or a combination alarm) on each level of your home. When you buy a smoke alarm, make sure it bears the ULC label, which assures the product meets Canadian standards.

Smoke alarms work, and they work well. When they don't, it's because of product obsolescence (alarms wear out after 10 years), battery failure (batteries must be replaced every six months) or battery removal.

me Shevin

An Elmer the Safety Elephant pamphlet Are you sure your smoke alarm works? is sponsored by Liberty Mutual. That pamphlet describes the difference between ionization and photo-electric type alarms.

# SAFETY CANADA

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#### Youth, continued from page 3.

Risk-taking is usually part of a lifestyle for youths who intentionally take chances behind the wheel. These youths may be overtired from lack of sleep, engage in other problem behaviors (e.g. use of alcohol and other drugs, delinquency), or seek thrills through speeding, tailgating and other risky driving behaviors.

Overall, young drivers tend to have more crashes due to a combination of lifestyle choices and inexperience.

#### We're Not There Yet!

Over the past decades, the crash record of young drivers has improved dramatically. This is the result of many countermeasures and programs, and follows a general declining trend. In 1998, for the first time on record, the number of road fatalities in Canada dropped below 3,000.

The causes of road crashes involving young people are manifold. Strategic application of proven measures is needed.

Graduated licensing systems have helped reduce crashes involving young drivers. These systems limit exposure to high risk driving situations, such as night driving, highspeed roadways, and the mix of alcohol and driving. They let young drivers gain experience in optimum conditions. Since 1994, six provinces have enacted graduated licensing systems, two more have provisional or probationary licence systems, and others are considering their use.

Other components of an effective strategy include: education (both driver training and alcohol/drug education); parent-based and peerbased programs; and encouraging mass media and advertisers not to promote risk-taking behavior.

The possibility of a teen being involved in a collision is still too high. The progress must continue. @

For details on the report "Youth and Road Crashes" contact TIRF: telephone (613) 238-5235; fax (613) 238-5292; e-mail tirf@trafficinjuryresearch.com.

#### Canada Safety Council

# Intersection

# **Youth and Road Crashes**

The past three decades have seen a tremendous drop in the number of young people killed and injured in collisions. Nonetheless, road crashes are still the leading cause of death among teens aged 15 to 19.

One of every eight traffic casualties in Canada is a teen. This rate exceeds other age groups by a wide margin. Experts attribute it to a combination of inexperience, immaturity and alcohol.

In November, 1999, the Traffic Injury Research Foundation (TIRF) published a report on the dimensions of the problem and possible solutions.

#### **Impressive Progress**

The statistics tell a positive story. From 1980 to 1997, the number of 15-to-19-year-olds killed in road crashes dropped by 61 per cent, from 1,038 to 404. The number injured went down by 47 per cent, from 54,000 to 28,780. Adjusted for population, the fatality rate declined by 55 per cent, and the injury rate by 38 per cent.

Alcohol-related deaths among teens have also dropped. For example, in 1980, nearly 70 per cent of teen drivers killed in road crashes had been drinking. By 1997, that figure had dropped to about 40 per cent.

### **Common Factors**

The decline in road fatalities, injuries and alcohol involvement seems to have stalled in the 1990s. The TIRF report identifies several key characteristics:

- Young drivers are most likely to be killed or injured during the summer months (June, July and August).
- A disproportionate number of the deaths and serious injuries occur on the weekend 22 per cent of fatalities happen on a Saturday.
- About half of the deaths and 64 per cent of the injuries occur at night. Given that teens drive less at night, these figures show how risky night driving is for young drivers.
- Single-vehicle crashes account for slightly more than half of the fatalities and serious injuries. Young drinking drivers are more likely to be involved in a single-vehicle crash.
- While young drivers are the least likely of any age group to drink and drive, the ones who do are at very high risk. Of teenage drivers who were killed, 40 per cent had been drinking, and 3/4 of these had alcohol levels above 80 mg%.

## Why Young Drivers Have More Crashes

Young drivers have difficulty in braking, steering and adjusting vehicle speed — and integrating these skills effectively. These skills develop with experience. So does the ability to recognize what constitutes a hazard, and to detect and respond to hazards quickly. In addition, young drivers have difficulty judging personal risk and making appropriate decisions in a critical situation that may have unknown consequences.

*To page 2...* 

## Kwiz Korner

# Safety at railway crossings — do you make the grade?

1. A freight train with 50 cars is travelling 50 km/h. What distance does it require to stop?

a. 300 m b. 1 km c. 1.6 km d. 2.4 km

- 2. A passenger train with eight cars is travelling 130 km/h. What distance does it require to stop?
  a. 300 m b. 1 km c. 1.6 km d. 2.4 km
- You are driving across train tracks. The lights start flashing and the gates are coming down. You should:
   a. keep going. b. abandon car. c. stop. d. back up.
- 4. It's okay for you to cross as soon as the last car of the train has cleared the crossing.

a. True b. False

5. A train whistle sounding two long, one short, and one long blast means:

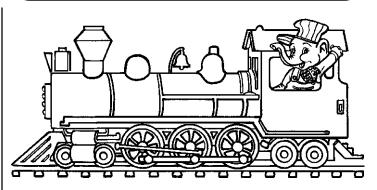
a. all clear, proceed.
b. the engineer is saying hello to a passing train.
c. stop — a train is approaching the crossing.
d. the train is about to stop.

- 6. A train should be expected on any track at any time.a. True b. False
- 7. Most highway/rail crossing collisions involve drivers living how far from the crossing?

a. within 10 km c. 40 to 100 km d. over 100 km

- 8. It is usually safe to drive around gates. a. True b. False
- 9. If you stall on the tracks when a train is approaching, get away from your car immediately.a. True b. False
- 10. The most common contributing factor in vehicletrain crashes is:
  - a. the inability of the train to stop.
  - b. weather conditions.
  - c. intoxication.
  - d. driver error.

Answers on page 4.



Tracks are for Trains: new Elmer the Safety Elephant activity book

3

#### Bike Safety for Adults, from page 1.

In addition, bicycle-related laws cover specific safety issues. Bicycles, as one of the smallest vehicles on the road, must be seen and heard. Since bikes are quiet vehicles, you must be equipped with a working bell or horn to announce your approach.

Reflective tape, reflectors and a front light make you more visible to other

road users. Consider these laws as a minimum. Whether required by law or not, for

# Be visible and predictable.

example, you should always wear a helmet and observe other common sense precautions.

Always ride defensively, anticipating the actions of other road users to avoid a collision and staying alert for all hazards. A car door could open at any time. A pedestrian or animal could dart onto the road without warning. Debris, grates or holes in the road could make you veer or crash. Wet or cold weather can make riding treacherous. If you must ride in those conditions, be aware of the challenges and handle your bike accordingly.

Whether it's daylight, dawn, dusk or dark, make yourself easy to see. One of the reasons motorists often give for hitting cyclists is that



Elmer the Safety Elephant now has a new Bicycle Safety Fun Book for children eight and under, sponsored by Liberty Mutual. they did not notice them. A cyclist may be hard to spot from far away when a vehicle is traveling relatively fast. When the sun is very low, cyclists and motorists can be momentarily blinded by the glare.

Bright clothing catches people's attention in the daytime — the brighter the better. If you must ride at night, go beyond the required reflectors and front light. Wear clothing made with retro-reflective material, or retro-reflective tape on your clothing, to ensure you can be seen.

Protect your head by wearing a CSA-approved bicycle helmet; other types of sport helmets won't do, as they are designed for different types of impact. The helmet should fit snugly, level and square on the forehead with the front covering the forehead. If it has been in a collision, it has done its job. Replace it.

#### Is Your Bike Safe?

First, your bicycle must fit you correctly. If it's too big or too small, you won't be able to control it adequately. You should be able to straddle it comfortably with both feet on the ground.

Next, keep it well maintained. Check it regularly to be sure it is safe to ride.

- Are the brakes adjusted properly, with brake pads and cables in good condition?
- Is the chain clean and oiled? (On ten-speeds, a chain that sags means the rear derailleur needs repair.)
- Do all the gears work well?
- Are all bolts tight?
- Are the wheels centred and secure?
- Are the tires in good condition with the right amount of air pressure?
- Do you have an emergency tool kit? Be prepared in case a tire goes flat or a screw comes loose.
- If anything is broken, fix it.

The Canada Safety Council wishes Canadians a safe and enjoyable biking season! @

\* Of the 70 bicycle fatalities in 1997, there were 36 age 20 and over, 34 under 20. In 1984, there were 138 fatalities: 88 under 20, and 50 age 20 and over.

### Kwiz Korner: Answers

- **1.c.** Freight cars are very heavy, so they cannot stop on a dime! Travelling at 50 km/h, a freight train with 50 cars would proceed for about 1,600 m (1.6 km) before coming to a stop. At 80 km/h it takes this train over 2,400 m (2.4 km) and two minutes to come to a complete stop.
- **2.c.** A car travelling at 90 km/h takes about 80 m to stop. A passenger train of eight cars is 60 times heavier. Going 40 km/h faster it requires a much longer distance of 1.6 km.
- **3.a.** Keep going if you are already driving across the tracks when the lights start flashing. It will only take you a couple of seconds to continue, and the warning devices are activated several seconds before a train reaches the crossing.
- **4. b.** False. You could drive right into the path of a fast-moving train on another track, or slam into its side. Only move once you're sure there is no other train, and never move until the lights stop flashing.
- **5. c.** Stop. As a train approaches a crossing, federal regulations require that the engineer sound the train's whistle. This signal of four blasts usually is started about 400 m before the locomotive enters the crossing. When you hear it, be prepared to stop.
- **6. a.** True. Even if you regularly go across a certain crossing, don't assume the trains will always follow the expected schedule.
- **7. b.** Most collisions at crossings involve drivers living within 40 km. Familiarity tends to make drivers complacent, which can lead to a lack of due caution.
- **8. b.** False. It is very dangerous not to mention illegal to disregard crossing gates.
- **9. a.** True. Act fast! Get out of your car and off the tracks without a second's delay. Run in the direction of the train so you won't get hit by flying debris from the crash.
- **10. d.** Drivers who do not exercise due caution at crossings are the leading cause of highway/rail crossing collisions. These drivers ignore warning signals and take dangerous risks when they approach a crossing.

# Public Platform

# **Safety in the Great Outdoors**

he wilderness attracts hikers, campers, backpackers, climbers, canoeists, ATV users, bikers, hunters and others who seek adventure or want to enjoy nature at its purest. However, a sudden storm, a fall or a spur-ofthe-moment trip into unfamiliar territory can quickly turn into a crisis.

### **Expect the Unexpected**

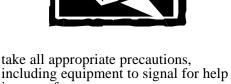
Planning ahead and being prepared for emergencies can protect you when the unpredictable happens. Before you set out, try to imagine what conditions you might face. How would you survive if something goes wrong? Even on a short trip, you might need to spend the night — and the weather could deteriorate. How would you get help if you have an accident or get lost?

Whenever you go hiking, take along a large plastic garbage bag, a whistle and a flashlight. The whistle will enable you to let others know your location. If it's cold, rainy or windy, you can put the bag over you, making holes for your nose and eyes; it will help preserve your body temperature.

Before you leave, find out about the area you're going to explore. Bring a good map, and check the weather forecast. Tell others your intended route and timetable. Never travel alone, and always stay with your group. You may need to bring water, especially if the weather is hot.

Early detection can mean the difference between a safe trip and a life threatening situation. The Canada Safety Council recommends that anyone venturing into the wilderness should bring along visual and audible distress signals in the event they become lost or need help. If you like to venture into the wilderness, whether on foot, by water or on a vehicle such as an ATV, invest in a wilderness survival kit. They come in different levels, with components suitable for the day hiker up to the veteran adventurer.

These are minimum measures. There are many suggested equipment checklists, but no single list covers every circumstance. The Canada Safety Council advises wilderness adventurers to use common sense and



including equipment to signal for help in case of an emergency.

## Make Yourself Easy to Find

As soon as you realize you are lost or need help, STOP. It's very hard to find a moving target, so if you stay in one spot you will be easier to find. In case of a serious injury, build a shelter and wait for rescuers. Don't try to transport the casualty, risking exhaustion or further injury.

The moment you stop, take out your whistle and blow it. A whistle carries farther than the human voice and does not blend in with the sounds of a remote wilderness environment.

If you are stranded because of a broken-down vehicle, such as an ATV or aircraft, consider staying where you are. Large objects are normally easier to spot than a lone hiker, and rescuers will be searching for the downed vehicle, assuming your have notified others of your route and estimated arrival time.

If you need to signal, moving to higher ground is recommended.

Search and Rescue experts stress that effective signaling can make the difference between a successful search and rescue and a life-threatening situation. Aerial flares and signal mirrors can attract attention. Once help is on the way, smoke flares, whistles and distress flags can help

# **Multipurpose** Lighters

Inder the Hazardous Products (Lighters) Regulations, cigarette lighters must comply with labeling, performance and child-resistancy requirements. However, these regulations do not apply to multipurpose lighters (known as barbeque, utility or grill lighters) because they are not for use on tobacco products, even though essential elements of their design, construction and foreseeable use are similar to those for cigarette lighters.

The Product Safety Bureau of Health Canada would like to amend the existing regulations to include mutipurpose lighters.

Health Canada is aware of 15 incidents concerning multipurpose lighters within a recent 24 month period. Most involved performance related safety concerns, but five (33 per cent) were child-play fires. The Bureau is not aware of any deaths related to these incidents, but in the U.S. there have been 65 deaths in the 340 fires started by children.

During the summer of 1999, the Product Safety Bureau conducted a national survey and tested multipurpose lighters. Of the 23 brands tested, 17 (74 per cent) failed to meet performance safety criteria similar to those required for cigarette lighters. Health Canada issued a Public Warning on July 15, 1999.

rescuers identify your exact position and keep them on course.

Conserve your signals until you are reasonably sure of being detected. Wait until you see or hear a potential rescuer. Aerial flares, camp fires, ground flares, flashlights and whistles are good ways to attract attention at night or dusk. In the daylight, it is harder to create a spectacular distress signal but additional options are available to you, including dye markers, signal mirrors and distress flags. @

## Safety in Soccer

Canada's soccer team surprised the 2000 Gold Cup. Soccer is the world's most popular sport, with over 120 million players worldwide. The victory may raise the profile of the sport even higher in this country.

Last year, the team physician for McGill University's football and soccer teams realized he was seeing more head injuries in soccer players than in football players. Dr. Scott Delaney noticed that some soccer players were lost for the entire season. Many missed weeks of school, unable to keep up with their studies in more advanced fields.

Heading the ball is intrinsic to the game. The player's head is repeatedly struck not only by the ball but also collisions with other players. Studies show that a startling percentage of soccer players, as high as 81 per cent of those tested, have neuropsychological deficiencies of attention, concentration, memory and judgement. As many as one-third of players studied had atrophy and abnormalities of the brain, a frightening statistic.



identifies three high risk groups: those who have previously suffered a concussion, goalkeepers and children. The youngest group, eager but largely unskilled, is of particular concern.

Dr. Delaney

Children don't know how to head the ball safely (just above the hairline, not on the forehead or the top of the head). They have thinner skulls to protect the brain than adults, and thinner necks that don't absorb or dissipate forces applied to the head.

He recommends head protection for these players, not hard-shell protection like a bicycle helmet, but something modeled loosely on the old-style leather football helmet. No such protection is currently available on the market. The Canada Safety Council shares with Dr. Delaney the hope that a manufacturer will take up this challenge. @

Source: The Gazette, November 24, 1999

# Will they ever learn?

Players at all levels of hockey should be required to wear protective equipment, writes Canada Safety Council president and NHL dad Emile Therien. The following article appeared in The Globe and Mail on February 1.

It all happened in a split second. On Saturday, January 29, a puck flew into the throat of Montreal Canadiens forward Trent McLeary, leaving his life in the balance. He is now out of danger, but with a fractured larynx and collapsed lung, Trent faces the prospect of a long and painful recovery.

My own family spent a tortuous night and early morning awaiting news of Trent's condition as it was my son Chris who delivered the slap shot that resulted in the nearly tragic incident. Chris, a Philadelphia Flyers defenceman, was overcome with remorse and feared the worst.

Could this injury have been prevented? Minor hockey league players under the jurisdiction of the Canadian Hockey Association wear a protective throat pad. The NHL has no such requirement. Indeed, the NHL doesn't even require its players to wear facial protection, despite the fact that



professional players not wearing a face shield account for 95 per cent of all eye and face injuries requiring treatment. McLeary, who had suffered a previous eye injury, was wearing a visor.

Over four million Canadians play hockey. Men and women of all ages use rented ice surfaces, non-regulated community rinks, ponds, even roads. Adult amateurs comprise 85 per cent of non-competitive, recreational hockey players.

In the late 1970s the Canadian Hockey Association (CHA) ruled that all minor league players must wear helmets and face masks certified by the Canadian Standards Association (CSA). In 1981, the Canadian Hockey League (CHL) made the same rule for its junior hockey players. But only half of the hockey players in Canada fall under CHA or CHL jurisdiction. All other players are exempt from regulations requiring personal protection.

Helmets and face protectors are not mandatory for most adult recreational players. However, that doesn't mean these players are immune to injury. Most injuries are entirely preventable by wearing protective equipment, without compromising the appeal and fun of the game.

Statistics clearly show that wearing protection prevents eye injuries. In the 1974-75 hockey season, before minor hockey players were required to wear face masks, there were 258 eye injuries including 43 blinded eyes; the average age of a player suffering an eye injury was 14. In the 1992-93 season only 31 players reported eye injuries, including four blinded eyes; the average age had risen to 33. In the 1996-97 season, only 12 eye injuries were reported, including three blinded eyes.

If minor league players were suffering the same number of serious eye injuries today as they were in the early 1970s, there would be a hue and cry from the public. Liability and insurance issues aside, I doubt parents would want to expose their children to the perils of hockey. This would seriously reduce the pool of talent available to the professional leagues.

In spite of the risk, some professional hockey players won't wear proper protective facial gear. Their excuse? Face protection is restrictive and could interfere with their performance. (Forget that losing an eye is a life-long disability!)

The fact the big leagues have not made such equipment mandatory flies in the face of common sense and sets a terrible example for the public. Not only should the NHL take action on facial protection, it should also look seriously at throat protection. Goalies today wear throat protection. This should serve as an example for all other players.

# On the Job

# **Safe Sitting**

o your muscles occasionally feel stiff and sore even though all you've done throughout the day is work at a desk? The reason could be that you've been sitting in the wrong position, perhaps at a computer.

Muscular discomfort and injury are common complaints for office workers. Fortunately, you can prevent or minimize these problems simply by moving around, adjusting your work environment or changing your work habits.

### **Check Your Body Position**

Prolonged work in the same position, especially an unnatural position, can cause discomfort or persistent pain in muscles, tendons and other soft tissues.

Keep your body in a relaxed, natural position. Ideally, your arms should hang relaxed from your shoulders. When you use a keyboard, your arms should be bent at right angles at the elbow. Your hands should be in a straight line with the forearm and your elbows close to the body. Your head should be in line with your body and slightly forward. To achieve the right body position you may have to adjust the height of your chair or work station.

If you use a visual display, the top of the screen should be at, or just slightly below, eye level. This allows your eyes to see the screen at a comfortable angle, without having to tilt your head or move your back muscles.

Your chair should provide good support for your back and the seat is at a height that allows your thighs to be horizontal and your feet flat on the floor. Keep work materials within easy reach. If your job requires extensive telephone use, using a headset can help prevent neck problems.

Give your body some relief from sitting by standing up, stretching or shifting position on your chair throughout the day. Some simple stretching exercises can be done while sitting. When possible, take a break to prevent discomfort and fatigue.

## **Use the Proper Chair**

A well-designed, adjustable chair can favorably affect posture, circulation, the amount of effort required to maintain a position, and the amount of pressure on the spine. Chairs designed for the ergonomic needs of today's offices are readily available on the market. If you're looking for a new chair, keep in mind the following:

- The seat should adapt to the user, not vice versa.
- The chair should be stable and fully and easily adjustable from the seated position.
- The seat pan and backrest should be upholstered in a fabric that absorbs perspiration.
- The seat pan height should be adjustable and should transfer your weight through the buttocks, not the thighs.
- The backrest should adjust up/ down and backward/forward or flex with body movement for good lumbar support. A forward tilt of the seat pan may relieve body stress by allowing the backrest to follow you.
- Most office work requires some mobility, so the chair should have wheels or casters (hard casters for soft floors and soft casters for hard floors), with five legs for stability.
- The front of the seat should be of a "waterfall" design to provide clearance for the flesh of the thigh and prevent reduction of blood circulation.
- For tasks requiring frequent lateral movements, the seat should swivel.

Use a footrest if you can't adjust the height of your chair or work station enough to relieve pressure under the thigh from the seat. The footrest should be angled and covered with a non-slip surface to provide comfortable support for the feet.

Keep your body in a relaxed, natural position.

## **Avoid Repetitive Strain Injury**

Repetitive strain injury (RSI) can be any injury associated with repetitive action. Initially, you might not notice soreness when you're actually doing the work, but you may feel pain in the evening. Early symptoms of RSI are muscle and joint aches and pains, and stiffness in the fingers, hands and neck. If you have these symptoms, don't dismiss them. These injuries are most easily treated in their initial stages.

Keyboards have been blamed for the vast majority of computer-related injuries. Sore wrists are the most common of all repetitive motion injuries attributed to computer use. To prevent muscle strain, arms should hang straight down from the shoulders and then bend into right angles at the elbows.

Don't force your arms and wrists into uncomfortable and unnatural positions. That could cause inflammation of delicate muscles and consequent pressure against the median nerve, which passes through the carpal tunnel (a narrow passage between the forearm and hand).

WRONG!



When using a keyboard, keep your forearm, wrist and hand in a straight line. The top of the screen should be at, or just slightly below, eye level.

Symptoms of carpal tunnel syndrome include: a tingling or numb feeling in the hand and/or fingers; shooting pains in the wrist or forearm; and difficulty clenching the fist or grasping small objects. It's important to recognize these symptoms at an early stage. If left untreated, carpal tunnel syndrome causes severe discomfort, intense, prolonged pain, and even loss of hand function, often requiring surgery.

Anyone in a job that involves sitting for most of the day should be aware of these types of injuries and take precautions to avoid them. @

# **Mark of Approval**

The Canada Safety Council Mark of Approval identifies products which can enhance safety, in order to encourage the use of such products. Strictly limited to the capability of the product of enhance safety, it does not duplicate services provided by CSA International and other certification bodies.

The Mark of Approval signifies that if the product is properly maintained and used according to the manufacturer's instructions it will enhance or contribute to a person's safety.

### **C-I-L/Orion Wilderness Kits**

The C-I-L/Orion Wilderness Signal and Survival Kits have received the Mark of Approval. These kits provide effective, easy-to-use signals and basic survival tools:

Basic Signal Kit: For daytrippers who take short (three to five hour) excursions.

**Complete Signal & Survival Kit:** For serious outdoor enthusiasts who travel to remote or semi-remote locations and do not establish a base camp.

**Ultimate Signal & Survival Kit:** For serious outdoor enthusiasts. Store at base camp, cabin, RV or home.

Inquire at your local sports or camping store, or contact C-I-L/Orion, 533 Argenteuil, Lachute, Quebec J8H 3Y2; telephone (450) 566-0566; fax (450) 566-0677. @

# Council News

**Child Seat Clinics Go National** Building on the success of the 1999 pilot project, the Canada Safety Council, The Co-operators, and the Infant and Toddler Safety Association have announced the national roll-out of Buckle Up Bears child seat clinics. The 1999 pilot saw 426 seats inspected at 15 clinics with a pass rate of only 12 per cent. The 2000 roll-out is expected to include a minimum of 10 districts, 40 clinics and 200 new trained inspectors. An attractive *Buckle Up Bears* growth chart offers practical information on proper use of child restraints. Quantities can be obtained from the Canada Safety Council or offices of The Co-operators. Local groups who want to get involved should contact their local Co-operators office.

#### **CSC Site Wins Award**

The Canada Safety Council Web site has been accepted for inclusion in the Quality Search Engine (www.w3qse.com), the Internet's most exclusive indexing resource. It has also been recognized as the best of the best on the Internet and has received the A#1 Quality Award for Excellence.

#### **Graduated Licensing in Manitoba**

In the early 1990s the Canada Safety Council held a symposium on Youthful Drivers. One of the outcomes of this meeting was a recommendation that there be continued investigation into the then newly recognized graduated licencing systems. Since that time, seven provinces have instituted graduated or probationary licensing. On February 29, former CSC Chair Derek Smith made a presentation on behalf of the Canada Safety Council to Manitoba's public consultation on graduated licensing.

#### **Ontario Safe Driving Initiative**

The Canada Safety Council is represented on Ontario's new Advisory Group of Safe Driving, which is part of the Action Plan for Safer Roads announced by Minister of Transportation David Turnbull last September. The group will advise the ministry on ways to combat aggressive driving and promote safe driving practices.

### **Elmer the Safety Elephant**

Elmer will attend many community events this year. To invite him to yours, contact your local Liberty Mutual office. He'll have a new bicycle safety booklet and new-look school bus safety booklet this spring. Quantities can be requested free of charge from the Canada Safety Council or local Liberty Mutual offices. A new Elmer railway safety booklet has also been produced in collaboration with Operation Lifesaver, with contributions from Liberty Mutual, Dow Chemical and the Imperial Oil Charitable Foundation.

#### Hockey, from page 6.

The use of CSA-certified protective equipment is of concern to injury prevention practitioners, the medical profession, safety organizations and others. Owners and players must get together to address this major public safety issue.

The probability of an incident like McLeary's happening again may be low. But with the present mentality, someday a team is going to lose a player. If the professional leagues don't want the best protection for their players, they have a big problem.

Source: Comment Section, The Globe and Mail, Tuesday, February 1, 2000

#### **Brashear's Helmet**

On February 21, Donald Brashear's helmet came loose when he was clubbed in the head from behind. He collapsed, and his head bounced off the ice several times, causing a concussion and other injuries. The media rightly focused on the gratuitous and uncalled-for violence of Marty McSorley's attack.

The Canada Safety Council suggested that the injuries suffered by Mr. Brashear raise other serious questions. Was his head properly protected? Was his helmet properly secured? Did it comply with safety requirements, or was it one of the fartoo-many unsafe helmets being worn by National Hockey League players?

## **Berard's Eye Injury**

There has never been an eye injury of any sort in a hockey player wearing a full visor, says the Toronto Maple Leafs' eye specialist. Dr. Rob Devenyi, who treated Bryan Berard after his eye was hit on March 11, believes every player should wear a full visor.

### **The Obvious Conclusion**

Wearing proper protective equipment does not seem to be a priority for some NHL players. In September 1994, the NHL ruled that all players must wear only CSA-approved equipment; uncertified equipment was not to be cleared for use by the League.

Wearing CSA-approved helmets and visors — and wearing them correctly — would reduce the number of serious head and eye injuries suffered by professional hockey players. @