LESSON PLAN #1

HELMET USE

OBJECTIVES:

By the end of the lesson, students will be able to:

- describe risks associated with cycling, in-line skating, scootering and skateboarding.
- describe the importance of protecting our brain and wearing a helmet.
- demonstrate how to properly fit a helmet.
- utilize problem solving and decision making skills as it relates to bike safety.

MATERIALS:

- Helmet

TIME REQUIRED:

- 40-60 minutes

LESSON OUTLINE:

Introduction:

- Bicycles, roller blades, scooters and skateboards are fun and popular outdoor activities.
- Brainstorm with students some of the risks associated with these activities. Highlight head injury as one associated risk.

Part One:

- Ask the students to identify why it is important to wear a helmet every time they ride.
- Ask students why they think some people do not wear a helmet.
  - Discussion of peer pressure, need to be cool, expense, comfort
- Review the law on helmet use (please see below).
- Ask students what can happen if the brain is damaged. Demonstrate the importance of wearing a helmet utilizing Activity #1 and the following background information.
Background Information:

- As of October 1995, all people under the age of 18 years must wear a helmet when biking (Young Cyclist Guide, Ministry of Transportation (Ontario)).

- The brain is a highly advanced organ in our body that allows us to see, think, hear, feel emotions, communicate and move our body.

- Our brain is covered by our skull which is a hard bone that varies in thickness from about 4-7 mm (Bicycle Helmet Safety Institute), approximately equivalent to the thickness of three pennies stacked up (Young Cyclist Guide, Ministry of Transportation (Ontario)).

- Our brain floats in a sac of fluid within our skull. When we hit our head, our brain “bumps” against the sides of our skull, like a boat crashing against a dock in storm. Like a blow to other parts of our body, swelling occurs and puts pressure on the brain causing a temporary malfunction and/or destruction of cells. If a blow to the head is severe enough, blood vessels in the brain will tear causing bleeding which also puts pressure against the brain squeezing out vital oxygen supply (Young Cyclist Guide, Ministry of Transportation (Ontario)).

- Once our brain is injured a bandage or cast cannot make it heal. It can take years for a brain to even partially heal and most of the time it never completely heals. People can even die from seriously injuring their brain.

- Wearing a helmet properly, can reduce how much force the skull must take during a crash and therefore reduce how much the brain crashes around inside the skull (Young Cyclist Guide, Ministry of Transportation (Ontario)).

- A helmet works by absorbing the force of the impact and spreading it out over the whole helmet therefore the impact on the head and brain is reduced.

- Wearing a properly fitted bike helmet can reduce your risk of serious head or brain injury by 88% (Safe Kids Canada Partner Guide, 2002).
Part Two:

- Discuss with students how to properly fit a helmet utilizing the following background information:

**Background Information:**

- Check that the helmet has no cracks or noticeable damage by twisting the helmet as you would an ice tray – this is referred to as the “ice tray” check.
- Replace the helmet if it has been in a crash.
- Check that the helmet has been approved by one of the following safety standards; CSA, SNELL, CPSC or ASTM.
- Use the foam fitting pads that come with the helmet to adjust the fit to your head.
- Place the helmet level on your head.
- The edge of the helmet should be two fingers above the eyebrows to protect the forehead.
- The side straps should lie flat and meet in a V-shape under each ear.
- The bottom strap should fit snug – allowing only one finger to fit between the chin and the chin strap.
- Replace your helmet if it is older than 5 years past the manufacturer date, or if you do not know the history of the helmet.

- Ask students what type of helmet they think they should wear when biking, rollerblading, skate boarding and scootering. Discuss what other protective gear should be worn when participating in these activities (See Safe Kids Canada flyer “Got Wheels, Get a Helmet”, 2002).

- Utilizing **Appendix # 1** review with students which helmet they should wear for which activity.
Part Three:

Small Group Problem Solving Scenarios:

- Utilizing Appendix #3 have students work in small groups to problem-solve the following scenarios.

1. You are about to go for a ride on your bike and you remember to wear your helmet. Name the steps to ensure that your helmet is on properly.

   **Answer:**
   - See background information in Part Two – how to properly fit a helmet.

2. You are about to go for a bike ride with your friends and you are the only wearing a helmet. Your friends begin to tease you for wearing one. What do you do?

   **Answer:**
   - Remain confident in your decision to wear a helmet.
   - Remind your friends that it is the law to wear a helmet.
   - Explain to your friends that wearing a helmet will protect your head.

3. You want to go rollerblading, which type of helmet should you use?

   **Answer:**
   - You can use a specially designed in-line skating helmet or bicycle helmet.

4. You want to go skateboarding, which type of helmet should you use?

   **Answer:**
   - You should use a multi-impact skateboarding helmet.

5. You are out for a ride and lose control of your bike and have a fall. You hit your head. Fortunately you were wearing your helmet. What should you do with the helmet?

   **Answer:**
   - The helmet should be thrown out and replaced – even if there is no noticeable damage.