

MIDDLE SCHOOL PROGRAM Outline Grades (6-8)

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Bicycle Safety Project Middle School Program

Outline

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Bicycle Safety Project Goal

To provide bicycle safety education, activities and equipment to youths aged 5-14 with the intended purpose of increasing bicycle safety knowledge and the use of safety equipment thus reducing related injuries.

Bicycle Safety Project Objectives

After individuals participate in the bicycle safety project they will be able to:

1. Understand that helmet law in Pennsylvania and what it states.
2. Express the importance of helmet usage and the necessity to wear it every time they ride.
3. Understand the simple functions of the brain.
4. Show how to properly wear and adjust a bicycle helmet.
5. Understand the role of bicycle safety equipment and the benefits of bicycle safety practices.
6. Recognize and repeat hand signals, road rules and street signs.
7. Understand the importance of being a good role model for younger children.

Education Session

• Introduction

Welcome to the Bicycle Safety Project.

*** Look for these boxes throughout the program outline. They contain helpful hints and to make your program run smoothly.**

1. **Introduce Yourself.**
2. **Introduce the Bicycle Safety Project and course content:**

"Today we will be talking about bicycle safety. I'm going to talk to you about the

importance of wearing a helmet, following the rules of the road, doing bicycle safety inspections, wearing safety equipment, being a good role-model and more. But first I want to learn about you..."

Issue questionnaire now, if using evaluation tools 1 or 3 (See evaluation section for more details.)

3. Ice Breaker (Have students raise their hands)

"Who has a bike?"

"Who has a helmet?"

"Who wears their helmet EVERY TIME they drive their bike?"

Video (Optional)

If time allows.

TOP PICKS:

1. "Bike Safety with Bill Nye the Science Guy" (grades 1-6)
2. "Jell-O in a Jar" (grades 4-8)

Peer group feedback showed that a high percentage of children liked a lecture/video/activity focus. The two listed videos appeal to the older audience and are up-to-date.

- **Discussion: To meet program objectives**

"WHAT IS THE FIRST THING YOU SHOULD DO BEFORE YOU DRIVE YOUR BICYCLES?"

ANSWER: **Do a bicycle safety inspection.**

1. Check the seat. Make sure it's the right height and is on tightly.
2. Check the handlebars. Look to see if they are attached securely.
3. Check the brakes. Make sure the brake pads are clean and they are working properly. Feel the hand brakes to make sure they work and aren't loose.
4. Check the chain. The chain should be well oiled and on snugly.
5. Check the tires. Look to see if the tires have enough air in them and that they have enough tread.
6. Check the pedals. Make sure they are on securely and in good condition.
7. Check the size of the bike. Make sure it fits the rider.

"WHY DO YOU NEED TO WEAR A HELMET?"

1. It's the law. In PA the law states that everyone under age 12 must wear a helmet. **Even if your older than 12 you should still wear a helmet!**
2. It protects your head. A bicycle helmet has been proven to greatly reduce the risk

of head and brain injuries by up to 85%.

3. It makes you visible to other people. Many helmets are made with bright colors or with reflective material. This makes it easier for people in cars to see you better.
4. Wear it EVERY TIME. People sometimes will wear their helmet if going long distances but not if staying close to home. Over 350 young people die each year in crashes and most crashes are near their home.
5. A helmet is required by many sports. Popular sports have made helmet use mandatory. Sports such as BMX riding, X-treme sports, skateboarding, in-line skating etc. all require helmet usage!

"HOW DO YOU PROPERLY WEAR A HELMET?"

(Ask students to raise their hands to give you ways. Make sure the following are part of the discussion)

1. On top of the head. Sitting squarely, low on the forehead. Two fingers widths above the eye-brows
2. Snug on the head. Make sure the helmet doesn't move from side to side or up and down. Use the foam pads that come with the helmet to help get the proper fit.
3. Strapped on. The straps should fit evenly on the face with the clips located below each earlobe. The bottom clip should be under the chin with only a 1-2 finger width gap between the chin and clip.

* This works best with something or someone for demonstration.
Example: A student or a styrofoam head from a wig store.

"WHY IS IT IMPORTANT TO WEAR A HELMET?"

1. You need to protect your brain! All body functions are controlled by the brain. The brain has many different sections that control different areas of the body. For example: the front part of your brain is responsible for your emotions, and thinking. The top for your motor skills(walking, running) and your senses. The back for your vision, speech and movement.
2. A helmet reduces head injuries. Properly wearing a helmet can reduce head injuries up to 85%.
3. Head injuries are life threatening. You can die from an injury to the head. A head injury is not like an injury to another part of the body. Head injuries can't be fixed like a broken arm. Head injuries can cause people to forget everything they've ever learned (including eating, dressing, walking), or become a completely different person.
4. Be a good example. When you wear your helmet you're a good example to all bicycle drivers.
5. Replace your helmet. You need to get a new helmet whenever you are in a crash or the helmet gets tight for your head

* A demonstration is very helpful here. An *egg in a styrofoam container* will show children how the yolk is the brain, the shell is the skull and the styrofoam is the helmet. Do an experiment showing

what happens to the egg when it is dropped in a "helmet" and without. *The Jell-O in a jar* demonstration also works well. (See Education Materials section.)

* A bicycle helmet that was involved in a crash is a good tool to use.

"WHAT KIND OF THINGS CAN YOU WEAR OR PUT ON YOUR BIKE TO MAKE IT SAFER TO DRIVE?"

* Try to show examples of each item.

1. A reflective helmet. Caution not to put stickers on the helmet. Glue may break down the helmet's outer shell.
2. Brightly colored clothing. (See Activities/Games)

Note: List some bright colors and pick out audience members as examples.

3. Reflective Stickers. Stickers can be put on clothing or your bike.
4. A bike light. You should NOT ride at night. When you get older and must ride at night, a bicycle light is a must! And always wear white clothing when riding at night.
5. Spoke reflectors. Make sure your bike has all standard reflectors and remember...you can always add more.
6. Blinkers. Safety blinkers will help car drivers and others see you from far away. They normally attach to your clothing and run on batteries.

"WHAT ARE THE BENEFITS OF SAFE BICYCLE PRACTICES?"

Answer:

SAFE BICYCLE RIDING PRACTICES = REDUCED CHANCE FOR INJURIES.

"WHAT ARE THE PROPER HAND SIGNALS?"

Note: Ask students to stand and spread out so they have enough room for practice.

Demonstration:

1. Have students raise their left hand and wave it around.
2. Have students raise their right hand and wave it around.
3. Have students raise their left hand again.

Tell students that most hand signals are done with the left hand.

- Show students the signal for a LEFT HAND TURN: Have the students practice.
- Show the students the signal for a RIGHT HAND TURN: Have the students practice. (Show alternate RH Turn at this time)
- Show the students the signal for STOPPING or SLOWING DOWN. Have the

students practice.

*** Game time (For grade 6 only)**

Tell the students you will give a series of turns and they need to show the correct hand signal.

NOTE: Keep it fast-paced and FUN!

EXAMPLE: "Is everyone ready???? Let's go"

Right turn

Left turn

Stop

Left turn

Right turn

Right turn

Stop

Stop

Left turn

Do the signals with them....HAVE FUN!!!!

For older grades just review the signals or have a "Demo Team". Pick a girl and a boy from the student body and have them show the hand signals. Whoever gets the hand signals right, their team (boys vs. girls) gets a prize (pencils etc.)

* Work with local police to see if they will help with this and all parts of the bicycle safety project.

"Road Rules"

- A bicycle is a vehicle, not a toy.
- Explain that a bicycle on the road has to follow all the same rules that a car does.
- A police officer can give a ticket to a bicyclist who fails to stop at a stop sign, fails to yield or runs a red light.
- Riding on the street can be very complex because you have to be aware of all your surroundings and drive your bike at the same time. Remember... Every intersection is potential for danger and you need to stop at every intersection and look both ways. Look LEFT-RIGHT-LEFT. Get off your bike and walk it across the intersection.

Ask participants

1. "What side of the road do you drive your bike?"

Answer: THE RIGHT SIDE (Ride with traffic not against it.)

* NOTE: Try to demonstrate what the right side of the road looks like. For example: Draw a road on a poster board showing the flow of traffic and bike riders.

2. "What street signs do you have to obey when driving your bike?"

Answer: ALL OF THEM

* Try to get sample street signs. Many youths ride in neighborhoods where the street signs have been stolen or vandalized. Explain the street signs and what they mean.

3. Ask students to list the hidden dangers on the road

- Potholes
- Train tracks
- Driveways (cars backing out)
- Puddles (make brakes less effective)
- Gravel
- Sewer grates
- Man-hole covers
- Parked cars on the street (doors opening)
- Other debris (leaves, litter, rocks)

4. Should you let your little brother or sister or a friend ride your bike?

Answer: No, because the bike will be too big for them and they may fall off and hurt themselves.

Ask participants if they have any questions and give a brief review of the basic points of the discussion.

"Conclusion of Education Session"

Activity/Game

Use an activity or game here like Jeopardy for program reinforcement. See Activities/Game Sheet following the Evaluation Tools.

Issue questionnaire now, if using evaluation tools 1 or 3 (See evaluation section for more details.)

EVALUATION TOOLS

To properly assess the success of your program you need to evaluate the effectiveness of the program.

Evaluation of a program can be very helpful in determining areas of program strength and weakness and will help you report outcome data.

Outcome data provides evidence of program worth and helps you measure changes in attitude, behavior or beliefs of program recipients. The goal of any health education program, including the bicycle safety project, is to change attitude, belief or behavior on a specific subject.

To determine if changes have been made in attitude, belief or behaviors about bicycle safety, three evaluation tools have been created. Each one was created with a specific audience in mind.

Evaluation Tool 1. This was created for classroom (grades 6-8) presentations. The Questionnaire should be given to students after the Ice Breaker activity and before any education has been given. Collect the questionnaires. After the conclusion of the program give students the questionnaire again. Tabulate the responses from both sets of questionnaires. The second questionnaire should show positive changes in program recipient's attitudes, beliefs and knowledge by selecting more right answers.

Evaluation Tool 2. Use the same questionnaire but issue it in a different way. This method should be used in assembly-type presentations. After confirmation with a school to conduct a bicycle safety presentation, ask the principal if they would distribute the questionnaire the day prior to your presentation. Teachers should administer the questionnaire but not educate the students on the right answers. Collect the questionnaire the day of your presentation and give teachers another set. Have the teachers re-administer the questionnaire after your presentation. Collect the questionnaires and tabulate the results.

Evaluation Tool 1 & 2

Questionnaire

(Use for grades 6-8)

This questionnaire was designed to measure learning in a pre-and-post evaluation tool. The same questionnaire should be used before and after the presentation.

Give students 5 minutes to answer the following 10 questions.

Circle the correct answer

1. A bicycle helmet reduces...

Crashes

Head Injuries

Broken Bones

2. It is the law in Pennsylvania to wear a bicycle helmet if you're under age 12.

True

False

3. What side of the road should you ride your bicycle?

Right

Left

4. A bicycle is considered a vehicle, just like a car.

Yes

No

5. A bicycle does not have to follow all the same rules as a car does.

True

False

6. What part of the body controls everything you do?

Heart

Brain

Eyes

7. In a bicycle safety inspection, what should you look for?

Loose paint

Loose handlebars

Dirt on the tires

8. Your bicycle helmet should fit...

Loose

Snug and not move

Big so you can
grow into it

9. Which color should you wear if you're riding your bike at night?

Black

Blue

Yellow

10. A helmet needs replaced...

When it's in a crash

Never

Bicycle Safety Games

BLACK BOX

Get a black box and fill the inside with neon/colorful stickers. In one corner hide a black sock. Show the students the box and how the colorful stickers stand out. Start a discussion on what bright colors they saw, who has on bright colors in the room etc. Then ask who saw the black sock. Explain why this is important.

JEOPARDY

Make a jeopardy board from foam board. Make the categories "Velcro" for board versatility. Have categories be different areas of bicycle safety. Have children answer questions for point values.

BIKE BINGO

Make bingo boards using pictures. Call out safety pictures until participants make Bingo. (such as helmets, stop signs, turns etc)

BIKE TIC-TAC-TOE

Get a blank board and helmet heads as markers. Split the audience into two groups. Ask each a student from each group a question and if they get it right they can put their color helmet head up. The team that gets Tic-tac-toe is the winner.

Bike Safety Promotional Ideas

May is designated bike safety month. This is a good month to have schools, community centers and retail stores promote bike safety.

Some ideas:

- Promote a bike helmet or bike safety coloring contest
- Create a bike safety bulletin board
- Have a school bike safety slogan contest. Have the winner win a donated bike.
- Students caught riding their bike with their helmet, get a free incentive item.

Incentive Items

Use incentive items to promote good bicycle safety practices. For example if you see bicycle drivers wearing their helmets reward them with a free coupon from a fast food restaurant, a T-shirt etc.

Create a bicycle patrol to monitor the effectiveness of bike safety messages and training. Identify 10 youths to act as a junior bicycle patrol. Give them incentive items to pass out while out on "patrol" to children wearing their bicycle helmets.

Bike Safety Handouts and Education Materials

- **Jell-O in a Jar**: a video developed by the National SAFE KIDS Campaign aimed at middle school children

To purchase this product call (310)523-3128

- Free materials are available in a limited quantity from **PennDot** @ 1-800-742-4363
 - "A Bicycle is Not a Toy" brochure
 - "Bike Like the Best" booklet
 - PA Bicycle Driver's Manual
 - Bike Safely bookmark
- **NHTSA/CPSC**
 - "What's New About Bicycle Helmets" brochure
 - "10 Smart Routes to Bicycle Safety" black & white brochure
 - "Use Your Head" poster

View their website @ www.cpsc.gov or call 1-800-638-2772

- **American Academy of Pediatrics**

- Bicycle Driver's License

To purchase this product call 1-800-227-2358

- **NHTSA**

- "Your Bicycle Helmet; A Correct Fit" brochure

View their website @ <http://www.nhtsa.dot.gov>

- **State Farm Insurance brochure**

- "Take the Safe Bicycling Quiz"

View their website @ www.nhtsa.dot.gov

- **PA Division of the American Trauma Society**

"Bike Smart Club" brochure – as part of the club, children receive Team Helmet coloring book, "Bike Smart Club" membership certificate and Sheldon Turtle pin Emergency Information Helmet Stickers

- **McDonald's/CPSC**

- "Use Your Head" brochure

View their website @ www.bikehelmet.org/ or call 1-800-638-2772 for ordering materials

- **AAA manuals on conducting bicycle derbies**

- "Bicycling is Great Fun" brochure, most appropriate for ages 5 thru 13
- "Bike Basics: A Guide to Safe Bicycling for Ages 1-15"
- "Kids Speak Out on Bike Helmets" brochure

To order these materials call AAA @ (717)657-2244

- **Medical Information Carrier System**

- A medical information decal system, placed inside of the helmet, which provides critical life saving information in the event of an emergency.

To order call the Medical Emergency Data Systems, Inc. @ (724) 295-1988 or visit their website @ www.meds.org

- **Bill Nye the Science Guy**

- A Disney video, which teaches children about bicycle safety in a fun manner. It covers hand signals and rules of the road to valuable tips from professional cyclist.
- This is a fun way to learn about a serious subject!

To order this product contact Disney Educational Productions @ 1-800-295-5010 or visit their website www.Disney.com/EducationalProductions

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- **Diamondback Perfection on Wheels**

- A 40-minute stunt show conducted by two of the nation's top riders. It uses high-energy music, audience participation and incredible bicycle stunts to set the Perfection On Wheels team apart from other "Lecture" style assemblies.
- Highlights all the important aspects of riding safely.

To book reservations call 1-800-660-2453, program cost \$499.00

- **Neon square spoke reflector**

To order call The Children's Hospital of Philadelphia @ (215) 590-5437

- **"Be Safe, Wear A Helmet" coloring book**

To order, call Allentown Health Bureau @ (610) 437-7677

- **"Helmet Safe with Bucklebear" storybook**

To order, call Center for Injury Prevention @ 1-800-344-7580

Bicycle Derbies

A bicycle derby gives students a chance to practice their safety knowledge on a course designed just for them. Derbies normally consist of stations that focus on different aspects of safe bike riding. Students go through the stations with their bikes and their helmets.

Helmet usage is mandatory! If a child does not have a helmet, helmets should be available for giveaway, sale or loan.

A complete "HOW TO" on Bicycle Derbies can be obtained by calling AAA.

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