

# **YOUTH BICYCLE SAFETY MODULES**

**(Grades 6-8)**



***Promoting Bicycle Safety!***

**FEBRUARY 2009**

# YOUTH BICYCLING

## MODULE 1: *Making Sure Your Bicycle & Helmet Are Safe*



### OBJECTIVES:

- ✓ Acquaint participants with each other and establish group bond.
- ✓ Acquaint participants with some of the benefits of biking.
- ✓ Introduce fundamentals in bicycle helmet fitting and use.
- ✓ Introduce fundamentals in bicycle maintenance.

### ACTIVITIES & MATERIALS

#### ACTIVITY # 1: WARM-UP (10 min.)

Materials needed: None

Handouts: None

#### ACTIVITY # 2: Bicycle Safety–Helmet Fit and Use (10 min.)

Materials needed:

- ✓ Bicycle helmets in several sizes (small, medium, large).
- ✓ VCR, DVD player or personal laptop
- ✓ Video “How to Properly Fit a Bicycle Helmet” (May show on a large screen or TV)<sup>1</sup>

Handouts:

- ✓ Handouts #1: How to Properly Fit a Bicycle Helmet (English or Spanish)<sup>2</sup>

#### ACTIVITY # 3: Bicycle Safety– Bicycle Fit and Check (10 min.)

Materials needed:

- ✓ One bicycle with a gear shift (if possible)
- ✓ Tire pressure gage

Handouts:

- ✓ Handout # 2: Bicycle Anatomy
- ✓ Handout # 3: ABC Spin Check

#### ACTIVITY # 4: Bicycle Safety–Clothing and Personal Gear (10 min.)

Materials needed:

- ✓ Examples of retro-reflective materials

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<sup>1</sup> Video can be downloaded from the National Highway Traffic Safety Administration website:  
<http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.810acae50c651189ca8e410dba046a0/>

<sup>2</sup> Download handout at: [www.nhtsa.dot.gov/people/injury/pedbimot/bicycle/EasyStepsWeb/index.htm](http://www.nhtsa.dot.gov/people/injury/pedbimot/bicycle/EasyStepsWeb/index.htm)  
(English) [www.nhtsa.dot.gov/people/injury/pedbimot/bicycle/EasyStepsSpan/index.htm](http://www.nhtsa.dot.gov/people/injury/pedbimot/bicycle/EasyStepsSpan/index.htm) (Spanish)

Handouts: None

**ACTIVITY #5: Debriefing** (20 min.)

Materials needed:

- ✓ VCR, DVD player or personal laptop
- ✓ Internet capability if watching the video on a laptop
- ✓ Video "Ride Smart – It's Time to Start" either VHS or DVD version<sup>3</sup>

Handouts:

- ✓ Handout #4: Bicycle Safety Quiz

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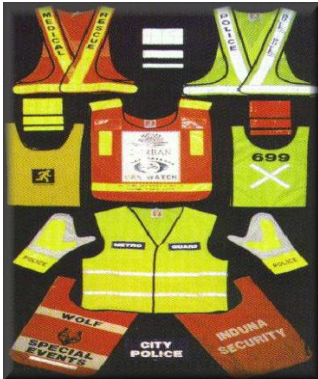
<sup>3</sup> Video can be downloaded from the National Highway Traffic Safety Administration website:

[http://www.nhtsa.dot.gov/portal/site/nhtsa/template.MAXIMIZE/menuitem.810acae50c651189ca8e410dba046a0/?javax.portlet.tpst=4670b93a0b088a006bc1d6b760008a0c\\_ws\\_MX&javax.portlet.prp\\_4670b93a0b088a006bc1d6b760008a0c\\_viewID=detail\\_view&itemID=fce95b8a9a480010VgnVCM1000002c567798RCRD&overrideViewName=Article](http://www.nhtsa.dot.gov/portal/site/nhtsa/template.MAXIMIZE/menuitem.810acae50c651189ca8e410dba046a0/?javax.portlet.tpst=4670b93a0b088a006bc1d6b760008a0c_ws_MX&javax.portlet.prp_4670b93a0b088a006bc1d6b760008a0c_viewID=detail_view&itemID=fce95b8a9a480010VgnVCM1000002c567798RCRD&overrideViewName=Article)

## KEY WORDS/PHRASES:



1. **Bicyclist/Cyclist:** A person riding on a bicycle.
2. **Retro-reflective:** Retro-reflective materials are a type of material added on road surfaces, road signs (e.g., stop signs), vehicles, and clothing to make them easier to see, especially when it is dark. See examples in the image. Retro-reflective materials do not need a light source on it directly (like a car headlight) in order for it to show up.



3. **Reflective:** Reflective materials are worn or placed on items to make a person or item easier to see, but it shows up only when a light source is shown directly on it, i.e. car headlights. Some examples of reflective gear include the round red plastic pieces – called “reflectors” often found on the back of bicycles, beneath the seat, white plastic pieces, also called “reflectors: attached to the spokes on bicycle wheels, reflective tape, dots, and reflective shoe laces are often on the spokes of front and back wheels.



4. **Aggressive Driver:** A driver whose behavior puts other road users at risk for crashes or accidents. Examples include: speeding, changing lanes quickly, driving too closely to other road users, or other traffic violations as a vehicle on the roadway.



5. **Distracted Driver:** A driver who as a result of their behavior, is not fully focused (eyes, ears, and mind) on the roadway. Some examples include: talking on a cell phone, eating, or tuning the radio or IPOD.



6. **Share the Road:** Signs and/or language that represents an alert to be cautious and watch for bicyclists. It is also meant to say that both motor vehicles and bicycles have a place (are allowed) on the road and should share the space with respect and with safety in mind.
7. **Rules of the Road:** Traffic laws/regulations and common-sense riding behavior to increase the safety of bicyclists riding in the roadway. Some examples include: riding in the same direction as traffic, following all signs and signals as motorized vehicles.

## INTRODUCTION:

Begin by introducing yourself. Provide participants with a brief overview of what you will accomplish as a group today. Say a few words about why you think their safety should be important to everyone, and explain that this is the reason why they are here.

## ACTIVITY #1: WARM-UP

- ✓ Have a brief discussion about bicycle crashes (another word for accident). Find out if any participants have had any personal experiences with bicycle crashes. Find out if the crashes or any related injuries resulted from bicycles in poor condition or in the bicyclist not wearing a helmet.
- ✓ Name at least one thing you would like to learn about bicycling and bicycle safety?

Other suggestions:

- ✓ Why do you think looking at your bicycle equipment might be important?
- ✓ Why do you think what you wear when bicycling might be important?
- ✓ Why wear a bicycle helmet?

**Note:** Many youth believe that they don't need a helmet because they haven't or won't crash. Discuss:

- ✓ Reasons why they may not wear a helmet
- ✓ Why wearing a helmet is a good choice, i.e., avoiding serious brain injury.
- ✓ How a serious injury might affect them and affect their family.
- ✓ Most common reasons bicyclists crash:

### Motorists Behavior affecting crash with a bicyclist:

- ⇒ Driver too close to a cyclist (a driver should allow 3 foot between them self and the bicyclist when passing)
- ⇒ Driver going too fast
- ⇒ Driver honks horn and frightens bicyclist
- ⇒ Driver fails to see bicyclist
- ⇒ Driver under the influence of alcohol or drugs through no fault of the bicyclist

### Bicyclists Behavior affecting crash:

- ⇒ Bicyclist goes too fast over a speed hump losing control
- ⇒ Bicyclist hits a rock, pebble or other debris
- ⇒ Bicyclist lacks skill to ride in a straight line
- ⇒ Bicyclist not wearing proper gear to increase their visibility
- ⇒ Bicyclist under the influence of alcohol or drugs (e.g., car gets

### Other influences:

- ⇒ Dogs running after bicyclists
- ⇒ Kids jump into bicyclist's path
- ⇒ Faulty bicycle equipment
- ⇒ Weather conditions (slippery) too close, dogs attack, kids jump into the way, icy patches on street, etc.).

**What else:** A very important behavior was left out of that applies to both the motorists' behavior and the bicyclist's behavior--- See if anyone can figure it out? The answer is that many motorists and bicyclists don't know and don't follow some of the rules of the road. The rules of the road will be discussed in subsequent modules.

## ACTIVITY #2: HELMET CHECK



- ✓ Engage participants in a brief discussion of why it is important for all bicyclists to wear helmets, bring out these key points:
  - Most (3/4) of bicycle-related deaths result from head injuries.
  - Wearing a bicycle helmet can reduce severe head injuries and possibly save your life if you are in a crash.
  - To properly protect your head, the helmet has to be worn every time you ride.
  - To properly protect your head, the helmet has to be the right size and adjusted to fit properly on your head.
- ✓ In order to be effective, helmets must meet the safety standards for bicycling.
  - Look inside for a CPSC sticker (which means the helmet was tested and meets the standards set by the Consumer Products Safety Commission) or a Snell sticker (which means the helmet's safety has been approved by a nonprofit organization that tests helmets).

- ✓ Adjust helmets for a proper position and fit. Let participants try out the helmets (if available), emphasizing that it is important that bicyclists adjust helmets for proper position and fit.
- ✓ Follow the step by step process as shown in the diagram above, and as described in Handout #1: Easy Steps to Properly Fit a Bicycle Helmet (English and/or Spanish Version). Provide copies of handout for take home.

For more information see the brochure "Easy Steps to Properly Fit a Bicycle Helmet" at the NHTSA website:  
[www.nhtsa.dot.gov/people/injury/pedbimot/bicycle/EasyStepsWeb/index.htm](http://www.nhtsa.dot.gov/people/injury/pedbimot/bicycle/EasyStepsWeb/index.htm) (English)  
[www.nhtsa.dot.gov/people/injury/pedbimot/bicycle/EasyStepsSpan/index.htm](http://www.nhtsa.dot.gov/people/injury/pedbimot/bicycle/EasyStepsSpan/index.htm) (Spanish)

## ACTIVITY #3: BICYCLE FIT & CHECK

- ✓ Roll out the bicycle in front of the group.
  - If the group is relatively small (10 or less), have the participants gather around you and the bicycle.
  - If participants can bring bicycles, you can conduct this activity outdoors.

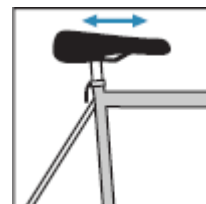


- ✓ Pass out **Handout #2: Bicycle Anatomy**



- ✓ **Bicycle Fit:** Discuss the importance of use a bicycle that fits you (not your parents or little or big brother). Use a bicycle that is appropriate for your height.
  - For boys, when standing over your bicycle (straddling) the bicycle, there should be about two inches between you and the bar.
  - When riding a mountain bike allow five inches of clearance to allow for more room to get off the bicycle on rough terrain.
  - For boys and girls, when you are on the bicycle with your feet on the pedals, the leg in the down position (6 o'clock) should have a slight bend at the knee.

- ✓ **Bicycle Fit- Adjust the Seat:** Both sizing and adjustments are more easily understood by demonstration. Use a person that is most likely to be suitable in size for the bicycle so only minimal adjustment is needed. The best way to demonstrate this is to have one person facing the front of the bicycle and then hold the handlebars with both hands while straddling the wheel in between the legs. The idea is to be able to allow the volunteer to sit on the seat and be balanced as if she/he is riding.



- When sitting on the seat, the feet should sit flat on the ground for a beginning rider, and the balls of the feet or tips of toes may touch for a more experienced rider, depending on the riders comfort level.



- Adjust the seat up or down as needed (to adjust the seat, undo the lever near the seat or loosen the bolt using a wrench if using an older bike)
- Once the proper height is determined, tighten up the bolt or lever.
- Give the seat a jiggle to make sure there is a tight connection.

✓ Pass out **Handout #3: ABC Spin Check**

- There are several basic parts of the bicycle that should be checked before riding: the wheels, the brakes, the handlebars, the seat, and the reflectors.
- Bicyclists are more likely to have a crash if their bicycles are not in proper working order.

✓ **Bicycle Maintenance Check** – check to make sure the bike is in proper working order before you ride it. If ever a doubt, don't ride it; this is one easy way to prevent a crash. Take the bicycle to a repair shop and have the bicycle fixed.

✓ Several basic parts of the bicycle that should be checked the wheels, the brakes, the handlebars, the seat, and the reflectors. Emphasize that riders are more likely to have a crash if their bicycles are not properly maintained.

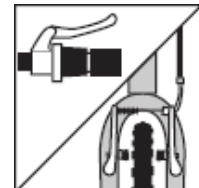
- **Do the ABC Spin Check**

**A is for Air: Check the tires**

(1) See if the tires look flat; squeeze the tires to see if they are firm. Tires should not be under inflated (too little air) or over inflated (too much air). Look for the tire pressure recommendations on the sidewall of the tire. Use a pressure gauge to measure the tire (if a gauge is available) or at least show them where the tire is measured for pressure and where air is placed.



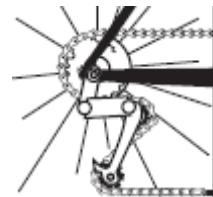
(2) Check the tires to see if they look damaged or worn out. If they do or you think they might be but not sure, ask an adult to look.



**B is for Brakes:** Check to see if the brakes work before riding.

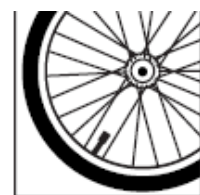
(1) Squeeze the hand brake;

(2) While in the driveway or in a protected spot, roll the bicycle and apply the brakes and



**C is for Chains:** Check the chains to make sure they are slightly oily, not rusty, and makes a straight line across the bottom.

**Spin the Wheels**– test the spinning of each wheel by listing first the front of the bike and spinning the front tire, then lifting the rear of the bike and spinning the back tire. Check to make sure the tire spins without shaking and spins without rubbing against the rims.





## ACTIVITY #4: CLOTHING AND GEAR CHECK

You don't have to go out and buy clothing specifically for bicycling (though there is a reason those who bicycle for long distances use specifically designed clothing). Here are some basic principles to consider: **Dress to be seen; Don't get caught; and Stay Alert.**

✓ **Dress to be Seen.** Wear clothes that increase others ability to see you

⇒ During the day wear bright colors.

⇒ In bad weather (rain, fog) or dawn or dusk, and at night wearing white or bright colors are not enough. Bicyclists are strongly encouraged to use lights on their bicycle and wear reflective clothing, thought retro-reflective is even safer, so they are more visible to others.



⇒ **Avoid Riding at Night.** Avoid Riding at Night. Children shouldn't ride at night. If the cyclist must ride, he/she is required by law to use a white front light and red rear reflector.

⇒ **Use Retro-Reflective Gear.** Retro-reflective gear means that external light (a car or street light) does not need to shine on the object for it to glow.



Items such as arm and/or leg bands, dots or stripes, and/or something on the back of the backpack or jacket is strongly encouraged.

✓ **Don't Get Caught - Check Clothing and Shoes.** Loose shoe laces, wide pant legs, or scarves can catch in the bicycle chins and gears. To avoid this:

⇒ Tuck pant legs into socks or wear a wear an elastic band to hold the pants close to your leg.

⇒ Tie shoes tightly or in a double knot

⇒ Avoid wearing scarves, belts, or any other item than can get stuck in the chain while riding.

✓ **Stay Alert - Use Your Eyes and Ears.**

⇒ Avoid using headphones or other electronic devices (IPODS, cell phones) or text messaging while you are riding; headphones harm your ability to hear the traffic around you (like an approaching car).



✓ **Discuss Clothing and Personal Equipment**

- **Be seen** - Wear clothes so you can be seen.

⇒ Bicyclists need to be seen during the day, in bad weather or low light conditions, and at night.

⇒ Ask what colors make them more easily seen by others?

- It was previously thought that white clothing increased visibility. We now know that this is not enough.

- During the day wear bright fluorescent colors.
- In bad weather (rain, snow, haze) or low light conditions (dusk, dawn), bright fluorescent colors is a help but additional personal equipment is very strongly encouraged (wear retro-reflective vest, jacket or coat with reflective trim, reflective zipper pulls on a backpack, reflectors on the bicycle and the tires).
- At night, color of clothing is less important, lighting is essential. Many States require a white front headlight and a rear red reflector. Additional equipment as described above is also helpful
- **Don't get caught** – Keep clothing free from the chains or other parts of the bicycle.
  - ⇒ Ask them to consider that any part of their clothing might interfere with or get caught in the bicycle.
  - ⇒ Remind them that they can use clips, leg clams or rubber bands or they can tuck their pants leg into their sock so it won't get caught in the chain.
  - ⇒ Make sure your shoes are tied so the laces don't get caught in the chains.
  - ⇒ Use caution in wearing any loose clothing including scarves, and any ties or buckles.
- **Stay Alert** – Use Your Eyes and Your Ears.
  - ⇒ Ask participants if they use any of the following: headphones, IPODS, cell phones? Do they text?
  - ⇒ Ask them why they think it is unsafe to use these devices when bicycling?
    - Anything of these can be considered a distraction for paying attention to traffic around you (cars, pedestrians, and other bicyclists)
    - You need your eyes for looking and ears to listen for traffic at all times.

## ACTIVITY # 5: DEBRIEFING

- ✓ Suggest that participants check out their bicycles before their next ride.
- ✓ Next, ask the participants to fill out the **Handout #4: Bicycle Safety Quiz**. The purpose of this activity is not to grade them, but to review some of what was gone over in the session and to add a few other helpful ideas about safe bicycling. Remember, you are trying to give them enough information and things to refer to so that ultimately they can do a bicycle safety project and relay the correct information to others. The facilitator can decide whether to do the activity individually or as a group. Either way, make sure everyone has heard and marks the correct answer for future reference. Use the opportunity to discuss the importance of the principle behind each question.
- ✓ Show video: How to Fit a Properly Fitted Bicycle Helmet (in either English or Spanish)
- ✓ As the final activity, ask each participant to quickly mention the most important new idea they learned about bicycle safety through the sessions.
- ✓ At the conclusion of the session, thank everyone for participating and encourage everyone to bicycle safely!

## HANDOUT #1:

# Easy Steps to Properly Fit a Bicycle Helmet

**It's not enough to simply buy a bicycle helmet – it should be properly fitted, adjusted, and worn each time you ride.**

### The Proper Helmet Fit

Helmets come in various sizes, just like hats. Size can vary between manufacturers. For the most comprehensive list of helmet sizes according to manufacturers, go to the Bicycle Helmet Safety Institute (BHSI) site: <http://www.danscomp.com/products/charts/helmetchart.htm>

*To select and properly fit a bicycle helmet, follow the helmet fitting instructions in this flyer.*

*It may take some time to ensure a proper fit. It is easier if you have someone help you adjust the straps.*

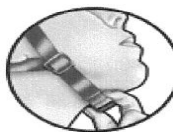
#### Step 1 Size:

Measure your head for approximate size. Try the helmet on to ensure it fits snugly. While it is sitting flat on top of your head, make sure the helmet doesn't rock side to side. Sizing pads come with new helmets; use the pads to securely fit to your head. Mix or match the sizing pads for the greatest comfort. In your child's helmet, remove the padding when your child's head grows. If the helmet has a universal fit ring instead of sizing pads, adjust the ring size to fit the head.



#### Step 2 Position:

The helmet should sit level on your head and low on your forehead—one or two finger-widths above your eyebrow.



#### Step 3 Buckles:

Center the left buckle under the chin. On most helmets, the straps can be pulled from the back of the helmet to lengthen or shorten the chin straps. This task is easier if you take the helmet off to make these adjustments.



#### Step 4 Side Straps:

Adjust the slider on both straps to form a "V" shape under, and slightly in front of, the ears. Lock the slider if possible.



#### Step 5 Chin Strap:

Buckle your chin strap. Tighten the strap until it is snug, so that no more than one or two fingers fit under the strap.



#### Step 6 Final Fitting:

- A. Does your helmet fit right? Open your mouth wide...big yawn! The helmet should pull down on the head. If not, refer back to step 5 and tighten the chin strap.
- B. Does your helmet rock back more than two fingers above the eyebrows? If so, unbuckle, shorten the front strap by moving the slider forward. Buckle, retighten the chin strap, and test again.
- C. Does your helmet rock forward into your eyes? If so, unbuckle, tighten the back strap by moving the slider back toward the ear. Buckle, retighten the chin strap, and test again.
- D. Roll the rubber band down to the buckle. All four straps must go through the rubber band and be close to the buckle to prevent the buckle from slipping.

www.nhtsa.gov  
**NHTSA**

**When to Replace a Helmet.**

Replace any helmet that has been involved in a crash, or is damaged.

**The Helmet Should Fit Now.**

Buy a helmet that fits your head now, not a helmet to “grow into.”

*Replace any helmet that has been outgrown.*

**The Helmet Should Be Comfortable.**

If it feels small, put in the thinner sizing pads or purchase a larger helmet. Ideally, select a helmet brand and size that fits well prior to any adjustments. If you buy a helmet that you find comfortable and attractive, you are more likely to wear it.

**The Helmet Must Cover Your Forehead.****The Chin Strap Must Be Tight and Properly Adjusted.****The Helmet Should Not Rock Forward or Backward on Your Head.**

If it does, see step 6.



**A bicycle helmet can protect your head and brain ONLY if you wear it each time you ride!**

**Helmet Laws**

Many States and local jurisdictions have bicycle helmet laws; please refer to your State or local jurisdiction. To find this information go to [www.helmets.org/mandator.htm](http://www.helmets.org/mandator.htm)

A bicycle crash can happen at any time. A properly fitted bicycle helmet reduces the risk of head injury by as much as 85 percent and the risk of brain injury by as much as 88 percent.

More children age 5 to 14 go to hospital emergency rooms for injuries associated with bicycles than with any other sport. Many of these injuries involve the head. Helmet laws ensure the safety of our children.



**For more information on bicycle safety, visit the National Highway Traffic Safety Administration (NHTSA) Web site at: [www.nhtsa.dot.gov](http://www.nhtsa.dot.gov)**

**Model Safe Behavior**

Everyone — adult and child — should wear bicycle helmets each time they ride. Helmets are the single most effective way to prevent head injuries resulting from bicycle crashes. Wearing a helmet each ride can encourage the same smart behavior in others.

**Helmet Certification**




Buy a new helmet that has been tested and meets the uniform safety standard issued by the U.S. Consumer Product Safety Commission (CPSC); use an old helmet only if it has a seal from one or more of the voluntary bicycle helmet standards, such as ASTM, Snell, or ANSI. Look for the certification seal labeled on the helmet.

DOT HS 810 600  
April 2006

[www.nhtsa.gov](http://www.nhtsa.gov)  
**NHTSA**

# Consejos y pasos para el uso debido del casco para montar bicicleta

**Para montar bicicleta de forma segura, no basta tener un casco. Es muy importante:**

-  Usar el casco del **tamaño adecuado**
-  Que el casco te quede **debidamente ajustado**
-  Que cuando montes en bicicleta, **siempre uses el casco**

## PASO 1-Tamaño adecuado

Los cascos vienen en varios tamaños que varían según el fabricante. Mide la circunferencia de tu cabeza para obtener una talla aproximada. Pruébate el casco para asegurarte que te queda debidamente ajustado (o sea, que el casco no se deslice de lado a lado).

Los nuevos cascos traen unas almohadillas adicionales para ajustar la talla del casco. Combina las almohadillas para lograr que te quede cómodo, pero ajustado como es debido.

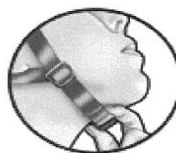
Si has crecido, saca las almohadillas. Si el casco cuenta con un anillo de ajuste tipo universal en vez de almohadillas, ajusta el anillo para que te quede cómodo, pero debidamente ajustado.

*\*Para una lista de tamaños según el fabricante, visita: Bicycle Helmet Safety Institute (BHSI por sus siglas en inglés).  
<http://www.danscomp.com/products/charts/helmetchart.htm>*



## PASO 2- Posición correcta

El casco debe de ir nivelado sobre tu cabeza y debe cubrir parte de tu frente. Para probar si tienes el casco puesto correctamente, coloca uno o dos dedos sobre tus cejas. Para quedar debidamente protegido, el casco debe tocar tus dedos.



## PASO 3- Ajustar la hebilla debajo de la barbilla

Centraliza la hebilla izquierda del broche para que quede debajo de tu barbilla. Puedes ajustar las correas desde la parte de atrás del casco para que la correa de la barbilla sea más larga o corta. Es más fácil ajustar las correas si no tienes puesto el casco.



## PASO 4 – Ajustar las correas laterales

Ajusta la corredera en ambas correas laterales para formar una "V" (debajo y enfrente de cada oreja). De ser posible fija la corredera para que no se corra fuera de posición.



## PASO 5- Ajustar la correa de la barbilla

Abrocha la correa de la barbilla. Ajusta la correa hasta que el casco te quede debidamente ajustado, de modo que no puedas colocar más de uno o dos dedos entre la correa y tu barbilla.



## PASO 6- Ajuste final

### A. ¿Te queda bien tu casco?

Abre tu boca lo máximo que puedas... ¡Da un gran bostezo! Deberás sentir cómo el casco presiona sobre tu cabeza. Si no es así, regresa al Paso 5 y ajusta más la correa de la barbilla.

### B. ¿Puedes mover tu casco hacia atrás a más de dos dedos sobre tus cejas?

De ser así, desabróchatelo, y acorta la correa frontal deslizando la corredera hacia adelante. Abróchatelo, ajusta la correa de la barbilla, y pruébatelo de nuevo.

### C. ¿Puedes mover tu casco hacia adelante de manera que cubra tus ojos?

De ser así, desabróchatelo, ajusta la correa de atrás deslizando la corredera hacia atrás en dirección a tu oreja. Abróchatelo, y ajusta la correa de la barbilla, y vuelve a probártelo.

### D. Desliza el anillo elástico hacia el broche.

Las cuatro correas deben pasar a través del anillo elástico para evitar que éste se corra.

## Recuerda que:



### **Debes usar un casco certificado**

Compra un casco que cumpla con las normas de seguridad de la Comisión de Seguridad de Productos para el Consumidor en los EE.UU. (*U.S. Consumer Product Safety Commission* o CPSC, por sus siglas en inglés); Usa un casco usado sólo si tiene un sello que certifique que cumple con las normas de seguridad de cualquiera de estas organizaciones: ASTM, Snell o ANSI. Busca el sello de certificación en la etiqueta del casco.



### **Debes cambiar de casco**

Cambiar de casco es necesario si fue usado durante un choque, si está dañado o maltratado, o si has crecido y ya te queda pequeño.



### **El casco debe ser del tamaño adecuado**

Compra un casco para el tamaño actual de tu cabeza, y no uno que te quede grande para que te quede bien "cuando crezcas".



### **El casco debe quedarte cómodo pero ajustado**

Si te aprieta demasiado, usa almohadillas más delgadas o compra un casco más grande. Es mejor elegir un modelo y tamaño que te quede bien, y te guste, pues es más probable que lo uses siempre.



### **El casco debe cubrir casi toda tu frente.**

Si caben más de dos dedos entre tus cejas y el casco, regresa al paso 2.



### **La correa de la barbilla debe quedarte ceñida.**

Si se te queda holgada, regresa al paso 5

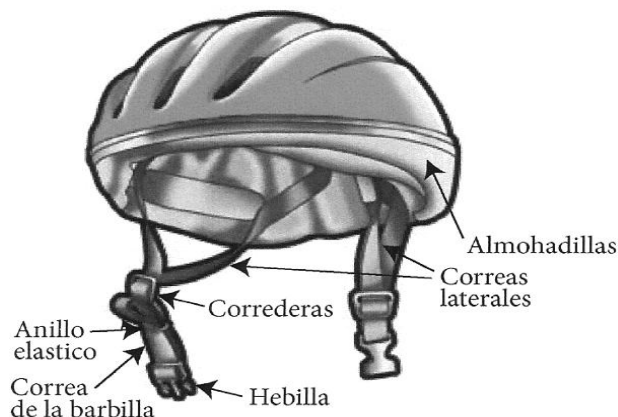


### **El casco no debe deslizarse hacia delante o hacia atrás.**

Si se te desliza, regresa al paso 6.



### **¡Un casco puede proteger tu cabeza y tu cerebro sólo si lo usas SIEMPRE que montes bicicleta!**



## Importancia de usar cascos:

### **1. Reduce el riesgo de lesiones**

Los choques en bicicleta pueden ocurrir en cualquier momento. Comparado con otros deportes, más niños entre las edades de 5 y 14 años llegan al hospital debido a lesiones por choques en bicicleta. Un casco de bicicleta debidamente ajustado protege contra el riesgo de lesiones en la cabeza hasta en un 85 por ciento, y de lesiones en el cerebro hasta en un 88 por ciento.

### **2. Hay leyes que requieren el uso de cascos**

Las leyes que requieren el uso de cascos de bicicletas son para proteger a todos, pero en especial a los niños. Por favor consulta las leyes de tu estado o jurisdicción local. Para más información visita: [www.helmets.org/mandator.htm](http://www.helmets.org/mandator.htm)

### **3. Es un buen ejemplo de precaución**

Todos, tanto adultos como niños, deben utilizar cascos cada vez que monten una bicicleta pues es la única manera efectiva de prevenir las lesiones en la cabeza o el cerebro por choques en bicicleta. Al usar tu casco siempre que montes bicicleta motivas a otros a tomar precauciones para protegerse.



**Para obtener más información sobre manejar una bicicleta de forma segura, visite el sitio Web de la Administración Nacional de Seguridad del Tráfico en las Carreteras (NHTSA por sus siglas en inglés)**  
**[www.nhtsa.dot.gov](http://www.nhtsa.dot.gov)**

[www.nhtsa.gov](http://www.nhtsa.gov)  
**NHTSA**

DOT HS 810 600  
Agosto 2006



## HANDOUT #2: BICYCLE ANATOMY



<b>Brakes</b> – Coaster brakes are used mainly on kids and Cruiser bikes; they are engaged by pedaling backwards. The front brake (is only found on handlebars) stops the front wheel. The rear brake is either on the handlebar or foot pedal and stops the rear wheel	<b>Pedal</b> – used by your feet to power the bicycle
<b>Chain</b> – transfers the energy from the motion of the pedals to the back wheel	<b>Rim</b> – the support of the wheel
<b>Chain wheel</b> – the large wheel that the chain runs on	<b>Saddle</b> – the seat
<b>Derailleurs</b> – the mechanism on the rear wheel that regulates the gears	<b>Seat tube</b> – the tube that supports the seat post
<b>Handlebars</b> – used to hold on and steer the bicycle	<b>Seat post</b> – used to adjust the height of the seat
<b>Hub</b> – the central part of a wheel	<b>Shift levers</b> – the levers used to shift gears
<b>Reflectors</b> – safety devices in the back or in front of the bike and on the tire spokes that helps cars see bicyclists at night	<b>Spokes</b> – the thin, metal wires that attach the rim to the wheel hub
<b>Top tube</b> – the tube that attaches the handlebar stem to the seat post	<b>Tire</b> – the inflated, rubber part of the wheel. Adapted from: EnchantedLearning.com

### Safety Accessories

<b>Active Light</b> – electrically powered lights that attach to the front of the bicycle (white) and to the back of a bicycle (red)	<b>Horn/Bell</b> – an accessory that can be attached to the bike to signal a warning to others
--	--





## HANDOUT #3: BICYCLE CHECK

# THE ABC SPIN CHECK

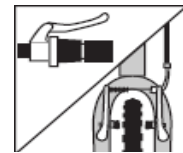
### A is for air:

- ✓ Look and squeeze your tires- they should feel hard.
- ✓ Soft tires can cause flat tires, ruin your rims, make your bike hard to ride.



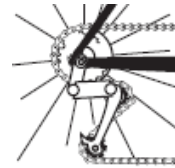
### B is for brakes:

- ✓ Squeeze the brake levers or, on some bikes, pedal backwards, to make sure you can stop your bike.



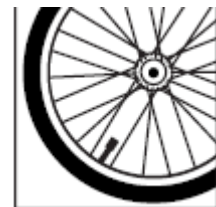
### C is for chain:

- ✓ Check the chain to make sure it is slightly oily, not rusty, and makes a straight line across the bottom.
- ✓ Spin is for spinning your wheels: make sure they don't wobble or rub on anything like the brake pads or the frame.



### Spin is for ... You Got it... Spin

- ✓ Spin your wheels to make sure they don't wobble or rub on anything like the brake pads or the frame. Lift up the front end of the bicycle and give the front wheel and spin; repeat procedure for the back end and back tire.



# HANDOUT #4: BICYCLE SAFETY QUIZ

**Instructions:** Circle the best answer.

1. When should a bicycle helmet be worn?

- a. Only when it is raining
- b. Only when it is dark
- c. All the time



2. How many people can safely ride on one bicycle?

- a. One
- b. Two
- c. As many people as can fit

3. Under most conditions, you should ride your bicycle\_\_\_\_\_?

- a. On the left side of the road against the flow of the traffic
- b. On the right side of the road with the flow of traffic
- c. In the middle of the road

4. When riding your bicycle, you should stop at all stop signs and traffic signals.

- a. True
- b. False

5. Why should you ride more slowly when it is raining?

- a. It take longer to stop
- b. So you can ride through the puddles
- c. To cool yourself off



6. When you are riding your bicycle, you should wear \_\_\_\_\_?

- a. Dark clothes
- b. Whatever is comfortable
- c. Bright or retro-reflective colored clothing

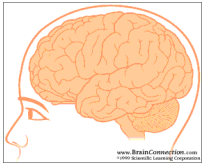

7. Always signal before making a right or left turn.

- a. True
- b. False

8. You should check your bicycle regularly to make sure it is safe for riding.

- a. True
- b. False

9. Riding against traffic on a street is:

- a. The safest way to ride
  - b. Illegal
  - c. Dangerous but your personal choice
10. A white headlight must be used on a bicycle:
- a. At all times
  - b. Never
  - c. Is required at night; would be helpful during sunset, sunrise, fog, rainy weather
11. A bicyclist should use hand signals:
- a. When turning left or right
  - b. To let motorists know his or her intentions
  - c. When stopping
  - d. All of the above
- 
12. A bicycle helmet:
- a. Can help protect riders from head injuries
  - b. Is required by law in some States and municipalities
  - c. Is recommended for children and adults
  - d. All of the above
13. Which of the following statements about bicycle safety laws is true?
- a. Bicyclists follow the same laws as other vehicles on the road
  - b. It's the law that you ride on the right side of the roadway, with cars
  - c. Most states require bicyclists to use a white headlight for night-time bicycling and some States also require red rear reflectors as well
  - d. All of the above
14. Why should you not wear headphones while bicycling?
- a. When you use headphones, you can't hear traffic noises and other important information
  - b. You might miss hearing your cell phone ringing
  - c. Both a and b
- 
15. Before entering the road from a driveway, a cyclist must stop and look left, right, left for vehicles in the roadway before proceeding
- a. True
  - b. False
16. You don't have to stop at a red light or stop sign if there is no traffic
- a. True
  - b. False

17. A flashing red light means stop
  - a. True
  - b. False
18. To avoid hitting an opened door of a parked car, a bicyclist should:
  - a. Ride far enough from parked cars that you can pass cars with open doors without changing your path
  - b. Swerve hard and yell when you see a door opened in front of you
  - c. Do nothing. Bicyclists can't do anything about such crashes or accidents because they are the driver's fault
19. A loose bicycle chain means that it is easier to pedal.
  - a. True
  - b. False
20. Bicyclists should ride with at least one hand on the handlebars at all times
  - a. True
  - b. False

**Sources:**

Simon's Bicycle Safety Quiz: <http://www.state.nj.us/cgi-bin/transportation/game/test>

Your Family's Health: [http://www.yourfamilyhealth.com/kids\\_health/bicycle\\_quiz/](http://www.yourfamilyhealth.com/kids_health/bicycle_quiz/)

Labot Bicycle Services: <http://www.bicyclela.org/Quiz.htm>

New York Biking Coalition: <http://www.nybc.net/programs/gettoschoolquiz.pdf>

Port Hope, Ontario Police: <http://phps.on.ca/bkquiz.htm>

Mississippi Valley Boy Scout Council:

[http://www.mississippivalleybsa.org/bicycle/bicycle\\_quiz.htm](http://www.mississippivalleybsa.org/bicycle/bicycle_quiz.htm)

East Bay Bicycle Coalition: <http://www.ebbc2.ebbc.org/safequiz/safequiz.html>

## BICYCLE SAFETY QUIZ : ANSWER KEY

1. C	2. A	3.B	4.A	5. A
6. C	7. A	8. A	9.B	10. C
11. D	12. D	13. D	14. A	15. A
16.B	17. A	18. A	19. B	20. A

# YOUTH BICYCLING

## MODULE 2: *Bicycling Tips & Neighborhood Mapping*



### OBJECTIVES:

- ✓ Actively engage participants in considering a biking route.
- ✓ Acquaint participants with bicycle safety measures.
- ✓ Review the principles of signs and signals and associated behaviors

### ACTIVITIES & MATERIALS:

#### ACTIVITY #1: Warm-Up (15 minutes)

Materials needed:

- ✓ Pens, pencils, or markers
- ✓ A flip-chart or board and appropriate writing equipment

Handouts: None

#### ACTIVITY #2: Neighborhood Mapping (15 minutes)

Materials needed:

- ✓ Markers
- ✓ Push-pins or adhesive tape to post participants' maps in the room
- ✓ A flip-chart or board and chalk for note-taking
- ✓ Your own neighborhood map

Handouts: None

#### ACTIVITY #3: Bicycle Safety Basics (10 minutes)

Materials needed: None

Handouts:

- ✓ Handout #5: Bicycle Safety Basics

#### ACTIVITY #4: Traffic Signs & Signals Quiz (10 minutes)

Materials needed: None

Handouts:

- ✓ Handout #6: Traffic Signs & Signals Quiz (Reproduce one handout/participant)

#### ACTIVITY #5: Debriefing (10 minutes)

Materials needed: None

Handouts: None

KEY WORDS/PHRASES: None

## ACTIVITY #1: WARM-UP

✓ Brainstorm as a group, while writing down participant responses on a flip chart or board:

- Do you bicycle? Why? Answers could include:
  - ⇒ To go to school
  - ⇒ To have fun
  - ⇒ To go places with friends
  - ⇒ To run errands/go to the store
- What are some other reasons that people bicycle? Answers could include:
  - ⇒ For transportation
  - ⇒ To exercise
  - ⇒ To lose weight
  - ⇒ To save gas money
  - ⇒ To spend time with family and friends
  - ⇒ For fun
  - ⇒ Anything else?
- What benefits could you get or would your family get from bicycling?
  - ⇒ Money savings for my family. Money can be spent on other things like toys or music, etc. While many families focus on having a car, costs associated with a car include the car purchase or monthly payments, car insurance, and gas.
  - ⇒ Help the environment. Using a bicycle to get around instead of a car help limit the bad fumes or gases that cars and buses leave in our air. Poor air quality can affect our health.
  - ⇒ Saves time. Bicyclists can travel more quickly when cars and buses are stuck in heavy traffic. Bicyclists can just jump on their bicycle and go versus waiting for a bus or sit on the bus while it makes multiple stops. Never have to look or wait for a parking space with a bicycle.
  - ⇒ Reduce the number of cars on the road which means less traffic.
  - ⇒ Fun way to exercise. Regular exercise through bicycling strengthens our heart, our muscles, and decreases our risk of many diseases.
  - ⇒ Stay healthy. Getting exercise helps us stay healthy so parents can work and send money home.
  - ⇒ Bicycling is fun. Bicycling is a fun thing for family to do together.

- ✓ Have a wrap-up discussion as a transition to the next activity, Neighborhood Mapping – youth will draw maps of the neighborhood to determine best routes for bicycling to and from school. Try to bring out some key factors, such as safety and amount of traffic, which participants should keep in mind when choosing a route to take on a bicycle ride.

## ACTIVITY #2: NEIGHBORHOOD MAPPING

- ✓ Ask how many participants bicycled here and how many rode in a car or bus, walked?
- ✓ Ask one or two participants to describe for the group the route they took. If none of the participants bicycled to the session, ask them to discuss some other common biking routes they often use or ones they have seen others use. (If it takes too long to get a volunteer, describe your own route first so that they have a “model” to follow.)
- ✓ Ask participants if there are any places on their routes that are not safe and why. Document and save responses to what participants feel is not safe, you may choose to refer back to these responses when doing future activities.
- ✓ Recruit one or two participants to help you distribute the materials you will need for the mapping activity. Each participant should have two pieces of paper and two writing utensils – crayons, markers, pencils of different colors.
- ✓ Tell the group that they will have a few minutes to make a map of their route. (Once they have received the materials for the activity, make note of the time and allow 15 minutes for completing the activity.) They are to begin by noting their point of departure and to end by noting their point of arrival. Tell them that they can include as few or as many details of their route, from one point to another, as they want. Remind them that this is a fun activity, and that you do not expect anyone to be an artist or architect.
- ✓ It’s important for you to join your group in this activity. Once the group gets going, start making a map of the route you took yourself on the flip-chart or chalkboard.
- ✓ Give participants a 3-minute warning so that they’re able to start wrapping up their mapping before their time is up. When they have finished, ask a few participants to share with the group what they enjoyed about their mapping activity and to show off their map.
- ✓ Summarize by letting participants know that these maps will be used to determine options for safer routes to get them to school when they are walking or bicycling.
  - Make sure participants have their names on their maps



- Have a couple of volunteers pass out adhesive tape or pushpins and ask participants to post their maps in the room.
- If it is not possible to post the maps until the group meets again, collect the maps and store for future use.

### ACTIVITY #3: BICYCLE SAFETY BASICS – KEY POINTS

- ✓ Ask the group if anyone knows another name for a bicycle riding on the road. The correct answer is “A Vehicle.” A bicycle riding on the road is considered in most States to be a vehicle. The driver of a bicycle must act like a vehicle by following all the same rules and responsibilities of other motorized vehicles.
- ✓ Pass out **Handout #5: Bicycle Safety Basics** and “walk through” each point with participants by asking participants to ask questions about or comment on each point with examples from their own experiences.

### ACTIVITY #4: TRAFFIC SIGN & SIGNALS QUIZ

- ✓ Pass out **Handout #6: Traffic Sign & Signals Quiz**.
- ✓ Ask participants to match each traffic sign and signal with its meaning.
- ✓ After everyone is finished, do a quick show of hands for correct answers for each sign.
- ✓ Briefly review the meaning of each sign and signal as you tally the answers and field any questions participants may have about each sign.
- ✓ Provide different scenarios encouraging participants to think if they were riding a bicycle versus if they were in a car, i.e. what would be the difference in the behavior? (rarely if ever is there a difference, a bicycle should act like a vehicle. Here are a few examples:
  - Q: You are riding your bicycle and a pedestrian is crossing the road. What should you do?  
A: You must yield (or slow down) and let the pedestrian cross.
  - Q: You are riding your bicycle and you see a “Do Not Enter, a “Wrong Way” or a “Road Closed” sign. What should you do?  
A: You should behave like a vehicle; you should not enter the street because you will be riding in the wrong direction or face unsafe conditions. Find a new route, most likely the same route that motorized vehicles are taking.

- Q: You are riding your bicycle and you see a pedestrian sign. What should you do?  
A: You must yield (slow down) and let the pedestrian pass

## ACTIVITY #5: DEBRIEFING

- ✓ Ask participants to name the top three things they learned today that they felt were most important to them. (The Facilitator can refer to handouts #5 and #6 for ideas to prompt participants).
- ✓ Ask participants to share one safety tip that they hadn't heard before.
- ✓ Explain that, during the next session, they will have an opportunity to use the maps they drew today to help them prepare for assessing how safe their neighborhood is for biking.
- ✓ Encourage them to apply the key points they learned about bicycle safety and traffic signs and signals in their day to day activity in their community. Encourage them to observe the safe and unsafe behavior of others and discuss this with their parents and with the group at the next gathering.

## HANDOUT #5: BICYCLE SAFETY BASICS

### SAFE RIDING TIPS:

- All bicyclists should wear a helmet. Make sure it fits correctly and that straps fasten properly.
- Check your bicycle before you ride. Make sure your bicycle fits and do the ABC Spin Check. Air in your tires, Brakes functioning, Chains not loose, and tires spin freely.
- Practice riding safely. This includes starting and stopping, riding in a straight line, turning, signaling with your hands.
- Children under 10 should not ride a bicycle in traffic.
- Use caution when riding on a sidewalk. Watch out for people, cars backing out of driveways, and cars turning into driveways or streets.
- Wear bright clothing when riding during the day so you can be seen by others.
- If riding in bad weather or in poor light, use lights and reflective gear (strips, buttons, zipper pulls, tape, stickers, etc.).
- Children are discouraged from riding at night. If you must ride at night, use a white front light on your bicycle- it's the law. Wear reflective clothing or apply reflective tape and use red reflectors/lights on the rear of your bicycle, clothing, or equipment.
- Always ride with at least one hand on the handle bars.
- Never ride others on your bicycle (handlebars, pedals, or back).



# HANDOUT #6: TRAFFIC SIGNS & SIGNALS QUIZ

**Instructions:** Look at the signs and signals. What do they mean? Write the letter of the correct sentence from the box below.



1. \_\_\_\_\_



2. \_\_\_\_\_



3. \_\_\_\_\_



4. \_\_\_\_\_



5. \_\_\_\_\_



6. \_\_\_\_\_



9. \_\_\_\_\_



7. \_\_\_\_\_



8. \_\_\_\_\_



9. \_\_\_\_\_



10. \_\_\_\_\_



11. \_\_\_\_\_



12. \_\_\_\_\_

a. Come to a complete stop. Put one foot down and look both ways for traffic. You must stop and look for traffic (cars, pedestrians and bicyclists). Traffic without the stop sign has the right of way	g. It's okay to walk, but look left, right, left for traffic as you are walking
b. No bicycles allowed; find another route	h. Green = Go Yellow = Stop unless you are already in the intersection Red = Stop
c. Slow down, look and listen. Do not attempt to cross if you see a train; go only when the train is gone.	i. Stop! Do not cross the road until the signal changes
d. Bicyclists and motorists should use the road together (respectfully)	j. Intersection ahead; stay alert
e. School zone; watch out for children walking or crossing the road	k. Slow down and look for traffic. You must yield right of way (let them go first) to oncoming traffic.
f. Watch for bicyclists on the roadway or crossing the roadway	l. Shows you which way traffic is traveling on that street.

## TRAFFIC SIGNS & SIGNALS QUIZ: ANSWER KEY

Answers:

1. a

2. c

3. l

4. g

5. h

6. d

7. e

8. k

9. f

10. b

11. j

12. i

# YOUTH BICYCLING

## MODULE 3: *Bicycling Safely in Your Neighborhood*

### OBJECTIVES:



- ✓ Strengthen group cohesion.
- ✓ Provide participants with the opportunity to accomplish a task as part of a team.
- ✓ Demonstrate to participants how our actions can ensure our physical safety.
- ✓ Introduce participants to additional biking safety measures.
- ✓ Engage participants in applying biking safety measures to an assessment of their immediate neighborhood.
- ✓ Increase awareness about biking safety and about neighborhood safety improvements among the families of participants.

### ACTIVITIES & MATERIALS

#### Activity #1: Warm-Up: (10 min.)

Materials needed: None

Handouts: Refer back to Handout # 5: Bicycle Safety Basics

#### Activity #2: Discussion: Riding a Bicycle Safely (10 min.)

Materials needed: None

Handouts:

- ✓ Handout #7: Riding a Bicycle Safely-Rules of the Road
- ✓ Handout #8: Riding a Bicycle safely-Signaling
- ✓ Handout #9: Sidewalk versus Street Riding

#### Activity #3: Putting Safety Knowledge to Work (30 min.)

Materials needed:

- ✓ For your neighborhood walk, you will need one teaching assistant or older participant to escort each group of 5-7 participants
- ✓ One pencil/participant
- ✓ One watch and one cell phone per group

Handouts:

- ✓ Handout #10: Bikeability Checklist – How Bikeable is Your Community (two copies per group/or one per participant)

#### Activity #4: Debriefing: (10 min.)

Materials needed: None

Handouts:

- ✓ Handout #10: Bikeability Checklist – How Bikeable is Your Community (two copies per group/or one per participant)
- ✓ Handout #11: Improving Your Community Score

#### KEY WORDS/PHRASES:

**Bikeable:** Finding out how safe and easy it is to go bicycling – how “bikeable” -- your neighborhood is.

**Traffic regulations:** The laws (e.g., speed limits, stopping at stop signs, etc.) governing driving, bicycle, and walking.

### ACTIVITY #1: WARM-UP

Welcome participants back. Tell them that in this session, they will take a closer look at how to ride a bicycle safely and what things make a neighborhood safer for bicycling.

- ✓ Ask participants to brainstorm the safety tips they most easily remember from last week’s session:
  - Remind participants to think about how bicyclists “behave” and the outside environment (i.e., neighborhood streets and drivers).
  - Ask participants to quickly name at least ten things bicyclists can do to ride more safely.
  - Ask participants to quickly name at least ten things that can make the streets and neighborhood safer for bicycling.
  - If the group is small, have each participant name his or her top “thing.”

### ACTIVITY #2: RIDING A BICYCLE SAFELY

- ✓ As a review, based on **Handout #5: Safe Riding Tips** from the previous session quiz the participants or create an interactive dialogue.
- ✓ Pass out **Handout #7: Rules of the Road**. In order to visualize the importance of riding in the same direction of traffic, simulate a few situations to make the point:
  - A car is at a stop sign preparing to turn right into the flow of traffic. Which way is the driver looking for a gap in traffic? What happens when a bicyclist comes along on the sidewalk riding in the opposite direction of traffic?

- You are riding along the road and there are cars parallel parked cars along the roadway. You notice exhaust coming out of the car or a figure in the car. What precautions should you take? (slow down since you aren't sure what the driver is going to do, be prepared to move over in case the driver doesn't look for you before opening his car door.
  - You are getting ready to get on your bicycle in your apartment's parking lot. What should you do? (yes put on your helmet) Look around you to see what cars are doing, look left-right-left before taking off, look for cars backing up and/or make eye contact with drivers to better ensure they see you, make sure to ride in the same direction of traffic even in the parking lot, stop and look left-right-left before entering the main roadway.
  - Other situations or questions?
- ✓ Pass out **Handout #8: Riding a Bicycle Safely-Signaling** and **Looking Over Your Shoulder**
- Lead a brief discussion of the key points.
  - Have the participants stand up and practice the hand signals for turning and stopping.
  - Ask participants why a bicyclist would need to look over his shoulder? The bicyclists must look first for traffic around him before signaling or before making a change of position on the road (as in turning or moving around an object). Have participants practice looking over their shoulder. Have them practice a few times with a partner where one is the motorists and stands there while the other walks and looks over their shoulder to see their partner.
  - Ask participants why each key point is important and how it can help make bicycling safer. For example, ask participants what might happen if:
    - ⇒ A bicyclist turns without giving a hand signal.
    - ⇒ A bicyclist enters the street from in between parked cars.
    - ⇒ A bicyclist turns without first checking other traffic entering an intersection
  - Imagine what looking over your shoulder and signaling is like while riding a bicycle?
  - Emphasize that while this activity is important, it is far more important to practice and maintain balance and comfort in riding. Both looking over the shoulder and signaling should be practiced in parking lots.
- ✓ Pass out **Handout #9: Sidewalk versus Street Riding** and review with participants.



### ACTIVITY #3: PUTTING SAFETY KNOWLEDGE TO WORK

Tell participants that now they will have a chance to put what they already know and what they've just learned about safety to the test. Tell them that they'll be going on a neighborhood walk to observe bicyclists and to assess the neighborhood.

#### Note to facilitator:

Prior to this activity you should determine and select a safe route or routes. It is suggested that you take this route yourself prior to the group ride. In case of stormy weather this activity will need to be rescheduled. If you have more than six participants, break into smaller groups with one adult to each group.

Keep in mind that participants should have parent consent forms on file.

- ✓ Pass out copies of **Handout #10: Bikeability Checklist-How Bikeable is Your Community**. Tell participants that on these checklists they will find some of the good reasons for biking and the safety behaviors that they discussed during the first session. They will also find items that will be discussed later.
- ✓ Take some time to review the sets of items on the checklist, and explain that participants will need to give a rating at the end of each section.
- ✓ Have a couple of volunteers pass out pencils and paper.
- ✓ Tell participants that, during their neighborhood walk, they should:
  - ⇒ Walk safely by following all traffic regulations and by paying attention to moving vehicles and other elements.
  - ⇒ Observe all their surroundings for the items included in the checklist.
  - ⇒ As they walk, try to imagine what the conditions would be like for them if they were on a bicycle
  - ⇒ Make note of the locations of things they would like to change.
  - ⇒ Keep their "group guide" in sight at all times.
- ✓ Divide participants into groups, with the leader/guide for each group. Point out the meeting point and the time (20 min. or less) you expect the groups to meet there.

- ✓ Assign each leader/guide to one of the routes you have identified before the session. Remind group leaders/guides to be watchful of the time.

## ACTIVITY #4: DEBRIEFING

- ✓ Ask individual group members to “report back” on their walk by sharing their general observations and impressions, and the total score they gave the neighborhood.
- ✓ Begin by reading aloud the first set of items: the problems listed under “Did you have a place to bicycle safely?” Then, ask a volunteer to read the corresponding items under the column “Action Items: What You Can Do,” and another volunteer to read the items in the column next to that one, “Action Items: What You & Your Neighborhood Can Do.”
- ✓ Continue this way until you’ve covered all the items on the table, making sure to stop at key words and explain what they mean.
- ✓ When you have finished doing this, ask participants to point out any other great ideas that this table did not include and jot these down on your flip chart or chalkboard.
- ✓ Summarize the findings and observations participants had about today’s neighborhood walk, and tell them that, as a special challenge, you are asking them to do an assessment of their own neighborhood.
- ✓ Neighborhood assessment:
  - Have their families join them on a neighborhood assessment; Cover an area around their house or apartment complex similar to the area (two- to three-block radius) covered on today’s walk;
  - End session with importance of sharing with their families the information they learned today. Share all the handouts with the family and have a discussion over dinner. Encourage them to use **Handout #10 Bikeability Checklist–How Bikeable Is Your Community?** and **11: Bikeability Checklist–Improving Your Community’s Score** as a family activity.
- ✓ Pass out extra copies of the **Handout #10:** for participants to take home, and thank them for their active participation and team work today.

## HANDOUT #7: BICYCLE SAFELY-RULES of the ROAD



Learning to drive your bicycle is like learning to drive your very first vehicle. Bicyclists have the same rights, same rules, same responsibilities as cars.



- Obey All Traffic Laws. Bicyclists must obey all traffic signs, signals, and lane markings as cars.
- Go With the Traffic Flow. Ride on the right in the same direction as other cars.
- Watch and listen for cars that are turning or backing up (look for white back-up lights, listen for back up beeping noise)
- When entering the street: Look left, right, and left again; only cross when no cars or present. Keep looking for traffic as you cross to make sure they see you and slow down or stop.
- Cross the street at intersections (including driveways). Always stop and look before crossing.
- If crossing the street in a pedestrian crosswalk, you must act like a pedestrian; get off your bicycle and walk it across the street just like a pedestrian.
- Watch for Parked Cars. Ride far enough out from the curb to avoid the unexpected from parked cars (like doors opening, or cars pulling out).
- Yield to traffic as required, including people in crosswalks.
- Use hand signals when turning.
- Ride in a straight line; do not weave in and out of traffic.

For more information on bicycle safety, visit the National Highway Traffic Safety Administration at [www.nhtsa.dot.gov](http://www.nhtsa.dot.gov)

# HANDOUT #8: RIDING A BICYCLE SAFELY-SIGNALING

Hand Signals: Hand signals are used to tell others what you intend to do.

Instructor note: It is important to teach hand signals and practice them in a parking lot. Unskilled cyclists are often not able to take one hand off the handlebars and steer straight. It is more important to steer straight and use the over the shoulder look. Also, just like driving, signaling what you want to do does not ensure that it is safe to do it. You cannot make the desired move until it is safe to do so.

## Turning Right:

- ⇒ Extend your left arm upward, like an "L" or extend your right arm straight out level with your shoulder.
- ⇒ Look for already turning traffic
- ⇒ Use the same signals to indicate lane changes.

## Turning Left: You have two choices:

- ⇒ Turn using the left turn lane:
  - (a) To turn left, extend your left arm out straight (horizontally); you can also point your index finger to the left;
  - (b) When the traffic is clear, move over to the left turn lane; either taking the lane or in the right side of the lane OR
- ⇒ Turn as a pedestrian:
  - (a) Cross over the intersection and wait for the proper pedestrian cross signal;
  - (b) always look to see the traffic is clear and continue watching as you cross; (c) If crossing in this manner, as a pedestrian, you are to walk your bicycle across the street.



## Stopping:

- ⇒ Extend your left arm downward in a diagonal with an open hand.

## HANDOUT #9: SIDEWALK versus STREET RIDING

*The safest place for bicycle riding is on the street. Sounds crazy but here is why:*

- a. Motorists do not expect for fast moving traffic on a sidewalk. They don't typically look for bicyclists on the sidewalk when backing out or coming out of driveways or roads. When they do look, drivers look for traffic traveling in the direction seen for motorized traffic.
- b. Many bicyclists ride on the sidewalk facing traffic, or going in the opposite direction of traffic. This is very dangerous. If you must ride on the sidewalk, ride in the same direction as traffic.
- c. Bicyclists are not simply pedestrians on wheels. They must follow the same traffic rules as cars. That means bicyclists need to follow all the signs and signals, stop or yield to pedestrians, and stop or yield to turning cars--- you can't just cross from the sidewalk over a street and back onto the sidewalk.

### So why do so many people ride on the sidewalk?

Children under 10 years old are actually encouraged to ride on the sidewalk for the following reasons:

1. Riding in traffic takes more than riding skill – it takes a few more years for the brain to learn and judge and make decisions about traffic.
2. Children, however, should begin learning about riding in traffic as soon as they take an interest in riding a bicycle.
3. The correct information about safe bicycle riding should be repeated many times over the years with greater explanation as the child can understand more. Keep in mind that teaching is not enough; parents should always be responsible for watching out for their children riding a bicycle.

Some places allow people to ride on the sidewalk while other places say it is against the law, like downtown areas or cities. Make sure you know the law in your State or jurisdiction to see if sidewalk riding is allowed. If you do ride on the sidewalk:

1. Watch for vehicles coming out of or turning into and out of driveways.
2. Stop at corners of sidewalks and streets to look for cars and to make sure the drivers see you before crossing.
3. Enter a street at a corner and not between parked cars. Alert pedestrians that you are near by saying, "Excuse me," or, "Passing on your left," or use a bell or horn.
4. Always ride in the same direction as motorized traffic.

# HANDOUT #10: BIKEABILITY CHECKLIST-

## HOW BIKEABLE IS YOUR COMMUNITY

### Directions

For the items listed under each question, mark the box "Yes" or "No" in answer to the question. After the question, write any more you have to say after "Something else." Then circle from 1 to 5 according to how many "Yes" answers you have

#### 1) Did bicyclists have a place to bicycle safely?

- |  |           |          |
|--|-----------|----------|
| • No space for bicyclists to ride            | yes _____ | no _____ |
| • Bicycle lane or paved shoulder disappeared | yes _____ | no _____ |
| • Heavy and/ or fast-moving traffic          | yes _____ | no _____ |
| • Too many trucks or buses                   | yes _____ | no _____ |
| • No space for bicyclists                    | yes _____ | no _____ |
| • Poorly lighted roadways                    | yes _____ | no _____ |

Something else:

Circle the number of "Yes" answers.

1      2      3      4      5

#### 2) How was the surface that bicyclists rode on?

- |  |           |          |
|--|-----------|----------|
| • Potholes   | yes _____ | no _____ |
| • Cracked or broken pavement   | yes _____ | no _____ |
| • Debris (e.g broken glass, sand, gravel, etc.)                                | yes _____ | no _____ |
| • Dangerous drain grates, utility covers                                       | yes _____ | no _____ |
| • Uneven surface or gaps   | yes _____ | no _____ |
| • Slippery surfaces (e.g. bridge decks,<br>construction plates, road markings) | yes _____ | no _____ |
| • Rumble strips  | yes _____ | no _____ |

Something else:

Circle the numbers of "Yes" answers

1      2      3      4      5      6

3) How were the intersections they rode through?

- Bicyclist had to wait too long to cross intersection yes \_\_\_\_\_ no \_\_\_\_\_
- May not have been able to see crossing traffic yes \_\_\_\_\_ no \_\_\_\_\_
- Signal didn't give cyclist enough time to cross the road yes \_\_\_\_\_ no \_\_\_\_\_
- Looked unsure where or how to ride through intersection yes \_\_\_\_\_ no \_\_\_\_\_

Something else:

Circle the numbers of "Yes" answers

1   2   3   4   5   6

4) How did the drivers behave around the cyclist?

- Drove too fast yes \_\_\_\_\_ no \_\_\_\_\_
- Passed bicyclist too close yes \_\_\_\_\_ no \_\_\_\_\_
- Did not signal yes \_\_\_\_\_ no \_\_\_\_\_
- Cut bicyclist off yes \_\_\_\_\_ no \_\_\_\_\_
- Ran red lights or stop signs yes \_\_\_\_\_ no \_\_\_\_\_

Something else:

Circle the numbers of "Yes" answers

1   2   3   4   5   6

5) What did bicyclists do to make their ride safer?

- Wore a bicycle helmet yes \_\_\_\_\_ no \_\_\_\_\_
- Obeyed traffic signal and signs yes \_\_\_\_\_ no \_\_\_\_\_
- Rode in a straight line (didn't weave) yes \_\_\_\_\_ no \_\_\_\_\_
- Signaled their turns yes \_\_\_\_\_ no \_\_\_\_\_
- Rode with (not against) traffic yes \_\_\_\_\_ no \_\_\_\_\_
- Was courteous to others travelers yes \_\_\_\_\_ no \_\_\_\_\_  
(motorist, skaters, pedestrians, etc...)

Something else:






Circle the numbers of "Yes" answers

1   2   3   4   5   6

---

## How does your community rate?

Add up your ratings and decide. (Questions 6 and 7 do not contribute to your community's score)

-  1) \_\_\_\_\_ 26-30 Celebrate!. You live in a bicycle- friendly community.
-  2) \_\_\_\_\_ 21-25 Your community is pretty good, but there's always room for improvement.
-  3) \_\_\_\_\_ 16-20 Conditions for riding are okay, but not ideal. Plenty of opportunity for improvements.
-  4) \_\_\_\_\_ 11-15 Conditions are poor and you deserve better than this! Call the mayor and the newspaper right away.
-  5) \_\_\_\_\_ 5-10 Oh dear. Consider wearing body armor and Christmas tree lights before venturing out again.

Total \_\_\_\_\_

Adapted from U.S Department of Transportation



# HANDOUT #11: BIKEABILITY CHECKLIST – IMPROVING YOUR COMMUNITY'S SCORE

Now that you know the problems,  
you can find the answers.

## Improving your community's score...



### 1. Did you have a place to bicycle safely?

#### a) On the road?

No space for bicyclists to ride (e.g. no bike lane or shoulder; narrow lanes)  
Bicycle lane or paved shoulder disappeared  
Heavy and/or fast-moving traffic  
Too many trucks or buses  
No space for bicyclists on bridges or in tunnels  
Poorly lighted roadways

#### b) On an off-road path or trail?

Path ended abruptly  
Path didn't go where I wanted to go  
Path intersected with roads that were difficult to cross  
Path was crowded  
Path was unsafe because of sharp turns or dangerous downhill  
Path was uncomfortable because of too many hills  
Path was poorly lighted

#### What you can do immediately

- pick another route for now
- tell local transportation engineers or public works department about specific problems; provide a copy of your checklist
- find a class to boost your confidence about riding in traffic

- slow down and take care when using the path
- find an on-street route
- use the path at less crowded times
- tell the trail manager or agency about specific problems

#### What you and your community can do with more time

- participate in local planning meetings
- encourage your community to adopt a plan to improve conditions, including a network of bike lanes on major roads
- ask your public works department to consider "Share the Road" signs at specific locations
- ask your state department of transportation to include paved shoulders on all their rural highways
- establish or join a local bicycle advocacy group

- ask the trail manager or agency to improve directional and warning signs
- petition your local transportation agency to improve path/roadway crossings
- ask for more trails in your community
- establish or join a "Friends of the Trail" advocacy group

### 2. How was the surface you rode on?

Potholes  
Cracked or broken pavement  
Debris (e.g. broken glass, sand, gravel, etc.)  
Dangerous drain grates, utility covers, or metal plates  
Uneven surface or gaps  
Slippery surfaces when wet (e.g. bridge decks, construction plates, road markings)  
Bumpy or angled railroad tracks  
Rumble strips

- report problems immediately to public works department or appropriate agency
- keep your eye on the road/path
- pick another route until the problem is fixed (and check to see that the problems are fixed)
- organize a community effort to clean up the path

- work with your public works and parks department to develop a pothole or hazard report card or online link to warn the agency of potential hazards
- ask your public works department to gradually replace all dangerous drainage grates with more bicycle-friendly designs, and improve railroad crossings so cyclists can cross them at 90 degrees
- petition your state DOT to adopt a bicycle-friendly rumble-strip policy

### 3. How were the intersections you rode through?

Had to wait too long to cross intersection  
Couldn't see crossing traffic  
Signal didn't give me enough time to cross the road  
The signal didn't change for a bicycle  
Unsure where or how to ride through intersection

- pick another route for now
- tell local transportation engineers or public works department about specific problems
- take a class to improve your riding confidence and skills

- ask the public works department to look at the timing of the specific traffic signals
- ask the public works department to install loop-detectors that detect bicyclists
- suggest improvements to sightlines that include cutting back vegetation; building out the path crossing; and moving parked cars that obstruct your view
- organize community-wide, on-bike training on how to safely ride through intersections

# Improving your community's score...

(continued)

## What you can do immediately

## What you and your community can do with more time

### 4. Did drivers behave well?

Drivers:  
Drove too fast  
Passed me too close  
Did not signal  
Harassed me  
Cut me off  
Ran red lights or stop signs

- report unsafe drivers to the police
- set an example by riding responsibly; obey traffic laws; don't antagonize drivers
- always expect the unexpected
- work with your community to raise awareness to share the road

- ask the police department to enforce speed limits and safe driving
- encourage your department of motor vehicles to include "Share the Road" messages in driver tests and correspondence with drivers
- ask city planners and traffic engineers for traffic calming ideas
- encourage your community to use cameras to catch speeders and red light runners

### 5. Was it easy for you to use your bike?

No maps, signs, or road markings to help me find my way  
No safe or secure place to leave my bicycle at my destination  
No way to take my bicycle with me on the bus or train  
Scary dogs  
Hard to find a direct route I liked  
Route was too hilly

- plan your route ahead of time
- find somewhere close by to lock your bike; never leave it unlocked
- report scary dogs to the animal control department
- learn to use all of your gears!

- ask your community to publish a local bike map
- ask your public works department to install bike parking racks at key destinations; work with them to identify locations
- petition your transit agency to install bike racks on all their buses
- plan your local route network to minimize the impact of steep hills
- establish or join a bicycle user group (BUG) at your workplace

### 6. What did you do to make your ride safer?

Wore a bicycle helmet  
Obeyed traffic signals and signs  
Rode in a straight line (didn't weave)  
Signaled my turns  
Rode with (not against) traffic  
Used lights, if riding at night  
Wore reflective materials and bright clothing  
Was courteous to other travelers (motorists, skaters, pedestrians, etc.)

- go to your local bike shop and buy a helmet; get lights and reflectors if you are expecting to ride at night
- always follow the rules of the road and set a good example
- take a class to improve your riding skills and knowledge

- ask the police to enforce bicycle laws
- encourage your school or youth agencies to teach bicycle safety (on-bike)
- start or join a local bicycle club
- become a bicycle safety instructor

