

# PEDESTRIAN SAFETY MODULES

(Grades 3-5)



*Promoting Pedestrian Safety!*

**FEBRUARY 2009**

# PEDESTRIAN MODULE 1: "Pedestrian Safety Basics Ad Campaign"

## OBJECTIVES:



- ✓ Acquaint participants with each other and establish group bond.
- ✓ Point out to participants how often they walk and its importance in their lives and in the lives of others
- ✓ Acquaint participants with pedestrian safety measures.
- ✓ Actively engage participants in role playing pedestrian safety scenarios.

## ACTIVITIES & MATERIALS:

### Facilities and Facilitators

- ✓ Have one facilitator for every 8 child participants
- ✓ Participants should be seated at desks or tables so they can easily complete written work

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

- Materials needed:
  - ⇒ Pens, pencils, or markers
  - ⇒ (optional) Retro-reflective material or article of clothing with same
- Handouts: none

### ACTIVITY #2: Safe Walking/Key Points Discussion (15 min.)

- Materials needed: none
- Handouts:
  - ⇒ Have one copy of Handout #1: Safe Walking Key Points for each participant

### ACTIVITY # 3: Safe Walking Campaign (30 min.)

- Materials needed: (for poster ad option)
  - ⇒ Paper for participant note taking
  - ⇒ Pen, pencil or marker per student
  - ⇒ White glue or clear/Scotch-type adhesive tape
  - ⇒ A pair of small scissors for cutting paper; one pair per two participants
- Handouts: none

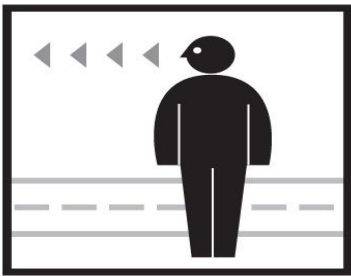
### ACTIVITY #4: Debriefing (5 min.)

- Materials needed: none
- Handouts: none

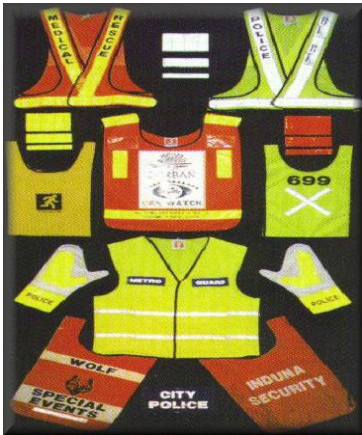
## KEY WORDS/PHRASES



1. *Jaywalk*: To cross streets carelessly without regard to traffic signals or crosswalks.



2. *Pedestrian*: A person traveling on foot.



3. *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.

## INTRODUCTION:

Begin by introducing yourself. Provide participants with a brief overview of what you will accomplish as a group today, which will include learning about safe walking and making a campaign ad about safe walking.

## ACTIVITY #1: Warm up

Start a discussion. Ask participants why they think safety should be important – first to themselves, and to everyone. Encourage them to share real life situations where safety was important. Here are some scenarios you can use, if necessary to stimulate discussion:



*Seven year old Jessica crosses the street running in between two parked cars. She is following her friends, Juan and Rosa, who are in the park across the street. A driver approaching does not see her and hits her. Jessica ends up in the hospital with a broken leg.*

*A group of children from the Melendez family were playing soccer in their home's front yard when the ball is kicked and ends up rolling across the street. Sergio, who is eight years old runs after the ball and an approaching car hits him. He is left seriously injured needing to go to the hospital.*

Ask participants what they would have done differently in these situations. To prompt discussion use examples such as:

- Cross at the crosswalk
- Never cross the street running in between parked cars
- Look both ways, left and right, before crossing the street

Define pedestrian as "someone who walks." Tell participants that each year about 5,000 pedestrians are killed and 69,000 are injured in motor vehicular crashes<sup>1</sup>. Give examples to show what that number of people would look like. Would they fill every seat in a big football stadium? Or, how would it compare to the number of kids in their school?

Young children and the elderly are more likely to be killed or injured in a pedestrian crash than any other age group. While many are quick to blame drivers for pedestrian deaths and injuries, the pedestrian is many times also at fault.

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<sup>1</sup> Statistics taken from: <http://safety.fhwa.dot.gov/media/crossadvice.htm> (Publication No. FHWA-SA-01-001 HSA-1/3-01 (10M)E)

Remind participants that we are all pedestrians at one time or another, and the traffic signals, signs and pavement markings are there to assure our safety. However, we should realize that no amount of traffic control devices will be able to protect us from ourselves if we do not pay attention to the "Signs of Safety" all around us.

Bring up the subject of Jaywalking. Have participants define the word "Jaywalk" to make sure everyone understands it. Ask why it's not safe.

Next, have a group "brainstorm." Ask participants to contribute suggestions for each of the topics below and write down the responses on a chalkboard or large sheet of paper everyone can see:

You can begin by saying, let's think of at least five things we'd like to learn about safe walking before the program is over. You can use these topics to prompt discussion:

- ✓ What would you like to learn about traffic laws?
- ✓ Traffic signs?
- ✓ Walking with younger siblings?
- ✓ What are some of the rules that aren't written and/or on signs that you'd like to know/aren't sure about?

Have a wrap-up discussion as a transition to the creation of an Ad Campaign. Ask participants to define Ad Campaign. (An Ad Campaign is a series of ads designed to change someone's behavior, such as to buy a product or to walk safely by looking both ways before crossing the street.) Tell them it is time for them to design the Safe Walking Ad Campaign.

Remind participants of how common it is to use ads to educate people about health and safety. Examples include posters in buses, subways, bodegas and schools, billboards, and announcements or ads on radio or television.

Tell participants that they will be able to use their creativity to create ads to educate people in the community about pedestrian safety. First, explain that you will discuss the Safe Walking Key Points/messages that will be used for the campaign. Next, explain that the group will divide into pairs to design ads. Tell participants they are free to create an Ad Campaign in their native language if it's other than English, if both in the pair share that language.

## **ACTIVITY #2: Discussion of Safe Walking/Key Points for Ad Campaign**

Pass out **Handout #1: Safe Walking Key Points**. Tell participants it is important that they understand each Key Point so that they can make a clear presentation of the Key Point in their ads.

Present each Key Point and then ask the group to explain:

- ✓ Why the Key Point is important.
- ✓ Why some pedestrians may not behave safely.
- ✓ How pedestrian injuries and deaths can be reduced if people kept the Key Points in mind.

After finishing the discussion, tell participants that they will now create ads to present the Key Points and that they will have to think of an idea that will capture the audience's attention. Finally, they need to write a script for their ad.

See example below:

#### *CHARACTERS*

- ✓ Driver
- ✓ Pedestrian
- ✓ Superhero

#### *SCENE:*

The driver is distracted by listening to music on headphones and is driving towards a pedestrian who is also distracted by listening to their iPod. The Superhero swoops down and saves the pedestrian from being hit by the car.

#### *SCRIPT:*

Driver (moving head to the music). *I can't wait to try my new dance moves.*

Pedestrian (also moving in rhythm): *This song really rocks.*

Etc.

After the participants create their ads, at the end of this activity, have each pair do a "show-and-tell" of their ad – describing their Poster Ad.

### **ACTIVITY #3: Safe Walking Ad Campaign**

Explain to participants that they have to pick one Key Point or message for their ad. They can select their Key Point from Handout #1. You can suggest that they can develop a short phrase to present the message, if they believe this will help their ad. (Some examples of interesting phrases used in seat belt safety campaigns include "Click It or Ticket," "Buckle Up", etc.).

Next, each pair will select one of the two options below: Option 1: Poster Ads, or Option 2: Audio or Video ads.

### Option 1: Poster or Print Ads

Distribute paper to participants and make markers, scissors, additional colored paper, and glue/tape available to the participants, as needed. Have the participants divide into pairs who will work together to create an ad.

Tell participants you want them to design a poster or print ad to publicize their Key Point/message. First, they need to select their Key Point. Next, they need to think of a picture or scene that would bring attention to their message. Finally, they need to show their ad, using the paper and other materials. Tell participants that if there is time in a later session, they may make poster-sized versions of their ads.

### Option 2: Video/Audio Ad

Explain to participants that each pair will design a 30-second or 60-second mock audio (radio) or video (television) ads. Each ad should present one Key Point/message. Tell participants they can be creative in their approach, keeping in mind the amount of time they have available. (Tell participants to limit their 30-second ad to about 100 words or their 60-second ad to about 200 words). First, participants need to select their Key Point/message.

Next, they have to think of an idea that will capture the audience's attention.

Finally, they need to write a script for their ad. For their script, they should first list the characters. Next, they should briefly describe the scene. Finally, they should then write the lines in order for their characters.

For example:

#### *CHARACTERS*

- ✓ Driver
- ✓ Pedestrian
- ✓ Superhero

#### *SCENE:*

The driver is distracted by listening to music on headphones and is driving towards a pedestrian who is also distracted by listening to their iPod. The Superhero swoops down and saves the pedestrian from being hit by the car.

#### *SCRIPT:*

Driver (moving head to the music). I can't wait to try my new dance moves.

Pedestrian (also moving in rhythm): This song really rocks.

Etc.

Note: If they are creating a radio ad, they also need to describe in the script what background sound effects will accompany their ad. For a video ad, they will need to describe the scene and actions of the characters.

After the participants create their ads, at the end of this activity, have each pair do a "show-and-tell" of their ad – describing their Poster Ad or acting out their audio or video ad.

## ACTIVITY #4: Debriefing

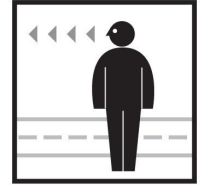


Ask participants to name the top three things they learned today that they felt were most important to them and one safety tip that they hadn't heard before. Tell them that, during the next session, they will have an opportunity to use the Key Points they learned by participating in a walk and pedestrian safety "walkability" assessment of their neighborhood.



## PEDESTRIAN HANDOUT #1: Safe Walking Key Points<sup>2</sup>

1. **Walk on sidewalks.** If sidewalks are not available, walk on the edge of the road or on the left shoulder of the road, facing the traffic flow. Use pedestrian bridges when they are available.
2. **Cross at marked crosswalks or intersections.** Pedestrians are most often hit by cars when they cross the road at places other than intersections.
3. **Look left, right, and left for traffic.** Stop at the curb and look left, right, and left again for traffic. Stopping at the curb signals drivers that you intend to cross. Always obey traffic signals. Keep looking left, right and left as you are crossing.
4. **See and be seen.** Drivers need to see you to avoid you.



- Stay out of the driver's blind spot. (A blind spot is an area of the road that can't be seen by a driver while looking forward or through either the rear- or side-view mirrors of their car.)
- Wear bright colors or reflective clothing, especially if you are walking near traffic at night. (More than half of pedestrian crashes are at night.)
- Carry a flashlight when walking in the dark.
- Do not let kids play near traffic or cross the street by themselves.
- In bad weather, make sure your umbrella and raincoat are brightly colored with retro-reflective stripes so drivers can see you.

5. **Watch out for smaller children.** Small children should not cross streets by themselves or be allowed to play or walk near traffic. Hold hands of children under 10 while crossing the street. Kids cannot accurately judge vehicle distances and speeds, which can result in unexpected movements.

6. **Obey traffic signals.** At intersections where traffic is controlled by signals, pedestrians must obey the signal and not cross against the stop signal. If traffic is being directed by a traffic officer, wait until that officer has signaled that it is OK for you to cross.



7. **Watch out for drivers who aren't paying attention and focus on safety.** Make eye contact with drivers when crossing busy streets. Use extreme caution if they aren't paying attention that is, using a cell phone, driving with a dog in their lap, etc. They may not see you. Turn off your cell-phone and iPod while you are walking, so you can pay attention and hear approaching vehicles.

<sup>2</sup> Adapted from: [http://www.wsdot.wa.gov/Walk/Safety\\_Tips.htm](http://www.wsdot.wa.gov/Walk/Safety_Tips.htm). Graphics from Street Smart Campaign, District of Columbia, Maryland and Virginia

## PEDESTRIAN MODULE 2:

### *"Pedestrian Safety Basics: Taking What We've Learned to the Streets"*

#### 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 increase our physical safety.
- ✓ Introduce participants to additional pedestrian safety measures. Engage participants in applying pedestrian safety measures to an assessment of their immediate neighborhood.
- ✓ Encourage participants to discuss pedestrian safety in their neighborhood with their families.

#### ACTIVITIES & MATERIALS:

##### ACTIVITY #1: Warm-Up (5 min.)

- Materials needed: none
- Handouts: none

##### ACTIVITY #2: Neighborhood Pedestrian Danger Zones (15 min)

- Materials needed:
  - ⇒ A flip-chart and markers for note-taking and for the leader to make simple pictures, charts, or maps of neighborhood "Danger Zones" – places that children in the group believe are unsafe for pedestrians
  - ⇒ (If no flip-chart is available, a chalkboard or dry erase board can be used, but make sure to have someone transcribe the notes onto paper for future use)
- Handouts: none

##### ACTIVITY #3: Neighborhood Walk (30 min.)

- Materials needed:
  - ⇒ For your neighborhood walk, you will need one teaching assistant, an older student (high school or above) or adult to escort each group of 6-8 participants. Make sure that they carry a watch and/or cell phone.
  - ⇒ Written directions for 2-3 simple routes in the neighborhood (approximately 6 blocks in length) for the neighborhood walk; each group can be assigned to take a different route
  - ⇒ Pencils; one for each student.
- Handouts:

⇒ Two copies per group or one per participant of Handout #2: Walkability Checklist

**ACTIVITY #4: Debriefing** (10 min.)

- Materials needed: none
- Handouts: none

## ACTIVITY #1: WARM-UP

Begin with a short brainstorming of the reasons why people walk. Provide examples to get the participants started:

- To go to school
- To go shopping
- For fun and recreation
- Etc.

Conduct a review of the material you covered during the last session by asking participants to recall the Safe Walking Key Points. To help participants, ask them to recall some of the posters and ads they created in this first session.

## ACTIVITY #2: Neighborhood Pedestrian "Danger Zones"

Begin by discussing how we are pedestrians every day. Point out to the group that even though we forget, walking is an important part of our everyday lives. We walk every day for all different kinds of reasons. Ask participants to brainstorm what some of these examples are (e.g., walking to the bus stop or school, walking a pet, exercise, reducing pollution, etc.) You can say, "Let's come up with at least five reasons for why we walk." Write these reasons down on your flip chart or the chalkboard as they name them.



Next, ask participants to think about walking in the neighborhood (the site where the program is conducted). Ask participants to identify intersections or other places where they believe it is unsafe to walk. Ask participants to describe the intersection or area – then draw a picture or small map of the intersection. Ask the group to describe what makes the intersection or area unsafe. Make notes summarizing the things that make the intersection or area unsafe. Discuss three or four examples.

Summarize the discussion by pointing out that an intersection can be unsafe because there is no sidewalk or no crossing signal or something else about the way the intersection is designed that make it unsafe. Remind participants that any intersection can be unsafe if pedestrians are not careful.

## ACTIVITY #3: Neighborhood Walk

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. They will also have a chance to see, in real life, some of the things they will discuss in today's session.

Divide the group into several smaller groups of 6-8 participants each and assign a guide to each group. (Each guide should have the directions for the route of the neighborhood walk for their group.)

Pass out copies of **Handout #2: Walkability Checklist**. Tell participants that on this checklist they will find some of the benefits of walking and the safety measures that they discussed during the first session. They will also find some things discussed in today's session.

Now, take a few moments to review the sets of items on the checklist, and explain that participants will need to give a score at the end of each set.

Have a couple of volunteers pass out pencils. Tell participants that, during their walk, they should:

- ✓ Follow the Safe Walking Key Points.
- ✓ Observe all their surroundings for the items included in the checklist.
- ✓ Make note of items, such as cracks in sidewalks, a lack of sidewalks or crosswalk markings, overgrown trees or other objects that obstruct views of traffic, etc., that should be taken care of through repair or removal. Briefly discuss how factors like these can affect safety.
- ✓ Make note of the locations of things they would like to change.
- ✓ Keep their "group guide" in sight at all times.

Now, divide participants into groups and their corresponding group guides. Point out the meeting point and the time (20 min. or less) you expect the groups to meet there. Remind group guides to be watchful of the time.

When you have gathered again as a whole group, have participants identify any missing items on the checklist. If they have not done so already, make sure they rate each set of items, using the rating scale provided on the form.

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.

## ACTIVITY #4: DEBRIEFING

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. Suggest that they:

- ✓ have their families join them on this neighborhood assessment;
- ✓ that they cover an area around their house or apartment complex similar to the area (two- to three-block radius) that they covered on today's walk;

Pass out extra copies of Handout #2: Walkability Checklist for participants to take home, and thank them for their active participation and team work today.

# HANDOUT #2: WALKABILITY CHECKLIST<sup>3</sup>

Walking should be safe, easy and pleasant. Using this checklist, take a walk and use the checklist to check on how safe it is to walk on that route. As you are walking the route, note the things you feel should be changed to make it a safer, more pleasant, and more enjoyable walking route. If an item doesn't apply, you do not have to respond.

## 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 you have room to walk?

There were sidewalks, paths or shoulders	Yes_____	No_____
Sidewalks started and stopped	Yes_____	No_____
Sidewalks were broken or cracked	Yes_____	No_____
Sidewalks were blocked with poles, signs	Yes_____	No_____
Too much traffic	Yes_____	No_____



Something else:

Circle the number of "Yes" answers.

**1    2    3    4    5**

### 2. Did drivers behave well?

Looked before backing out	Yes_____	No_____
Yielded to people crossing streets	Yes_____	No_____
Turned into crosswalk with people in it	Yes_____	No_____
Drove slowly	Yes_____	No_____
Sped up to get through lights in time	Yes_____	No_____



Something else:

Circle the number of "Yes" answers.

**1    2    3    4    5**

<sup>3</sup> Adapted from: Dakato County Public Works System, West St. Paul, MN

**3. Was it easy to cross streets?**

- There were crosswalks and "walk" signs    Yes\_\_\_    No\_\_\_
- Road was too wide    Yes\_\_\_    No\_\_\_
- Walk signals gave me enough time to cross    Yes\_\_\_    No\_\_\_
- Parked cars blocked my view of traffic    Yes\_\_\_    No\_\_\_
- There were curbs in good repair    Yes\_\_\_    No\_\_\_



Something else:

Circle the number of "Yes" answers.

**1    2    3    4    5**

**4. Was it easy to follow rules?**

Could you:

- Cross at crosswalks    Yes\_\_\_    No\_\_\_
- See both ways before crossing streets    Yes\_\_\_    No\_\_\_
- Walk where you could see oncoming traffic    Yes\_\_\_    No\_\_\_
- Cross with the light    Yes\_\_\_    No\_\_\_



Something else:

Circle the number of "Yes" answers.

**1    2    3    4    5**

**5. Was your walk pleasant?**

- Other people out and about    Yes\_\_\_    No\_\_\_
- Need more grass, plants    Yes\_\_\_    No\_\_\_
- Scary dogs    Yes\_\_\_    No\_\_\_
- Good lighting    Yes\_\_\_    No\_\_\_
- Clean; little litter    Yes\_\_\_    No\_\_\_



Something else:






Circle the number of "Yes".

**1    2    3    4    5**



## 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** \_\_\_\_\_

## CHILD PEDESTRIAN MODULE 3: *"Pedestrian Safety Basics: Faster than You Think"*

### OBJECTIVES:



- ✓ Provide participants with an opportunity to consider how to improve the state of pedestrian safety in their neighborhoods
- ✓ Introduce participants to the concept of "response-time" (how quickly a person reacts to something, such as a sound or sight) and begin to demonstrate that it is a factor in the decisions we make as pedestrians
- ✓ Introduce participants to pedestrian safety measures for the younger child and how child and older children can be role models for safe pedestrian behavior for younger children
- ✓ Provide participants with an opportunity to share pedestrian safety measures for the younger child with those closest to them

### ACTIVITIES & MATERIALS:

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

- Materials needed: none
- Handouts: none

#### ACTIVITY #2: "How Fast Are You?" (25-30 min.)

- Materials needed:
  - ⇒ 12-inch rulers; one per each team of two participants.
  - ⇒ 3" x 5" index cards and pens or pencils; 1 per student.
- Handouts: none

#### ACTIVITY #3: Traffic Signs & Signals Quiz (10 min.)

- Materials needed:
  - ⇒ Make copies of the Pedestrian Handout #3: Traffic Signs and Signals for all participants
- Handouts: none

#### ACTIVITY #4: Debriefing (20 min.)

- Materials needed: none
- Handouts: none

## ACTIVITY #1: WARM-UP

Ask for a show of hands for participants who were able to do a walk of their neighborhood, using the extra checklists they were given at the end of the last session, and take information on their checklists about this walk. (If no one did the walk, ask them to think of the neighborhood walk done the last session.) Choose one or two volunteers and have them share with the rest of the group their responses to the following questions:

- ✓ Was it hard to do the walk?
- ✓ What kinds of things did you notice in particular about your neighborhood that you hadn't noticed before?
- ✓ Did any family members, neighbors or friends come with you?
- ✓ Did *they* notice things about your neighborhood that they hadn't noticed before?
- ✓ Do you, or does your family or neighbors, plan to take any actions about what you saw in your neighborhood? If so, what actions?
- ✓ Would you encourage others here who didn't get to do their neighborhood walk to try it? Why or why not?

When you have finished, tell participants that today they will learn about "reaction time." Ask them if they know what the word "reaction" means and have them give you some examples. When they have finished, tell them that a "response" is like a reaction, and ask them to guess what "response-time" means. If no one guesses correctly, explain that "response-time" is the time it takes for us to do something or to "react" or "respond" to something that's happened around us or to us.

Explain why reaction time is important. Understanding how long it takes you to react (i.e., get out of the way of a moving vehicle) can save your life. This means that you have to judge how long it will take an approaching vehicle to cross your path. Then you need to make sure that you have plenty of time to cross a street to avoid a crash with an approaching vehicle.

Both pedestrians and drivers can be wrong about the time it takes them to respond to situations in the street. When they are wrong, they put others in danger. For example, drivers make think they can "make the light" before it turns red.

Other things can affect our response or reaction time AND that of drivers, including:

- ✓ Little or no light (darkness, fog, no street lights),
- ✓ Visual distractions (have participants name some examples),
- ✓ Sleepiness,
- ✓ Medications that can affect alertness, like sinus medications.
- ✓ Distractions, such as drivers or pedestrians eating, talking on cell phones, etc.

Now, tell them that you will play a game that will show them how long it takes for us to do things: sometimes longer than we think, sometimes faster than we think.

## ACTIVITY #2: "How Fast Are You?"<sup>4</sup>

Divide participants into teams of two and provide each team with a ruler and two index cards. Tell participants that this game will help them to measure their response-time to something they see -- but first you will demonstrate. Recruit a volunteer to help you with this.

Ask participants to have one of their teammates hold the ruler near the end point (the 12-inch mark) and to let it hang down loosely by holding it between their thumb and index finger. Take a moment to demonstrate this.

Next, ask participants to have the other member of their team bring his or her thumb and forefinger to form an "O." Have them place their "O" directly below the ruler. Now, have them slip their "O" over the bottom of the ruler, below the 1-inch mark, as you demonstrate this.

When they have done this, have them "unstick" their thumb and forefinger *without* moving their hands. Tell them that, at some point, the ruler will fall down and they will need to catch it by pinching it in place with their thumb and forefinger but that, until this happens, they are *not* to touch the ruler.



Take a few moments to demonstrate the dropping and catching of the ruler. Now, ask the volunteer you selected to be your partner to drop the ruler when you least expect him or her to do so. Catch the ruler as fast as you can. When you do so, hold it in the place where you pinched it.

Note on your flipchart or chalkboard the number of inches at which you caught the ruler. Next, have participants try this with their partners and record the number of inches at which they caught their rulers on their index cards. Remind them that they must catch the rulers as fast as they can.

Make sure that all the "catchers" were able to catch their rulers. (Help those who couldn't do it by demonstrating it again.) Ask the "catchers" if they knew when the ruler was going to be dropped. Tell the "droppers" that it's very important that "catchers" don't know when the ruler will be dropped. Ask them to try to surprise their partners.

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<sup>4</sup> Adapted from "Neuroscience for Kids," University of Washington, Seattle WA:  
<http://faculty.washington.edu/chudler/neurok.html>

Now, tell participants that the “droppers” will drop their rulers sometime within the next 5 seconds and that “catchers” are, again, supposed to catch their ruler as fast as they can. Again, have them jot down on their index cards the number of inches at which they catch the ruler.

Tell participants that the numbers they recorded on their index cards represent the amount of time it took them to “respond” or “react” to the ruler being dropped. Wait a few moments for their surprised looks and responses, and ask them to look at the first number they jotted down.

Tell them that that number was the amount of time it took them to catch the ruler the first time, and ask if any one knows how much time that was.

Take a moment to ask participants the time it took them to catch the ruler the first and second times. (Ask the group to find out who was the slowest and who was the fastest to do so.)

Note whether or not there was a difference between the two times and ask them why they think there was. Tell them that, if there was an improvement in their time (if they caught the ruler faster than they did the first time), it may have been because they had had a chance to try it. Sometimes, the time it takes us to do something improves with practice.

Ask them if they’ve ever had to cross a street with an electronic signal (i.e., the electronic sign/light that says “Walk” or “Don’t Walk” at intersections, especially those with a traffic signal) that gave them 12 seconds or less to cross. Point out how some of these electronic walk-signals will sometimes give them as much as 60. If they’ve ever had to cross a street with a quick-changing traffic light signal, ask them if they got it right the first time they tried? Did they have to rush at the last minute to get across? Did the time it take them to cross the street improve with practice?

Now, tell the group that you will have them try to catch the ruler under different circumstances and with different students or children to find out how their reaction time varies, and try the following:

✓ Dim Light

Turn off the lights in your room or move to a part of the room where the light is dim. Ask participants to repeat the dropping and catching of the ruler. Did their reaction time increase or decrease in the dim light, or did it stay the same? Can they explain their results?

Now, point out that our reaction- or response-time is always involved in our safety as pedestrians. Ask them if they think it takes them more time or less time to cross a street safely during the day or during the night.

✓ Different Ages

Have participants take a few moments to find and pair up with someone in the room who is as considerably older or younger than them as possible. (Let them include you in this.) Have them

repeat the dropping and catching of the ruler. Who was fastest, the youngest or the oldest participant? Why?

Tell participants that our response or reaction time is often longer than we think and that it changes more often than we know. Ask them if they know why this might be.

Point out that there are many things that influence the time it takes us to respond (like little or no light, visual distractions, sounds, tiredness, sleepiness, etc.), and that we are often unaware of them. Also, our thoughts move faster than our bodies can and we often forget this, too.

Point out that sometimes pedestrians think they can safely cross a busy intersection faster than they can and that sometimes drivers be wrong about the time it takes them to get through a yellow light and end up putting other drivers *and* pedestrians in danger.

### ACTIVITY #3: TRAFFIC SIGNS & SIGNALS QUIZ

Pass out the Quiz (**Handout #3: Traffic Signs & Signals Quiz**). Ask them to match each traffic sign 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 as you tally the answers and field any questions participants may have about each sign.

Quiz Answer Key:

1. g	2. f	3.a	4. h
5.e	6.b	7.c	8.d

### ACTIVITY #4: DEBRIEFING

To wrap up today's session involve participants in a discussion of the day's highlights:

- ✓ What did you learn that was most exciting? Least exciting?
- ✓ What surprised them most about their response-time or the response-time of their peers?

Bring out the key points listed below in the discussion:

## Key Points

- ✓ Our response- or reaction time varies according to many different things (including little or no light, visual distractions, sounds, tiredness, sleepiness, some medications or alcohol, etc.), and we are often unaware of these things. Also, our thoughts move faster than our bodies can and we often forget this, too.
- ✓ Response- or reaction-time has a lot to do with our safety as pedestrians. Both pedestrians *and* drivers are wrong the time it takes them to respond to situations in the street. When they do, they put others in danger.
- ✓ Younger children don't think the way we do and need us to be safe even in very obvious situations:
  - Never let a child less than 10 years of age cross the street alone.
  - Teach young children what you've learned about what to wear and what to do on the street to stay safe.
  - Be a role model: show young kids that you will always follow the rules and they will do the same.
- ✓ When crossing the street:
  - Children under 10 years old should walk, not run.
  - They should be holding hands with an older person (10 years or older) or adult.
  - When crossing in front of a school bus, children must cross at least 10 feet in front of it.
- ✓ When walking:
  - When walking with a child, take the most direct route with the fewest street crossings.
  - Hold hands with children if you are walking through a parking lot.
  - Remind child never to run out into the street for a ball, pet, or for any other reason.

Thank your group for their active participation today and for their team spirit, as well as for caring enough about younger kids to share with them what they know.

# HANDOUT #3: TRAFFIC SIGNS & SIGNALS

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



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- a. Stop. Look for a train.
- b. Do not walk here.
- c. Walk, but look out for traffic.
- d. Stop! Do not walk. Wait until the signal changes.

- e. School zone. Children walk here.
- f. Red light. Do not cross the road.
- g. People cross the street here.
- h. Children play here.