# Safe Routes to School Guide

# Teaching Children to Walk Safely as They Grow and Develop:

A guide for parents and caregivers



Created July 2009





### Acknowledgements

### Barbara Alberson, M.P.H.

California Department of Public Health, Epidemiology and Prevention for Injury Control State and Territorial Injury Prevention Directors Association

### Jennifer L. Huebner

Traffic Safety Programs at AAA

### Eunyoung Lim, M.P.H.

Traffic Safety Programs at AAA

#### Leah Walton

National Highway Traffic Safety Administration

### Jennifer Percer, Ph.D.

National Highway Traffic Safety Administration

### Jeffrey Weiss, M.D.

Phoenix Children's Hospital American Academy of Pediatrics

The authors would like to thank Barbara Alberson, M.P.H., Jennifer Huebner, Eunyoung Lim, M.P.H., Jennifer Percer, Ph.D., Leah Walton, and Jeffrey Weiss, M.D. for reviewing this work.

### **Contents**

Introduction
Part 1: Understanding how children learn pedestrian safety skills 10-2
Children age four to six10-4
Children age seven to nine
Children age ten and older10-6
Part 2: Resources for helping children learn pedestrian safety skills 10-7
Overview for parents and caregivers
For parents and caregivers of children age four to six
For parents and caregivers of children age seven to nine
For parents and caregivers of children age ten and older
References

### Introduction

Walking, first as a child holding the hand of a caring adult, is a form of transportation used throughout life. Being able to walk safely is an important skill that needs to be developed over time, starting with those first hand-held walks. The process is similar to that of how teenagers learn to drive. Just as teenagers must first practice judgment and skills with an adult present and in simple traffic conditions, children need help learning and practicing where and how to walk safely. To help children become safe walkers, adults must look at the world of traffic from a child's point of view and have an understanding of how children's abilities to learn and reason develop over time.

This guide is intended to help parents and caregivers match their guidance and expectations with their children's abilities.

Each child grows and develops differently so it is impractical to expect all children to demonstrate a specific ability at a specific age.<sup>1, 2, 3, 4, 5, 6, 7</sup> This impracticality makes time spent walking together when an adult can assess and guide their child's learning all the more important. Although parents and caregivers are usually the most familiar with their children's abilities, it is common for them to overestimate their children's walking skills.<sup>8, 9</sup> This can lead to children walking in situations that they are not ready to handle.

This guide leads parents and caregivers through stages of child development and identifies which walking safety skills to teach along the way. The guide is divided into two parts:

Part 1: Understanding how children develop and learn pedestrian safety skills provides information about how children develop and what they are ready to learn about safe walking at different ages. Based on child development and pedestrian safety research, each age grouping includes a description of physical, mental and social skills as they relate to pedestrian safety.



Lincoln Elementary, Mt Vernon, Washington

Part 2: Resources for helping children learn pedestrian safety skills provides brief assessment tips and age-appropriate knowledge and skills to teach children about pedestrian safety. The information is organized into several one-page handouts for easy sharing with other parents and caregivers.

### Part 1: Understanding how children develop and learn pedestrian safety skills

### Key pedestrian skills for children

What do children need to learn in order to become aware, traffic-smart pedestrians? Walking skills, such as choosing where to walk and when and how to cross a street, can become second nature over time. But children first need to develop the judgment to see what is different about every walking situation. In other words, children can't just transfer a particular procedure from one street crossing to the next without needing to use judgment each time. Children must be able to combine their mental and physical abilities, as well as their pedestrian knowledge, to walk safely.<sup>10</sup> Parents and caregivers can help their children learn and develop these skills and behaviors by providing repeated instruction and modeling. 10, 11, 12, 13, 14 This section provides a brief overview of the basics for choosing where to walk and how to cross streets and how growing children gain abilities in carrying out these key skills.

### Choosing where to walk

When setting foot outside, a pedestrian's first decision is to pick where to walk. Sidewalks and paths that separate walkers from motor vehicles are ideal. When not available, roads with wide shoulders where a pedestrian can walk facing oncoming traffic are next best. Roads with the least traffic and lowest speeds are generally safer for walking. Some areas will feel safer than others depending on the presence of other people on the street and whether there is evidence of criminal activity.

When walking with children, parents can explain why and how they selected their walking route. As their child gets older, parents can ask their children to suggest where to walk and ask them to explain why.

### Finding a place to cross

Crossing the street incorporates many different types of pedestrian skills and knowledge and begins with identifying a safe place to cross.<sup>15</sup> In general, a safe crossing location is one that has a clear view of traffic from all angles, few cars, and crossing aides (like a traffic signal



Lexington, Nebraska

with a "walk" phase or a crossing guard). It's particularly helpful if this is a crossing that can be used each time the child walks to a particular destination.

To choose a safe place to cross along a new route, children must be able to evaluate the situation, including the ability to judge the presence of traffic, traffic speed and the availability of crossing aides. <sup>10</sup> Children also must evaluate their own abilities as pedestrians to decide whether they are safe to cross. In other words, children need to decide if they feel comfortable crossing. Before being ready to take on these tasks alone, a parent needs to provide practice time and guidance.

Parents can help teach and reinforce these judgment skills by walking with their children and modeling safe pedestrian behavior, such as stopping at the curb and looking for traffic in all directions before crossing a street. Young children need to walk with a parent or caregiver to practice safe crossing behavior. Young children should also be shown the safest crossing site along any route that they will walk on a regular basis, such as the route to school. Parents and caregivers can help their older children choose the safest crossing location to use along a route and instruct them to always cross at that site.

### Crossing the street

After children are able to judge a crossing site and decide it is safe to cross, they must then be able to focus their attention on crossing the street safely.<sup>10, 15</sup> Two skills necessary for crossing the street safely are attention-switching and concentration.

Attention-switching is the ability to select the most important parts of a situation, such as a flashing crosswalk and an oncoming car, while ignoring distractions. For example, a child must be able to shift attention from friends playing across the street to oncoming traffic in order to pay attention to motor vehicles and assess the safety of the situation. Attention-switching is an important skill for children to have in order to recognize traffic when crossing and selecting safe crossing locations and times.<sup>4, 5, 16</sup>

Concentration is also important because a child must be able to continue watching for traffic while crossing the street. A loss in concentration while crossing could mean a child does not see oncoming traffic or a turning car. Attention-switching and concentration are cognitive skills that children are developing and improving throughout childhood, so they often need extra help focusing on the important information in a crossing or pedestrian situation.

### Consistently applying skills to new crossing locations

Once children are able to identify safe crossing sites and maintain focus while crossing, they then must be able to use their skills consistently to cross safely at different locations. Children may not always make safe decisions, even if they have learned pedestrian safety rules and skills. More specifically, children may learn they need to stop, wait, listen and look while crossing at a curb, but they have a hard time repeating the same process if crossing elsewhere. Consistent, safe crossings require children to judge and pick a safe crossing site, choose an appropriate gap in traffic, use coordination skills and maintain concentration while crossing. Children need help from parents and caregivers to repeat the process successfully many times before they can complete it safely by themselves. 11, 12, 18, 19,

### Putting it all together

Deciding where to walk and picking the right time and place to cross streets are all skills that help prepare children for a lifetime of safe walking. The ultimate goal of a parent's time spent discussing and modeling safe walking with children and giving them opportunities to practice is to help children become safe, confident and independent pedestrians. They will be able to recognize and pick the best places to walk and cross and behave as safely as possible near traffic.<sup>4, 18, 20</sup> These children may also grow up to become better drivers because they understand how to share the road with people on foot. The following sections provide more detail of the abilities of children at different ages.

### **Growth and Development Key Points**

- 1. Children need to be able to choose the safest places to walk.
- **2.** Children need to learn where to cross streets and how to cross safely.
- **3.** Children will demonstrate these skills *some* of the time, so continued practice is needed until they are consistent.
- **4.** Attention-switching and concentration skills are essential for safe walking and develop as children mature.

### Childen age four to six

Children who are four to six years of age are entering a time when their physical and mental abilities allow basic walking safety skills to be introduced, discussed and practiced. This age group needs to walk with an adult who will make safety a priority.

Young pedestrians are at particular risk of injury from running into the road from between parked cars or other obstacles for several reasons. First, it is hard for children in this age group to see oncoming cars because obstacles, such as parked cars, often block their view of traffic. At the same time, they are still learning how to use their peripheral vision and how to use the information they see to identify oncoming cars.<sup>21, 22</sup>

While young children usually wait for a longer period of time before crossing than older children, there may be a delay between the time a young child decides it is safe to cross the street and when he or she actually starts to cross. <sup>23</sup> Due to that delay, it may no longer be safe to cross because motor vehicles may be closer than when the child first decided to cross. <sup>4</sup> Young children are also at risk for traffic-related injuries because without training or prompting they may not fully understand why traffic situations are dangerous. <sup>18, 24</sup>

Distraction and impulsivity also are contributors to unsafe behaviors because they can affect a child's decision-making process while walking and may lead to unsafe crossing choices or other unsafe pedestrian behavior. <sup>19, 23, 25, 26, 27</sup> For example, a child who chases a ball into the street does not automatically realize that they have gone from playing in the yard to running in the street.

While children are becoming more physically independent, they still are influenced by, and depend on, parents and caregivers for guidance and assistance in their everyday lives. As with all children, parental supervision is an important factor in decision-making for safe walking.<sup>23, 28</sup> Adult-led instruction and modeling of safe pedestrian behaviors can help children learn by giving an opportunity for discussion about the safety of real-world walking situations.<sup>10, 11</sup>



McCook, Nebraska

### **Growth and Development Key Points**

### Children age four to six:

- 1. Need supervision.
- 2. Are ready to practice the basics.
- **3.** May do the unexpected.
- 4. Need adults to model safe walking behavior.

### Children age seven to nine

Children seven to nine years old can continue expanding their pedestrian abilities and knowledge through more education and practice with parental or adult supervision. As with younger children, seven to nine year olds are developing at different rates and gaining pedestrian skills at varying times throughout this time period.

By this age range, children can usually reason about past and future events, which allows for in-depth instruction about more complex safety behaviors. Parents and other adults can begin discussing how safe crossing strategies might differ according to the location. The ability to understand more complex instruction allows children in this age group to combine their knowledge and everyday experiences to strengthen their safe walking habits.

Children seven to nine years old also continue to develop their attention switching skills and their ability to scan scenes and identify important information, such as oncoming traffic.<sup>3, 27, 29</sup> These skills are essential to the ability to decide when it is safe to cross and to focus on crossing safely. To cross the road safely, children must be able to locate and acknowledge traffic and pay attention to how traffic is moving while ignoring other distractions in their environment, such as someone walking a dog or a friend calling to them from across the street.<sup>10</sup>

As children develop these skills and are better able to focus their attention on single tasks, such as stopping at the curb to check for cars, they can continue to strengthen their safe walking abilities.

As children in this age range are developing, they should be supervised and instructed to ensure that they follow pedestrian safety rules. Despite their increasing abilities, children at this stage should not be in traffic alone.<sup>3, 5, 10</sup>



Niskayuna, New York

### **Growth and Development Key Points**

### Children age seven to nine:

- 1. Still need supervision.
- 2. Are ready to learn more complicated skills.
- **3.** Benefit from walking with an adult who explains more complex pedestrian safety tasks, such as where and when to cross at a new location.

### Children age ten and older

Children age ten and older continue to develop their physical, cognitive and psychosocial abilities. They are improving their processing, attention and decision-making skills, all of which are essential to pedestrian safety.<sup>2, 29, 30</sup> Some children in this age group may be walking with little or no supervision. Therefore, it is essential for parents to ensure that their children continue to learn and practice the skills developed throughout younger childhood. To help their child prepare to walk alone, parents may want to begin with simple, low traffic routes. Walk the route with the child and talk about where to walk and, if necessary, where to cross before the child tries it alone.



Hillside Elementary School, Niskayuna, New York

### **Growth and Development Key Points**

### Children age ten and older:

- **1.** Are usually ready for a mix of independence and supervision.
- **2.** May need reinforcement and reminders about safe walking behaviors.
- **3.** Benefit from practicing a specific route with an adult to talk about where to walk, where to cross and any other safety considerations before walking the route alone.

### Part 2: Resources for helping children learn pedestrian safety skills

### A. Overview for parents and caregivers

Describes basic pedestrian safety skills and highlights children's abilities and learning needs at different ages.

### B. For parents and caregivers of children age four to six

Provides ways for parents to discuss safe walking with their young child.

### C. For parents and caregivers of children age seven to nine

Provides a basic checklist to assist in assessing and building children's pedestrian safety abilities.

### D. For parents and caregivers of children age ten and older

Provides a basic checklist to assist in assessing and building the pedestrian safety abilities of older children.

# HELPING CHILDREN LEARN PEDESTRIAN SAFETY SKILLS: Overview for parents and caregivers

Walking is a fun and healthy way to spend time with your child. You are your child's most important role model for walking safely. Children learn by watching others, so your own safe pedestrian behavior is the best way to teach these valuable skills. Consider these tips as you walk with your child:

- 1. Obey all traffic signs and signals.
- 2. Choose routes that provide space to walk and have the least amount of traffic and lowest speeds.
- 3. Look for traffic at all driveways and intersections.
- 4. If possible, cross at a crosswalk or at an intersection with a walk signal.
- 5. Stop at the curb and look for traffic in all directions (left, right, left, to the front and behind). At an intersection, it is important to look in front and in back to check for turning vehicles. The second look to the left is to re-check for traffic that is closest to you.
- 6. Wait until no traffic is coming and start crossing; keep looking for traffic as you cross the road.
- 7. Walk across the road. Do not run.
- 8. Wear reflective gear if it is dark or conditions limit visibility, such as rain or snow.
- 9. Talk with your child about what you're doing and why as you walk.

Although you might be able to see quickly that it is safe to cross the road or make other decisions while walking, your child may not know or understand why it is safe. Help your child understand and learn safe walking skills by practicing them each time you walk near or around traffic and taking the time to talk through new situations.

As a driver you can also be a role model for safe behavior. Respect pedestrians and use the drive time to teach your child about signs, signals and other traffic rules.

### Developing pedestrian skills

Children's ability to understand and make decisions about where to walk and cross the street change as they grow and develop.

#### Children age four to six:

- 1. Have limited judgment, making it hard for them to know where or when it is safe to cross the road.
- 2. Cannot gauge the speed of oncoming traffic.
- 3. Can be impulsive and lose concentration easily.
- 4. Have a hard time staying focused on one task, such as crossing the road.



### Walk together

This age group needs to walk with adults who will make safety a priority. Children age four to six still are learning what it means to be safe. They should always be with an adult while walking. The best way for children to learn is by repeating safe walking skills with an adult.

### Overview for parents and caregivers (continued)

### Children age seven to nine:

- 1. Need supervision as they learn more complicated pedestrian safety skills.
- 2. Can begin to identify safe crossing sites with help and practice.
- 3. Can begin to learn how to identify traffic and stay focused while crossing the street with help and practice.

### Teach lifelong skills

These years are the time to teach skills that prepare children to be safe walkers throughout their lives. Children age seven to nine can begin to learn more complicated pedestrian safety tasks. Even though they are older, they always should be with an adult while walking near or around traffic. The best way for children to learn is by repeating safe pedestrian skills with an adult.

### Children age ten and older:

- 1. Need specific instruction and modeling as they learn more complicated pedestrian safety skills.
- 2. Can identify safe crossing sites with help and practice.
- 3. With help and practice, can identify traffic and stay focused while crossing the street.

### Find a mix of independence and supervision

Children age ten and older gradually can learn more complicated pedestrian safety tasks. Even though they are older, they should still be with an adult while walking near or around traffic until they consistently demonstrate safe pedestrian skills. The best way for children to learn is by practicing safe pedestrian skills with an adult. As children grow, revisit these safety issues often to make sure they are still practicing safe behavior.

### How can you help?

You can help your children by talking with them and showing them the correct safe behavior. Consider starting with these tips:

- 1. Walk with your child to model correct safety behaviors.
- 2. For routes that will be repeated (like walking to school), walk with your child to help pick the safest route. Explain that is important to always follow this route.
- 3. Stop at every curb and talk with your child about the importance of stopping to look for traffic in all directions before crossing.
- 4. Wait with your child at the curb and explain that it is important to wait until there is no traffic coming in any direction before crossing the road together. If you are at an intersection with a walk signal, explain that you wait until the walk sign appears and then look in all directions for traffic before crossing.
- 5. As you cross, help your child stay focused on crossing safely by holding his or her hand and walking directly to the other side of the street.

### How to choose the safest route

- 1. Choose the route with the fewest streets to cross.
- 2. Avoid crossing busy or high-speed streets.
- 3. Pick places that have sidewalks when possible. If there are no sidewalks, the second choice is to walk facing oncoming traffic as far to the right as possible.

Make sure to always follow this same route when walking with your child to a particular destination.

## HELPING CHILDREN LEARN PEDESTRIAN SAFETY SKILLS: For parents and caregivers of children age four to six

You know your child's behavior and abilities best. Keep in mind that all children develop differently but young children always need supervision when they walk in or near traffic. Help your child become a safe pedestrian by practicing these skills.

### Help your child safely cross the street

1. Stop at the edge of the road.

**Say**: We stop here at the edge of the road to look for cars before we cross.

We only cross where we can see if cars are coming.

2. Look in all directions for traffic.

**Say**: Before we cross, we look for cars. We look left, right, left again and behind us. Let's look together.

3. Cross only when no cars are coming.

Ask: Do you see any cars coming?

4. Hold hands when crossing. Walk across the road when no cars are coming.

**Say**: Now we can walk across the road because no cars are coming. We're going to keep watching for cars as we cross.



### Help your child understand the traffic environment

1. Walk with your child and hold hands.

**Say**: We always hold hands when we walk to stay safe.

2. Explain stop signs, crosswalks, traffic lights and other pedestrian signs that you see along your walk.

**Say**: Stop signs are red, they tell cars to stop. Crosswalks are where people walk across the road. Traffic lights tell cars when to stop and when to go. For cars, red means stop and green means go.

3. Show your child the safest place to cross.

**Say**: This is where we cross the road because we can see when cars are coming and they can see us. We cross at a crosswalk or intersection when we can because that is where drivers expect to see walkers.



Prepared by the National Center for Safe Routes to School with funding from the National Highway Traffic Safety Administration

# HELPING CHILDREN LEARN PEDESTRIAN SAFETY SKILLS: For parents and caregivers of children age seven to nine

You know your child's behavior and abilities best. While every child's development is unique, children in this age group need supervision when they walk near traffic. Make sure your child is ready for the next step in learning how to walk safely by checking the following:

My child:
☐ Understands that traffic is dangerous.
Uses safe crossing sites we have identified together.
☐ Always stops at the edge of the road.
☐ Always looks in all directions before starting to cross.
☐ Starts crossing when no cars are coming.
☐ Keeps looking for traffic when crossing.
☐ Walks directly across the road.



### If your child has trouble with these steps, practice and talk about the following:

- 1. Safe crossing sites have few cars and clear views of traffic.
- 2. Always stop at the edge of the road or the curb to look for traffic.
- 3. It is important to look for cars in all directions before starting to cross.
- 4. It is safest to cross when no cars are coming in any direction. If you are at an intersection with a walk signal, wait until the walk signal appears and then look in all directions for traffic before crossing.
- 5. Keep looking for traffic when crossing to make sure you can see cars coming.
- 6. Walking directly across the street is the safest way to cross.



Prepared by the National Center for Safe Routes to School with funding from the National Highway Traffic Safety Administration

# HELPING CHILDREN LEARN PEDESTRIAN SAFETY SKILLS: For parents and caregivers of children age ten and older

You know your child's behavior and abilities best. By age ten, some children are walking with less supervision or alone. Use this checklist to assess your child's skills in walking safely near traffic.

My child:
☐ Understands that traffic is dangerous.
☐ Chooses and uses safe crossing sites along all walking routes.
☐ Always stops at the edge of the road.
☐ Always looks in all directions before starting to cross.
☐ Starts crossing when no cars are coming.
☐ Keeps looking for traffic when crossing.
☐ Walks directly across the road.
Uses safe pedestrian behavior in all traffic situations.



### If your child has trouble with these steps, go over the following:

- 1. Safe crossing sites have few cars and clear views of traffic.
- 2. Always stop at the edge of the road or the curb to look for traffic.
- 3. It is important to look for cars in all directions before starting to cross.
- 4. It is safest to cross when no cars are coming in any direction. If you are at an intersection with a walk signal, wait until the walk signal appears and then look in all directions for traffic before crossing.
- 5. Keep looking for traffic when crossing to make sure you can see cars coming.
- 6. Walking directly across the street is the safest way to cross.

When walking together, continue to observe your child's behavior. While older children may know the rules, they may not always follow them or may get distracted.

### References

- 1. Schieber, R. A. (1996). Developmental risk factors for childhood pedestrian injuries. *Injury Prevention*, 2(3), 228–236.
- 2. Vinje, M. (1981). Children as pedestrians: Abilities and limitations. Accident Analysis & Prevention, 13(3), 225–240.
- 3. Whitebread, D. & Neilson, K. (2000). The contribution of visual search strategies to the development of pedestrian skills by 4–11 year-old children. *British Journal Education Psychology*, 70(4), 539–557.
- 4. Thomson, J. A. (2006). Applied Spatial Cognition: From Research to Cognitive Technology (G. L. Allen, Ed.). London: Routledge.
- 5. Dunbar, G., Hill, R. & Lewis, V. (2001). Children's attentional skills and road behavior. *Journal of Experimental Psychology*: Applied, 7(3), 227–234.
- 6. Tolmie, A.K., Thomson, J.A., Foot, H.C., Whelan, K.C., Sarvary, P. & Morrison, S. (2002). Development and evaluation of a computer-based pedestrian training resource for children aged 5 to 11 years. (Road Safety Research Report No. 27). London: Department for Transport.
- 7. Michon, J.A. (1981). Traffic education for young pedestrians: An introduction. *Accident Analysis & Prevention*, 13(3), 163–167.
- 8. Rivara, F. P., Booth, C. L., Bergman, A. B., Rogers, L. W. & Weiss, J. (1991). Prevention of pedestrian injuries to children: Effectiveness of a school training program. *Pediatrics*, 88(4), 770–775.
- 9. Dunne, R. G., Asher, K. N. & Rivara, F. P. (1992). Behavior and parental expectations of child pedestrians. Pediatrics, 89(3), 486–490.
- 10. Percer, J. (in press). Child pedestrian safety education: Applying learning and developmental theories to develop safe street-crossing behaviors. Washington, DC: National Highway Traffic Safety Administration.
- 11. Thomson, J. A., Ampofo-Boateng, K., Lee, D.N., Grieve, R., Pitcairn, T.K., & Demetre, J.D. (1998). The effectiveness of parents in promoting the development of road crossing skills in young children. *British Journal of Education Psychology*, 68(4), 475–491.
- 12. Sandels, S. (1975). Children in traffic. London: Elek.
- 13. Tolmie, A.K., Thomson, J.A., Foot, H., Sarvary, P., Karagianidou, E. & Banks, M. (2006). The role of skills, attitudes and perceived behavioural control in the pedestrian decision-making of adolescents aged 11–15 years. (Road Safety Research Report No. 68). London: Department for Transport.
- 14. Rothengatter, J. A. (1981). The influence of instructional variables on the effectiveness of traffic education. *Accident Analysis & Prevention*, 13(3), 241–253.
- 15. Tabibi, Z. & Pfeffer, K. (2003). Choosing a safe place to cross the road: The relationship between attention and identification of safe and dangerous road-crossing sites. *Child: Care, Health, & Development*, 29(4), 237–244.
- 16. Demetre, J. D., Lee, D.N., Grieve, R., Pitcairn, T.K. et al. (1993). Young children's learning on road-crossing simulations. *British Journal of Educational Psychology*, 63(2), 348–358.
- 17. Zeedyk, M. S., Wallace, L., Carcary, B., Jones, K. & Larter, K. (2001). Children and road safety: Increasing knowledge does not improve behaviour. *British Journal of Educational Psychology*, 71(4), 573–594.
- 18. Ampofo-Boateng, K. & Thomson, J. A. (1991). Children's perception of safety and danger on the road. *British Journal of Psychology*, 82(4), 487–505.
- 19. Briem, V. & Bengtsson, H. (2000). Cognition and character traits as determinants of young children's behaviour in traffic situations. *International Journal of Behavioral Development*, 24(4), 492–505.

- 20. Van der Molen, H. (1981). Child pedestrian's exposure, accidents and behavior. *Accident Analysis & Prevention*, 13(3), 193–224.
- 21. David, S. S., Foot, H. C. & Chapman, A. J. (1990). Children's sensitivity to traffic hazard in peripheral vision. *Applied Cognitive Psychology*, 4(6), 471–484.
- 22. Maurer, D. & Lewis, T. L. (2001). Visual acuity: The role of visual input in inducing postnatal change. *Clinical Neuroscience Research*, 1(4), 239–247.
- 23. Barton, B. K. & Schwebel, D. C. (2007). The roles of age, gender, inhibitory control, and parental supervision in children's pedestrian safety. *Journal of Pediatric Psychology*, 32(5), 517–526.
- 24. Hilll, R. Lewis, V. & Dunbar, G. (2000). Young children's concept of danger. *British Journal of Developmental Psychology*, 18(1), 103–119.
- 25. Demetre, J. D. & Lee, D.N. (1992). Errors in young children's decisions about traffic gaps: Experiments with roadside simulation. *British Journal of Psychology*, 83(2), 189–202.
- 26. Foot, H., Tolmie, A., Thomson, J., McLaren & Whelan, K. (1999). Recognizing the hazards. *The Psychologist*, 12(8), 400–402.
- 27. Pasto, L. & Burack, J. A. (1997). A developmental study of visual attention: Issues of filtering efficiency and focus. *Cognitive Development*, 12, 427–439.
- 28. Zuckerman, B. S. & Duby, J. C. (1985). Developmental approach to injury prevention. *Pediatric Clinics of North America*, 32(1), 17–29.
- 29. Pearson, D. A. & Lane, D. M. (1991). Auditory attention switching: A developmental study. *Journal of Experimental Child Psychology*, 51(2), 320–334.
- 30. Ridderinkhof, R. K., van der Molen, M.W., Band, G. P. & Bashore, T. R. (1997). Sources of interference from irrelevant information: A developmental study. *Journal of Experimental Child Psychology*, 65(3), 315–341.