

Safe Routes to School Guide

Education



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Overview

Education is one of the complementary strategies in a Safe Routes to School (SRTS) program. Education activities include teaching pedestrian, bicyclist and traffic safety and creating awareness of the benefits and goals of SRTS. While education dovetails with engineering and enforcement, it is most closely linked to encouragement strategies. For example, children may learn pedestrian and bicyclist safety skills and then get the chance to join a mileage club that rewards children for walking or bicycling to school. Encouragement activities also offer “teachable moments” to reinforce pedestrian and bicyclist safety education messages.

Planning education strategies includes identifying:

- Who needs to receive information.
- When the education should be delivered.
- What information needs to be shared.
- How the messages will be conveyed.

Who

Audiences for SRTS education include:

- Children.
- Parents.
- Drivers.
- Neighbors.

Once a community decides to begin a SRTS program, each of these audiences plays a role in receiving and/or providing related education. Some sub-groups may require particular attention, such as families who do not speak English as a first language, individuals with vision, hearing or mobility impairments, and families with low-incomes. These groups are often overlooked so planning ahead for how they will be reached is important.

When

Before beginning encouragement strategies, children should receive pedestrian and bicyclist safety education. Sometimes education strategies need to begin quickly. For example, in areas with unsafe routes where children are already walking or bicycling out of necessity, educa-



Law enforcement officer teaching children about pedestrian safety in Baltimore, Maryland.



David Parisi

Educating drivers in a school drop-off and pick-up area.

tion is urgently needed to reduce the risk of injury to children until other measures can also be put into place. The timing for education activities can also depend on the issues in the community and how education fits with other parts of the SRTS program.

What and How

What information needs to be shared with each audience is presented in this chapter as “key messages.” How the information can be conveyed is described in “strategies.” Key messages and strategies are organized by audience. It is worthwhile to read about all groups because there is overlap among them. For example, sometimes parents and neighbors are also drivers near the school and thus need to be reached for a variety of reasons in a variety of ways.

.....
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.....

Effective Education Strategies for Children and Adults

Planning successful Safe Routes to School (SRTS) education activities requires considering how children and adults learn best. Children benefit from a combination of educational methods such as group activities, hands-on skill building and discussion. Many of the pedestrian and bicyclist safety skills that children need cannot be taught solely by verbal instruction; they also require practical experience.^{1, 2} Hands-on activities, such as simulated street crossings and bicycle handling drills provide children with the opportunity to watch and apply safety skills. A parent or instructor walking or bicycling with a child enables the child to learn in a “real world” setting, and allows the adult to assess how well the child understands and applies safety skills.

Adults learn best when they feel the topic is relevant to them.³ SRTS education aims to provide parents with information about how to address barriers to walking and bicycling and how to create and promote safe walking and bicycling behaviors and environments for their children. For example, if vehicles frequently speed near the school, parents may be educated on both how the speed of a vehicle hitting a pedestrian relates to the seriousness of injuries and potential solutions for improving safety.

Children

Teaching children to safely walk and bicycle is of central importance in Safe Routes to School (SRTS) programs. A secondary, valuable focus is teaching children about the benefits of walking and bicycling, such as the positive impact these activities have on personal health and the environment. Knowing these benefits can help children understand the importance of these activities and inspire participation.

School-based Education

This section focuses on the delivery of education through the school because:

- While ideally children receive most of their instruction from parents, this does not always happen. School-based education assures that all children get the chance to learn and practice the same skills.
- All children can benefit from learning bicycle and pedestrian safety behaviors, regardless of whether they will walk and bicycle to school, as these skills will serve them throughout life.
- The reality in some communities is that young children who would ideally be supervised by adults are walking to school alone, which makes providing safety education and other strategies all the more important.

When to Teach

A challenge with providing safety education in the schools is that children, even in the same grade, vary in their readiness to handle traffic situations, such as choosing a safe time to cross a street. In general, children are not ready to cross a street alone until age 10.⁴ Ideally parents are a central figure in their children's safety education. Parents have the best opportunities to



A family travels together to Marylin Elementary School in Atlanta, Georgia.

effectively assess their individual child's skills and teach safe behavior in the course of daily life so they should be encouraged to participate in their child's safety education. It is also important to emphasize to children that they need to check with their parents before walking or bicycling alone. Children may believe that because they have been taught how to cross a street, for example, that they are ready to do so on their own.

Key Messages For Children

This section includes four main education topics that relate to Safe Routes to School (SRTS) for children:

- Pedestrian safety skills.
- Bicyclist safety skills.
- Personal safety.
- Health and environment benefits.

Strategies for educating children around these key messages are provided in the next section, Strategies for Educating Children.

It is also important to emphasize to children that they need to check with their parents before walking or bicycling alone.

Pedestrian Safety Skills

When pedestrians between the ages of five and nine are injured it is most often when motor vehicles have hit them as they cross the street midblock, particularly from between parked motor vehicles.⁵ Running across intersections and getting off of school buses are also common times for children to be hit by motor vehicles. In general, children are not ready to cross a street alone until age 10.⁴ However, children vary in their developmental readiness to make decisions about where and when to walk and cross a street. Parents are often the best judges of when their child is ready to walk without an adult. When they are ready for this level of independence, children need to know how to choose where to walk, as well as when, where and how to cross a street. These skills also require an understanding of how to interact with drivers.

Children need to know the following points:

- Ask a parent before walking anywhere without them.
- Use sidewalks or paths. If there are no sidewalks or paths, walk as far from the motor vehicles as possible on the side of the street facing traffic.
- Watch for motor vehicles turning or pulling out of driveways.

Children who are old enough and have parent permission to cross the street need to know the following additional points:

- Choose the route with the fewest streets to cross. Avoid crossing busy or high-speed streets.
- Be more visible to drivers by wearing bright clothing in the daytime. When there is little or no light, such as at sunrise or sunset, wear retro-reflective gear or carry a flashlight.
- Always look for motor vehicles. Drivers are supposed to obey the rules and watch for pedestrians but they cannot be relied on to always do so.
- Do not cross behind or within 10 feet of the front of a bus or other large motor vehicle because the driver can not see this area.
- Stop at the edges of driveways and curbs or edges of the street where no curb exists and look for motor vehicles before proceeding.



Practicing crossing the street in Greensboro, North Carolina.



Preparing to practice pedestrian safety skills in Santa Ana, California.



Practicing safe riding skills at Manor School in Fairfax, California.



Children practice crossing in a simulated setting at College Gardens Elementary School, Rockville, Maryland.

- Watch for parked motor vehicles that may be getting ready to back up or pull forward.
- Before crossing, always look for motor vehicles even after a crossing guard, parent or other adult says it is okay to cross.
- Walk, don't run, across the street.
- If crossing the street at midblock:
 - Stop at the curb and look left, right and left again for traffic.
 - Wait until no traffic is coming and begin crossing. Keep looking for traffic until you have finished crossing.
- If crossing between parked motor vehicles is necessary:
 - Stop at the curb and check to see if the motor vehicles are running or if anyone is in the driver seat. If there is a driver, make eye contact and be sure you are seen before stepping in front or behind the motor vehicle.
 - If safe, walk to the edge of the parked motor vehicles, and look left, right and left again before crossing. Keep looking for traffic until you have finished crossing.
- If crossing the street at an intersection:
 - Obey traffic signs and signals.
 - When the signal indicates it is time to cross, check for motor vehicles. Drivers may not obey the rules and turning drivers may not look for pedestrians.
 - Look to see if motor vehicles are coming. Look left, right and left; then behind and in front for turning motor vehicles. Keep looking for traffic until you have finished crossing.



David Parisi

Santa Barbara, California.

Bicyclist Safety Skills

Riding a bicycle is a major step towards independence and mobility for children and, like walking, is a skill that can be used throughout a lifetime. Supervised practice time on the bicycle is the most important way for children to gain riding and safety skills. It can also instill confidence and create better riders as well as better future drivers who are more aware of bicyclists on the street.

Before riding to school, children first need to have sufficient bicycle handling skills, including the ability to:

- Ride in a straight line.
- Ride in a straight line while scanning the situation ahead, behind and to the side.
- Stop quickly using the bicycle's brakes without swerving, falling or colliding with anything.
- Swerve in a controlled manner to avoid a hazard or collision.

When children have these skills, they should learn and be able to demonstrate the following safety behaviors before riding to school:

Preparing for the ride

- Dress appropriately. Wear brightly colored, close-fitting clothing. Tie your shoes and secure long laces and loose pant legs. Do not wear headphones.
- Wear a properly fitted helmet. See the Resources section for information about bicycle helmet fit.
- Ride a bicycle that fits. When seated on the bicycle, both feet should be firmly planted on the ground and hands should reach the handlebars.

- Ride a bicycle that is in good condition. Tires should be firm, brakes should prevent tires from rotating when pushed, chain should not droop or be rusty and the seat and handlebars should be tight.
- Do not carry anyone else on the bicycle. A bicycle with one seat is a bicycle for one person.
- Do not carry anything in your hands. Use a backpack, basket or panniers to carry school supplies and books.
- It is best to ride only in daylight. If riding when it is dark, use headlights, taillights and reflectors, and wear bright clothing with reflective material.

During the ride

- Choose the route with the fewest streets to cross. Avoid busy and high-speed streets.
- Before entering the street, look for other vehicles to the left, right, in front and behind.
- Keep paying attention to your surroundings. Watch for other vehicles and hazards, such as potholes and parked motor vehicles, along the route.
- Watch for motor vehicles turning into or exiting at driveways.
- Stop at all intersections, and check for traffic before crossing. When possible, cross at locations where adult school crossing guards are present. It may be best to dismount and walk your bicycle across large or busy intersections.
- Ride in a straight line with two hands on the handlebar unless signaling.
- Follow all traffic laws, including:
 - If riding in the street, ride in the same direction as motor vehicles, on the right hand side of the street, about two or three feet from the edge.
 - Use hand signals when turning and stopping.
 - Obey traffic signs and signals.
- Always check in front and behind for traffic before changing lanes, crossing intersections or turning.
- If riding on a sidewalk or path, ride slowly and be prepared to stop quickly.

Bicycle Helmets

The protective effects of bicycle helmets are well-documented.^{7,8} Studies on bicycle crashes have shown that helmet wearers have a significantly lower risk of head and facial injuries than bicyclists without helmets.^{9,10,11} In fact, one study found that bicyclists wearing helmets had reductions in their risks of head and brain injuries of 85 percent and 88 percent respectively.¹²

Bicycle helmets must be used by students participating in bicycling program. Some schools have rules that require students to attend a bicycle safety education class before bicycling to school and to wear a helmet whenever bicycling to school. In addition, many states and municipalities have laws requiring helmet use. See the Bicycle Helmet Safety Institute for a list of locations with bicycle helmet laws at www.helmets.org.



Bicycle safety training at Henry Elementary School in Tucson, Arizona.



A law enforcement officer teaches bicycle safety in Tucson, Arizona.

Personal Safety

In addition to pedestrian and bicyclist skills, many schools teach children ways to avoid potential risks in their environment beyond traffic, like criminal activity and people that may want to harm them. Fear of abduction or assault discourages some parents from allowing their child to walk or bicycle to school. Although child abduction, particularly near a school, is very rare, SRTS programs need to address not only the real dangers from crime, but also parents' perceptions. Whether dangers are real or perceived, both affect parents' decisions to allow their children to walk or bicycle to school. Some students and parents worry about bullying by other children while walking or bicycling to school. Schools address bullying as part of violence prevention programs, which can be incorporated into the SRTS program.

Walking school buses can help address personal safety concerns by providing a way for children to walk in a group with adult supervision.

Health and Environment Benefits

Beyond safety, education for children may also address benefits to personal health and the environment provided by walking and bicycling. Health benefits often focus on the importance of physical activity. Children learn about how the cardiovascular and muscular systems function and how physical activity can strengthen these systems. Although most children engage in physical activity primarily because they think it is fun, highlighting the relationship between personal health and physical activity gives children another reason to be physically active.

Education may also include information about the impact of motor vehicle use on air quality and limited energy resources. Children learn that they can help keep the environment healthy by walking and bicycling instead of traveling in a motor vehicle.

See the Resources section of this chapter for related programs and materials.



Allegheny Elementary School, Pittsburgh, Pennsylvania.

Highlighting the relationship between personal health and physical activity gives children another reason to be physically active.



Morton Way Elementary School focuses on air quality as a reason to walk in Brampton, Ontario, Canada.

Strategies For Educating Children

The preceding section, Key Messages for Educating Children, describes the topics that may be included in Safe Routes to School (SRTS) education for children. This section includes ideas for:

- Ways to deliver the education message.
- How to support classroom-based teaching.
- Sources of instructors.

Ways to Deliver Education

A variety of methods are available for teaching children about safety and health. Deciding on a method (or more than one) may be influenced by:

- How much content is to be covered.
- The amount of time available.
- The desired outcome.

For example, one-time instruction, such as an assembly, generally offers the least information and requires the least time. Skills practice, which requires more time and extensive preparation, shows the greatest promise for children to adopt safety skills.¹

This section describes the following educational methods:

- One-time instruction.
- Classroom or physical education lessons.
- Parent involvement.
- Structured skills practice.

While each method is described separately, SRTS programs usually use a combination of methods. In fact, a multi-pronged approach will most likely reach more children.

One-time Instruction

One-time instruction, such as an assembly, offers an opportunity to reach many children quickly. The event builds school-wide excitement about bicycling and walking while offering a way to introduce safety education in schools where competing demands for class time do not allow for more extensive instruction.

Assemblies work best when they are short, visual, focused on a single topic, age-appropriate and engage



Tam Valley School students test their bicycle and pedestrian safety knowledge by playing Jeopardy in Mill Valley, California.



School assembly in Santa Ana, California.

children. Educational messages may be taught through skits, songs, chants, photographic or artistic presentations, videos, guest speakers or other ways of engaging a large audience. Classes working on related topics, such as health or air quality, can share what they have learned with other children in the audience.

Children may have a hard time remembering or applying what they learn in these brief sessions. One-time methods can be made more effective by reinforcing them throughout the year by inserting messages in school-wide announcements, signs and newsletter articles.

Classroom or Physical Education Lessons

In a classroom or physical education class, education can be provided in the following ways:

- Stand-alone lessons.
- Lessons integrated into subjects such as language arts and math.
- Comprehensive curriculum delivered in every grade.

Ideally, children will receive a comprehensive bicycle and pedestrian safety curriculum which includes hands-on skills practice. Many schools see bicycle and pedestrian safety, whether as part of a comprehensive curriculum or not, fitting nicely into physical education.

Lessons Integrated Into Classroom Subjects

Safety education can be integrated into traditional classroom subjects to meet education standards in many ways. Examples include:

Math

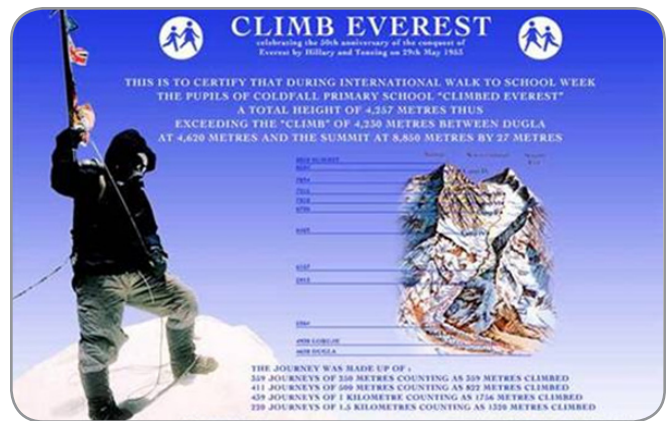
- Calculating average walking speeds or distances.

Science

- Walking outdoors to collect samples and observe nature.
- Learning about climate change, pollution and how walking and bicycling can play a protective role.

Reading

- Reading about nature or walking.



Students at Coldfall Primary in London, England, calculated their collective miles walked and bicycled and "climbed" to the top of Mount Everest.



A student's map of barriers to walking to school from Annapolis Elementary School, Annapolis, Maryland.

School-based Instruction Requires Support

Teacher interest and enthusiasm is critical for success of any school-based education that will be part of the SRTS program. However, many demands are placed on teachers. If classroom or physical education teachers are to provide instruction, it may be helpful to consider the following steps to increase the chance of a successful education component.

Get administrators on board.

For teachers to devote class time to instruction, the principal needs to support and encourage it. If needed, the PTO/PTA can help persuade school administration of the importance of safety education.

Link the lesson content to state or local education standards.

Doing so will help justify the use of class time and will help children learn necessary skills and concepts.

Provide lesson plans to teachers.

Given the heavy workload on teachers, sample lesson plans may make it easier for teachers to get involved.

Encourage parent involvement.

Parents and other community members can volunteer their time to help.

Language arts

- Writing about walking or what is seen on the route to school.

Art

- Designing posters to encourage walking.

Geography

- Tracking students' walking and bicycling mileage and plotting it on a map.
- Learning about places that the school or class "visits" as they gather miles. (See more details in the Encouragement chapter.)
- Drawing a map of the route to school.

Health

- Learning about the cardiovascular system.
- Calculating heart rate.
- Using pedometers to count steps.

Parent involvement

Parents can be the best instructors for their children because:

- They can serve as role models for safe walking and bicycling behavior.
- They can observe their child's behavior and provide guidance in real-life situations.

Information about what's being taught in school can be sent home and parents can be asked to reinforce the skills with their children. Encouraging parents to take a walk with their child provides time for them to assess the child's skills, such as whether the child pays attention to traffic, chooses appropriate places to walk and has the ability to gauge gaps in traffic that allow for safe street crossing. Parents can also play a role in the school by volunteering to help with classroom and skills practice.

Structured Skills Practice

Skills practice gives children a safe, supervised environment in which to learn safety behaviors. Pedestrian skills practice includes where and when to cross a street and proper crossing procedure. Bicycle skills training includes bicycle handling drills and may also include a supervised group ride in a neighborhood. Simulated situations, whether on foot or bicycle, require space such as a playground or closed parking lot and more than one



IWALK

Walking to Rushton Elementary School in Mission, Kansas.

Safety education can be integrated into traditional classroom subjects to meet education standards in many ways

adult. Bicycle skills practice also usually requires cones, stop signs and other props.

Skills practice may be included in the following ways:

- Part of classroom or physical education class-based lessons.
- Part of an after-school program.
- A one-time event such as a bicycle rodeo.

Bicycle skills practice or any on-bicycle activity is more logistically complex than pedestrian safety training and a knowledgeable instructor such as a law enforcement officer, bicycle club member or experienced physical education teacher is needed. Bicycle skills practice is generally conducted with older elementary children and may occur one-time as a bicycle rodeo, or over several sessions as a more complete bicycle safety training.

Bicycle Rodeo

Bicycle rodeos are one-time events for children to practice basic bicycling techniques and can serve as an opportunity to check children's bicycles for fit and functioning and to provide instruction on proper helmet use. Rodeos require a knowledgeable instructor and use a simulated setting for practice. Simulated settings may be playgrounds or parking lots set up with stop signs, traffic cones and other props. Often a stop sign course is set up to teach children how to stop and look for oncoming traffic. Other activities teach balance, stopping, turning and control. Rodeos are often community sponsored instead of solely conducted by a school.

Bicycle Safety Training

Bicycle safety training generally lasts five to 10 hours over several sessions and includes both information and on-bicycle practice of safe ways to operate a bicycle. At the end of the course, participants apply their knowledge and skills in simulated or actual on-road settings. Simulated activities are as described for a bicycle rodeo, but allow more time for practice and mastery. Knowledgeable instructors may be available from the local law enforcement agency or bicycle club. For example, the League of American Bicyclists offers trained instructors to teach their Bicycle Education program, which is available at www.bikeleague.org/programs/education.

See the Resources section for activities, lesson plans, comprehensive curricula and pedestrian and bicycle skills training programs.

The table on the following page provides a summary of some of the key advantages and considerations of each method that has been described here.

Sources of Instructors

All of these educational strategies require at least one individual who is knowledgeable and willing to teach. A variety of people may take on this role. If instruction is to be provided at the school, teachers may cover the material themselves or they may appreciate guest instructors, such as a local bicycle club member or law enforcement officer. Parents can play a central role as instructors for their own children, but they may need guidance on what to teach. After-school activities are another opportunity to provide safety training and can tap into other community resources.



PBIC Image Library

A bicycle rodeo course.

The following individuals can play a role in educating children:

- Physical education or classroom teacher.
- Law enforcement, fire department or safety personnel.
- Local bicycle club member including a League of American Bicyclists Instructor.
- Parent.
- Volunteer.
- School nurse.
- Public health professional.
- Community group, such as a local Safe Kids coalition.

	Advantages	Considerations
One-time instruction	<ul style="list-style-type: none"> • Requires little time. • Reaches many children at once. 	<ul style="list-style-type: none"> • Children may not retain information. • Requires activities that will engage a large audience with a range of ages and attention spans.
Classroom or physical education lessons	<ul style="list-style-type: none"> • Reaches all children regardless of whether they currently walk or bicycle to school or have parent instruction. • Can be part of progressive instruction year to year. 	<ul style="list-style-type: none"> • Requires class time. • Requires instructor preparation time.
Parent involvement	<ul style="list-style-type: none"> • Uses opportunities to assess and teach pedestrian skills in real-life situations. • Each child receives guidance based on his or her individual developmental readiness. 	<ul style="list-style-type: none"> • Children may not all equally benefit as some parents may not choose to be involved. • Parents may need guidance as to what are appropriate safety messages.
Structured skills practice	<ul style="list-style-type: none"> • More likely that children will retain and apply skills than education without hands-on practice.¹ 	<ul style="list-style-type: none"> • Requires space, equipment (including helmets) and several adults.

Putting It Into Practice: Bicycle Safety Training

B.B. Harris Elementary, Duluth, GA

At B.B. Harris Elementary in Duluth, Georgia, Safe Routes to School Project staff collaborated with the school's physical education teachers to train 450 children in grades three through five in bicycle safety over one month. Using the League of American Bicyclists Kids Bicycle Education and the Basics of Bicycling curricula, the school developed a five-session bicycle safety program to fit the physical education schedule. The course was entitled "Safe Bicycle Driving," and the instructor (certified by the League of American Bicyclists) began each class by telling the students that this was effectively their very first driver's education class; whatever they grow up to drive — cars, trucks, motorcycles or bicycles — the same rules of the road apply.

Through the training, the children had opportunities to fit helmets and bicycles, practice bicycle-handling skills, and learn four basic rules of the road. On the final day, the students were introduced to "Harristown, A Bicycle-Friendly City" in the gym, with simulated streets and destinations, such as a store, a park and a library. The students rode around the "city" to the Harristown destinations, some as bicycle drivers and some as vehicle drivers. A few served as police officers, giving out tickets to those who violated a rule of the road. The students then received a "Safe Bicycle Drivers License" and an activity booklet by the same name.

Putting It Into Practice: Institutionalizing Safety Education

Rockville, MD

In Rockville, Maryland, all 7,000 elementary students receive bicycle and pedestrian education. Since 2004, bicycle and pedestrian safety has been a standard part of the school system's teaching curriculum. The program was initiated by City of Rockville staff and is now coordinated by physical education teachers.

The curriculum includes a series of interactive lesson plans designed for each grade. Students in kindergarten through second grade learn basic pedestrian concepts. Older elementary school students (grades three through five) focus on bicycle safety fundamentals such as proper use of a bicycle helmet, rules of the road, laws pertaining to bicyclists and bicycle handling techniques. Students practice pedestrian and bicyclist skills through simulated scenarios using bicycles, helmets and pedestrian safety props supplied by the city. In addition, the school's safety patrol practices bicycle and pedestrian safety skills and then reinforces safety messages to students.

At Farmland Elementary school in Rockville, few students bicycled to school before the program began. Afterwards, the bicycle rack was full every day. The Washington Area Bicyclist Association has begun to extend the reach of the program into other schools in Montgomery and Prince George's counties. The Maryland Pedestrian and Bicycle Safety Education Program has been made available to public and private schools, law enforcement agencies and community organizations throughout Maryland, as well as being available online for any community to use at <http://www.walktoschool.org/resources/safety-education.cfm>



Practicing bicycle skills in a simulated environment at Farmland Elementary School, Rockville, Maryland.

Parents

Education directed towards parents can strongly influence whether more children walk and bicycle to school in a safe manner. Parents control whether their child walks or bicycles to school and how their child behaves during these activities. A parent's own behavior also impacts the safety of his or her child and all children as they walk or bicycle to school. For example, a parent who speeds to drop off his or her child at the school makes a less safe environment for walkers and bicyclists. Parents who walk with their children to school can provide supervision and guidance for children who are learning how to negotiate traffic and people in their environment.

Key Messages For Parents

In relation to Safe Routes to School (SRTS), parents play a role in their child's safety in three ways:

1. As teachers of safety behaviors.
2. As drivers on the school campus during drop-off and pick-up times.
3. As drivers near the school.

Different messages apply to parents for each of these roles.

Parents as Teachers

Practice safe walking and bicycling with your child. Parents teach and model safe behavior for their children. Children have the best chance of retaining and applying walking and bicycling skills if they have a chance to practice them with supervision and reinforcement. It is similar to the need to teach teens to drive; new drivers are not expected to have the skills or knowledge to drive safely without receiving instruction.

Parents need detailed information about proper safety practices specific for their child's age. Most parents naturally want to do what is best for their child and need to be aware of the appropriate safety messages to share with their child. An informed and interested parent can identify safe walking and bicycling routes for his or her child, teach his or her child rules as they walk or



Parents walking their children to Benten Elementary in Atlanta, Georgia.



David Parisi

Passing out educational fliers to drivers.

bicycle, and model safe behavior themselves. See the Key Messages for Children section for more information.

Parents as Drivers on the School Campus During Drop-off and Pick-up Times

Follow correct drop-off and pick-up procedure if driving to the school is necessary. Drivers need to know the appropriate locations for pick-up and drop-off at the school and any special rules that apply at these times. A well-designed drop-off and pick-up procedure along with drivers who correctly follow the procedure will improve the safety of everyone arriving to or departing from school. See the Student Drop-off and Pick-up chapter for more information on how to improve the safety of this process.

Parents as Drivers Near the School

Parents are no different than other drivers. Some contribute to safety problems by speeding through school zones and failing to obey traffic signals. See the next section, All Drivers Near the School, for messages and strategies for reaching parents in this role.

Strategies For Reaching Parents

A variety of strategies can be used to reach parents as they teach their children safety skills and drive on the school campus and adjacent streets.

Print materials

To communicate with parents, school Web sites, e-mails to parents or information sent home with students can all be used. In California, some schools hold Traffic Safety Days to promote safe driving in the school zone, as well as encourage safe walking and bicycling. School officials, parent volunteers, law enforcement officers and others distribute fliers and talk to drivers who pick up or drop off children. Walkers and bicyclists are given safety information and incentives at a welcome table as they arrive at the school.

Enforcement strategies

Signs, pavement markings, notices and educational flyers placed on windshields of illegally parked motor vehicles remind parents of proper rules and procedures. See the Enforcement chapter for more information.

Media stories

Local news stories that focus on Safe Routes to School (SRTS) can also include key messages about pedestrian, bicyclist and traffic safety.

Training

While many parents feel comfortable teaching their child pedestrian safety, they sometimes feel less prepared to teach bicycling rules of the road. One bicycle club in Marin County, California, responded to this need by offering a training class for parents on how to teach bicycling skills to their children. Some communities have sought ways to improve parents' driving behavior through training.

For more information see the Strategies for Reaching All Drivers Near the School section and the Student Drop-off and Pick-up chapter.



Peter Lagerwey

Parking signage indicates special rules during school drop-off and pick-up times, Seattle, Washington.



David Parisi



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Traffic Safety Day at Tamalpais High School in Mill Valley, California.

Putting It Into Practice: Parent Safety Drive Initiative

Dorset County Council, England

Dorset County Council's innovative Parent Safety Drive was piloted at Sherborne's Abbey Primary School in 2003. It aims to reduce the county's high number of child passenger injuries and to cut down on unnecessary trips to school by motor vehicle by helping and encouraging parents to become better, safer and more sensible drivers. Linked to the development of school community supported travel plans, this scheme aims to change parent attitudes to motor vehicle use in a practical, non-threatening way. The initiative is promoted in partnership with the local National Health Service Primary Care Trust, which provides a range of health services for local people and is eager to work in partnership with the local highway authority to reduce the number of child transportation-related injuries and improve driving standards.



The focus of the program is to:

- Improve parents' driving standards.
- Reduce the number of child road casualties.
- Encourage more sensible use of the motor vehicle.
- Reduce the number of parent vehicles within the immediate environment of the school.

Parents spend an hour with an experienced driving instructor who shares useful defensive driving and hazard awareness advice and tips using familiar local streets. There is no test or assessment involved. Parents drive on a range of roads, including congested urban environments and quieter but faster rural roads. Safer parking and reversing techniques are included in the session together with an opportunity to discuss in-car safety issues and suggestions for locations to park and walk the remainder of the trip to school. Highway code knowledge is revisited as well. It is promoted as a rare chance to refresh driving skills, perhaps for the first time since taking a driving test. There is a fee for the drive of £18 per hour, but a subsidy is planned. Evaluation from parents who have participated was reported as encouraging.

This initiative requires schools to recruit volunteers and to promote the concept of parent driver improvement as a fundamental objective in the school travel planning process. It also requires persuading some parents that you never stop learning as a driver and that 100 percent concentration is required.

Visit Dorset County Council's road safety Web page at www.dorsetcc.gov.uk/rsafe to find out more about driver improvement schemes.

All Drivers Near the School

Many parents, community members and school personnel drive near the school on most weekdays. Each driver can contribute to or detract from the safety of the walking and bicycling environment for children. Failure to comply with traffic laws and posted speed limits are examples of driving behaviors that result in unsafe conditions.

A National Safe Kids study of 27 cities found that of the vehicle speeds recorded during the 30 minutes before and after school, 65 percent of drivers exceeded the posted speed limit with 23 percent of these drivers traveling at least 10 mph above speed limit and 33 percent traveling 30 mph or more beyond the limit.¹⁴

The need to reduce the number of speeders and the speeds at which they travel is crucial to ensure the routes to school are safe. As motor vehicle speed increases, so does the pedestrian injury severity and the likelihood of death. A pedestrian struck by a motor vehicle moving 20 mph has a 5 percent chance of dying. As motor vehicle speed increases to 30 mph and 40 mph, the likelihood that the pedestrian will be killed increases to 45 percent and 85 percent respectively.^{15,16} Slowing motor vehicle speeds not only reduces the chance of a pedestrian-vehicle collision because of the reduced stopping distance required, but it also reduces the chance of a pedestrian fatality or serious injury.

Along with speeding, failure to comply with stop signs and traffic signals also contributes to unsafe environments. A National Safe Kids study on driver behavior at intersections in school zones and residential neighborhoods found that 45 percent of drivers failed to completely stop at the intersection even though a stop sign was present, and of these 7 percent did not even slow down for the sign. Although the study found that drivers were more likely to stop when a pedestrian was present compared to not present, 36 percent of drivers violated the stop signs when pedestrians were waiting at the curb to cross and 24 percent of drivers did not come to a complete stop at the intersection while pedestrians were crossing.¹⁷

Additionally, a study of crosswalks in school zones shows that approximately 30 percent of drivers stopped within or beyond the boundaries of crosswalks, thus blocking the pedestrian path.¹⁸

Drivers traveling at safe speeds, yielding to pedestrians and bicyclists, and stopping at stop signs and crosswalks help create a pedestrian and bicyclist-friendly



Michael Cynecki

Roadrunner Elementary School, Marana, Arizona.

A National Safe Kids study of 27 cities found that of the vehicle speeds recorded during the 30 minutes before and after school, 65 percent of drivers exceeded the posted speed limit.

Key Messages For Drivers Near the School

Drivers near the school can help create an environment that feels safe and inviting for pedestrians and bicyclists. They need to know the following:

- Watch for, and yield to, pedestrians and bicyclists near and around the school.
- Obey speed limits for the school zone.
- Come to a complete stop at stop signs.
- Do not block pedestrian crosswalks.

Strategies For Reaching All Drivers Near the School

A good time to provide safety messages to drivers is while they are in their motor vehicles and near the school, through signage, enforcement strategies and media.

Signage

Sign messages, such as “Drive 25, Keep Kids Alive”¹⁹ and “Give Our Kids a Brake,”¹⁹ remind drivers to slow down and help to build a cooperative community spirit. Although these signs are not in the Manual on Uniform Traffic Control Devices (MUTCD), communities are allowed to install educational and guide signs which are not uniform. Signs installed on private property, like yards, are not covered by the MUTCD. Stickers and banners are also sometimes affixed to garbage cans or hung across streets. Before hanging banners or signs across streets or on public signposts, approval should be obtained from the appropriate government office. See the Engineering chapter for more information about signage.

Enforcement Activities

Enforcement strategies can be combined with education, such as by using speed trailers at key locations around schools. Speed trailers display the speed a motor vehicle is traveling as it passes the trailer. See the Enforcement chapter for additional examples.

Media

Radio announcements played during drive times can serve as timely reminders. Other media, such as newspaper articles or television features, can be used to draw attention to the importance of careful driving when



David Parisi

Burton Valley, California.



David Parisi

Signage reminds drivers to obey speed limits in Bellevue, Washington.

children are present and to highlight a Safe Routes to School (SRTS) program.

Parents and neighbors often make up a large amount of the traffic near a school during school drop-off and pick-up times. See the Parents and Neighbors sections of this chapter to learn about messages and strategies to reach them.

Neighbors

Neighbors include residences and businesses near the school. The success of a Safe Routes to School (SRTS) program can be influenced by neighbors who can either play an active role in making it safer for children to walk and bicycle to school or resist these efforts. While some neighbors have children who attend the school, many do not. Addressing their needs and concerns and involving them in the SRTS process will increase the odds that they will be supportive.

Key Messages For Neighbors

Messages to neighbors depend on local conditions. If there are environmental barriers to safe walking routes, often the neighbors can help.

Messages for neighbors include:

- Keep sidewalks clear so they are passable by pedestrians. Sometimes motor vehicles, garbage cans, snow and other materials force pedestrians off of walkways and into traffic.
- Prune plants and shrubs to enhance visibility. This will help pedestrians, bicyclists and drivers see one another, particularly at street crossings.
- Keep unleashed pets off the route. A loose animal can be intimidating and deter walking or bicycling, regardless of the friendliness of the animal.

Also see the Key Messages for All Drivers Near the School section for additional relevant messages.



Michael Cynecki

Neighborhood near Arrowhead Elementary School in Phoenix, Arizona.



Michael Cynecki

Keep sidewalks clear. Peoria, Arizona.



A walking route free of obstructions for students going to Laguna Elementary School in Tucson, Arizona.

Strategies For Reaching Neighbors

Neighbors should be engaged early in the Safe Routes to School (SRTS) planning process. This provides an opportunity for SRTS coordinators to hear and address these concerns and increases the likelihood that neighbors will take action to make or keep routes safe. The impact of potential SRTS activities on neighbors should be assessed. For example, a remote drop-off area may be initiated to ease traffic congestion near the school. While it improves safety for pedestrians and bicyclists and gives those that live further away the chance to walk, it may also create traffic problems in new areas. Identifying and addressing these issues need to be part of the process.

Ways to reach neighbors include:

- Attend neighborhood group meetings to introduce SRTS, discuss neighbors' needs and concerns and ask for their help. A community in California invited neighbors to a “pruning party” and provided supplies and assistance to trim vegetation growing over the sidewalks. If conflict over trimming trees and bushes occurs, local officials can often resolve issues by enforcing local ordinances.
- Host an open house for neighbors and parents to learn more about SRTS.
- Install informational signs in highly visible locations around the neighborhood.
- Distribute fliers to homes near the school. Some communities have mailed information with utility bills.

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Neighbors should be engaged early in the Safe Routes to School planning process.

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David Parisi

Examples of educational fliers.



David Parisi

Sign leading participants to a Safe Routes to School open house in California.



Resources

Pedestrian and Bicycle Safety

OECD Keeping Children Safe in Traffic

Report by the Organisation for Economic Co-operation and Development draws on best practices and research results to show how child casualties can be reduced. Free executive summary. \$45 for full report. www.oecd.org/document/9/0,2340,en_2649_34351_31416393_1_1_1_1,00.html

League of American Bicyclists

Bicycle safety and bicycle maintenance education for bicyclists of all levels and ages. Information on how to find Bicycle Education courses taught by League Certified Instructors. www.bikeleague.org

Safe Kids

Walking and bicycling safety tips for parents to teach children. www.safekids.org/tips/tips.html

Bicyclinginfo

Tools and resources for improving bicycle safety including education and enforcement, bicycle parking and a bikeability checklist. www.bicyclinginfo.org

Walkinginfo

Tools and resources for improving pedestrian safety including education and enforcement, pedestrian safety plans, a walkability checklist and crash data. www.walkinginfo.org

American Academy of Pediatrics “About Bicycle Helmets” brochure

Describes why children need helmets and how to select one. www.aap.org/family/thelmabt.htm

Bicycle Helmet Safety Institute

Information about states with helmet laws, studies on bicycle helmet use and a list of bicycle helmet videos. www.helmets.org

Consumer Product Safety Commission recalls and standards

Search on “bike helmets” for benefits of wearing helmets and product recall announcements. www.cpsc.gov

ASIMO Step to Safety Pedestrian Safety Video

Teaches safe street crossing procedure for children ages 5 through 9. <https://asimo.honda.com/pedestriansafety/index.asp>

FHWA Bicycle Safety Education Resource Database

Searchable database by audience, riding skill level and bicycling topic. www.bicyclinginfo.org/ee/fhwa_db.cfm

FHWA Good Practices Guide for Bicycle Safety Education

For program developers or those seeking an existing bicycle safety education program. www.bicyclinginfo.org/ee/bestguide.cfm

NHTSA Ride Smart, It's Time to Start

Video for middle school students that promotes bicycle helmet use. www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.810acae50c651189ca8e410dba046a0

NHTSA Bike Smart, Bike Safe

Bicycle safety video and materials for elementary school children in English and Spanish. www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.810acae50c651189ca8e410dba046a0

Florida DOT and University of Florida Dept of Urban and Regional Planning, Florida Traffic and Bicycle Safety Education Program

Elementary and middle school materials and activities. www.dcp.ufl.edu/centers/trafficsafetyed/safeways.htm

Hawaii Bicycling League BicycleEd Hawaii Program

For fourth grade students in public schools; offers classroom and on-bike instruction with a focus on comprehension of street patterns and acceptable street behavior. www.hbl.org

North Carolina DOT Division of Bicycle and Pedestrian Transportation and the Bicycle Federation of America (now the National Center for Bicycling and Walking), Basics of Bicycling Curriculum

Bicycle safety and on-bike handling skills for elementary school children in North Carolina. www.ncdot.org/transit/bicycle/safety/programs_initiatives/curriculum.html

Bicycle Coalition of Maine Bicycle Safety Education Program

The program serves kindergarten through eighth grade, but is aimed primarily targeted to fourth and fifth grade students. www.bikemaine.org

Bicycle Transportation Alliance Bicycle Safety Program

Hands-on bicycle safety courses for fourth through seventh grade children in Oregon. www.bta4bikes.org/at_work/programs.php

Texas Bicycle Coalition Texas Supercyclist

Curriculum to certify elementary health and physical education teachers to teach fourth and fifth grade students the basics of traffic safety, with emphasis on bicycle riders as vehicle operators. www.biketexas.org/content/view/36/49

Rockville Department of Recreation and Parks Maryland Bicycle and Pedestrian Safety Education Program

Pedestrian safety skills for children in kindergarten through second grade and bicycling skills for children in third through fifth grade through a combination of classroom and hands-on skills practice. Free and downloadable from the Internet. www.walktoschool.org/resources/safety-education.cfm

NHTSA Safe Routes to School Toolkit, Classroom Activities

Designed to assist parents and school personnel with initiating and implementing SRTS programs and includes information for developing pedestrian and bicycle safety curricula and lessons and how to integrate safety education messages into other academic subjects. www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2002/overview.html

NHTSA Safe Routes to School Practice and Promise

Provides decision makers with information about SRTS, including the history of SRTS, the key factors and strategies used by successful programs, the risks and benefits, and case studies of SRTS programs from around the United States and abroad. www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2004

Marin County Bicycle Coalition Safe Routes to School Program

Lesson plans on physical fitness, healthy lifestyles and the environment. www.saferoutestoschools.org

Active & Safe Routes to School Canada, IWalk Week Activity Ideas

Kindergarten through high school hands-on learning activities covering safety, health and the environment. www.iwalktoschool.org/resources.htm

Personal Safety

Center for Missing and Exploited Children Guidelines for Programs to Reduce Child Victimization

Provides school personnel, parents and communities with guidance about program elements and messages needed to teach personal safety to children. www.thelost.org/missingkids/servlet/ResourceServlet?LanguageCountry=en_US&PageId=0

Center for Missing and Exploited Children Know the Rules ... For Going To and From School More Safely

Tips to help parents prepare their children for a safer journey to and from school. www.missingkids.com/missingkids/servlet/ResourceServlet?LanguageCountry=en_US&PageId=892

U.S. Department of Justice Personal Safety for Children: A Guide for Parents

Provides information for parents about how to talk to children about safety, advice to parents about how to keep children safe, and tips to children about how they can protect themselves. <http://ojdp.ncjrs.org/publications/PubAbstract.asp?pubi=196166&ti=&si=&sei=&kw=&PreviousPage=PubResults&strSortby=&p=&strPubSearch=>

US HRSA Stop Bullying Now

Resources for adults and educational messages for children. <http://stopbullyingnow.hrsa.gov>

Health and Environment**USDA My Pyramid**

Activities and physical activity messages for children. www.mypyramid.gov

CDC Verb Campaign

Physical activity promotion for middle school children. www.cdc.gov/youthcampaign

Georgia Clean Air Campaign

Classroom activities and information for parents and educators. www.cleanaircampaign.com

US EPA Environmental Kids Club

Classroom activities and information for parents and educators. <http://epa.gov/kids>

City of Portland Office of Transportation Kids on the Move

Curriculum focuses on safety and the impact of vehicle use on the environment. Free and downloadable from the Internet. www.trans.ci.portland.or.us/saferoutes/learning/teachers/KidsOnTheMove/default.htm

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