

EMT's & INJURY PREVENTION: ADVOCATES FOR CHILDREN

RESOURCE MANUAL



EMERGENCY MEDICAL SERVICES FOR CHILDREN PROGRAM

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From
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INTRODUCTION

The **EMTs and Injury Prevention: Advocates for Children** is a curriculum designed to help EMT's become involved in primary injury prevention activities.

This curriculum is intended to supplement a 4-hour injury prevention training which is being held for EMTs in Ohio. Realizing that not everybody can attend these trainings, however, we have compiled the curriculum into a condensed version, which you have before you.

The objective of the curriculum is to provide specific information and tools for EMT's to plan, implement, and evaluate community based injury prevention projects. This curriculum can serve as a teaching tool, reference book, resource guide, or community action manual. It is designed to present ideas and resources for you to respond to your community's specific injury prevention needs. This curriculum is offered as a starting point, a foundation from which EMS can begin thinking about and planning for a safer community.

In addition to the materials in the curriculum, you are encouraged to contact the Ohio EMSC Program at 1-800-233-0785, your regional SAFE KIDS Coalition, or the office of Injury Prevention, Ohio Department of Health for technical support or to obtain further information that can assist your efforts in injury prevention.

Good luck in your endeavors

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Oklahoma EMSC Resource Center
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LEARNING OBJECTIVES

Upon completion of this workshop, the EMT Instructor shall be able to:

1. Give two (2) reasons why an EMT can be an effective community activist in promoting childhood safety and injury prevention issues.
2. Give a brief description of the size and severity of the injury problem for children in Ohio.
3. List five (5) leading causes of death to children in Ohio.
4. Describe how to use the Haddon Matrix to create injury prevention strategies.
5. Provide a brief description with specific strategies for preventing at least two (2) of the five leading injuries to children.
6. List five (5) agency representatives in your community whom you could contact to form an action team to brainstorm solutions for a local childhood injury problem.
7. List three (3) sources where you can obtain injury data and statistics.
8. Identify two (2) methods for evaluating injury prevention activities.

Role of the EMT in Injury Prevention

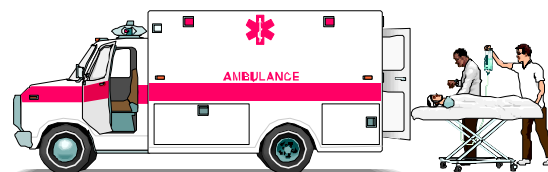
THE ROLE OF EMTs IN INJURY PREVENTION

"In the future the success of EMS systems will be measured not only by the outcomes of their treatments, but also by their prevention efforts. Its expertise, resources and positions in communities and the health care system make EMS an ideal candidate to serve linchpin roles during multi-disciplinary, community-wide prevention initiatives. EMS must seize such responsibility and profoundly enhance its positive effects on community health."

Theodore R. Delbridge MD, MPH, "EMS Agenda For The Future"

UNDERSTANDING INJURY PREVENTION

A 14 year old teen hops on his mountain bike leaving his helmet in his room, drives downtown at 5 p.m. wearing dark green army fatigues, makes a left-hand turn through a yellow light, and is struck by an automobile coming from the opposite direction. The result: a skull fracture.



Question: Was his head injury an accident?

The word "accident" suggests something unpredictable, random, and therefore not preventable. If the teen had worn his helmet, had worn bright colored clothing, or stopped at the yellow light, the injury may very well have been prevented ("**preventable incident**") or the severity of the injury could have been reduced. Most injuries are predictable and preventable: using the word "accidents" hides this fact from ourselves and the public.

Given the perspective that injuries are predictable and preventable, we can begin to think about plans to intervene. We can identify how, when, and where injuries typically occur. We can identify who may be at the highest risk for injuries. We can also target interventions to prevent specific types of injuries. Interventions include a variety of strategies that will be explored in later sections.

Our goal is to prevent injuries -- injuries from vehicle crashes, falls, assaults, abuse, firearms, or fires. Injuries are the least understood of our medical problems; however, they are one of our most serious medical problems. Injuries cause more death and disability in children than all other diseases combined. During the first forty years of a person's life, injuries are the leading cause of death in the United States.

WHY SHOULD EMTs BECOME INVOLVED IN INJURY PREVENTION?

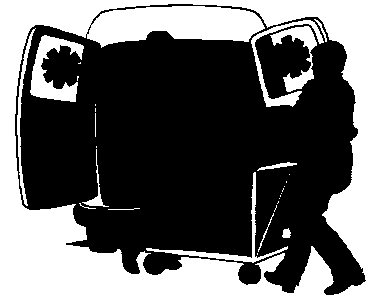
Many EMTs are drawn to emergency medical services because of the opportunity to make a dramatic contribution to a person in need. With adrenaline pumping, they respond to the scene of an "accident" and get great satisfaction when the person in critical need receives medical care and improves during transport to the hospital. They become partners with emergency physicians and nurses in a daily struggle to save critically ill or injured patients.

But beyond the excitement of the moment is a more sobering reality.

EMTs and Injury Prevention

How often do EMTs respond to a call and find the patient dead or without a chance for survival? How often do EMTs perform CPR on a lifeless victim knowing the situation is hopeless? How many times does the EMT transport a patient to the Emergency Room only to hear the emergency physician declare the patient dead shortly after arrival? The stark reality is that many patients who die from injuries could not be saved no matter what was done for them. Sometimes, no matter the experience or level of medical skills an EMT may have, the patient will not survive.

As health care providers involved in our community, we must look beyond the occasional dramatic rescue to the numerous failures of our system. We must begin to ask questions such as why a certain intersection is involved in so many pedestrian deaths? Why is a particular bar the scene of so many shootings or stabbings? Why is a certain housing complex the scene of so many respiratory problems?



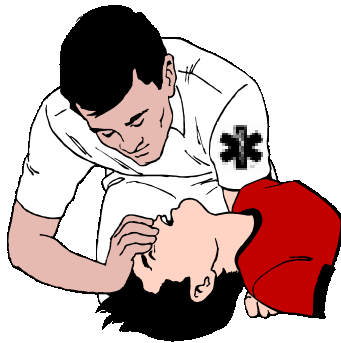
As we begin to ask these kinds of questions, we begin to think of possible answers. We could test our answers by changing something. At times, what may be needed to solve a serious problem is quite simple: installing a traffic light or a guard rail or providing better street lighting. Other times, it may be difficult to correct the problem. Efforts to prevent drunken people from walking into the street, stop teenagers from smoking, or teach kids how to use 911 require a different kind of process and understanding, as well as a commitment from the community, to move toward change.

EMTs are valuable providers of emergency care, CPR and other life saving measures, and can be vital community resources for disease and injury prevention. In some communities, the EMT may be the most medically sophisticated person available. Because we see first hand the results of risk behavior, or we can share our experiences to persuade young teens to use prevention methods, like seat belts or bike helmets. As invited speakers for school children, we can be effective and believable advocates for safety. Because we are often the first on the scene, we can identify and document how the injury happened and what could have been done to prevent or reduce the severity of the injury. Our testimonies and personal experiences can be very powerful tools.

As agents for prevention and safety, EMTs become vital resources for promoting health. To do this requires an understanding of the concepts of disease and injury prevention and a commitment to the people of the community. It is a commitment not only to provide the best possible pre-hospital care but also to educate individuals and the community before the accident occurs.

Historically, over the past few decades, fire, rescue and emergency services have done an outstanding job in improved medical skills, enhanced dispatch, improved response and transport services, and expanded delivery of services. In spite of all the improvements, the need for EMS services has not diminished. In fact, the need for EMS has greatly increased.

EMTs and Injury Prevention



Pediatric ambulance runs are split almost evenly between medical and trauma calls. Of the trauma calls, many are severe, life threatening, and could have been prevented. By limiting our focus to responding once an injury has occurred, we are providing secondary prevention -- on the scene rescue and transport. Basic or advanced life support is important because it can stop the injury process and improve the medical outcome, but cannot change the fact that the victim is already injured. Secondary prevention cannot help those who die at the scene of an injury. By becoming involved in injury prevention, we focus on primary prevention -- reducing the chances or the severity of the injury to occur in the first place.

Across the nation and throughout Ohio, EMTs must accept the challenge of adopting primary prevention as a new skill. As health professionals, EMTs can play an important role in injury prevention. We see patients directly and may be the first to recognize patterns of injury. We have access to medical records and can document the injuries and the surrounding circumstances. We are invited to present at schools, health fairs, and other events. We are in a position to influence change in the community. We have the personal testimony and the credibility to speak out about the problem and to promote public education.



This section has posed the question: "Why should EMTs become involved in injury prevention?" We hope we have provided some good reasons. More importantly, we hope that the section has started you to begin wondering, "Where do we start?" We think we should start with children.

WHY FOCUS EFFORTS ON CHILDREN?

It has been estimated that 80 to 90 percent of pediatric deaths due to trauma occur immediately or within three hours after the incident. Life support techniques and rapid transport will not save all these children. Improved initial aid and transport might save about 2,500 of pediatric deaths in the United States each year but primary prevention could save more than 6,000 children's lives annually by avoiding or lessening the injury incident situation.

- Every day, more than 39,000 children are injured seriously enough to require medical treatment, totaling more than 14 million children each year.
- Each year, more than 20,000 children will die as a result of injury.
- Injuries as a cause of death outrank all other childhood diseases combined.
- Injuries have been the leading cause of death in children for nearly 40 years.
- One in four children will suffer an injury during the next year that will require an emergency room visit.
- It is estimated that as many as 90 percent of unintentional injuries can be prevented.



These statistics come from the National SAFE KIDS Campaign and from a 1993 report of the American Academy of Pediatrics. Certainly, if we look just at the numbers, the sheer size of the problem justifies EMTs becoming involved in injury prevention activities for children.

EMTs and Injury Prevention



There are other reasons as well. Injury prevention efforts for children tend to benefit the entire family. For example, if our aim is to educate and inform, it may be best to direct education activities toward the whole family. Teaching injury prevention to children empowers them to share the information with their brothers, sisters and parents. How many of us have heard parents say that it's their six year old child who tells them to buckle up? Likewise, siblings and parents can reinforce the prevention message, often reminding the little ones when they forget. Finally, interventions like a smoke detector installation program may be targeted for children; however, it will help the entire family respond to a house fire.

Injury prevention activities for children tend to be more active, more entertaining, and more visual for the rest of the community. Bike rodeos, for example, promote road skills, bike safety inspections, and the use of bike helmets for children. In addition, bike rodeos give EMTs the opportunity to work with and get to know people from police agencies, schools, media, medical or public health offices. These are often the people who are in a position to make decisions that affect us, our service, and the delivery of emergency medical services in our communities.

Injury prevention activities are also a way to share resources. For example, a public health office may have to conduct an immunization program every fall before school starts but they have a difficult time getting parents to come with their children. The police or sheriff's office may want to conduct a missing child identification program but don't have the staff to visit every school classroom. Your EMS service unit, meanwhile, just got a load of smoke detectors that need to be distributed in your spare time. Can you begin to see how joining efforts with other agencies might make for a more effective program?

You could, for example, conduct a week-long project: As an incentive for bringing their children to the immunization clinic, parents are provided a smoke detector and given the opportunity to register their child with the law enforcement's missing child alert program. The planning might take time, but the actual event has a greater chance for success. You will have a better turnout, you'll have more volunteers to help, and it might be easier to get a local vendor to donate food or drinks. Certainly, the media will be more interested in covering the day's activity.

In addition to the good will, promotional visibility, and networking opportunities, childhood injury prevention efforts are important because children are at higher risk for injury. Physical attributes, motor skills, and the cognitive and behavioral developments of children influence and increase the risk for occurrence of the injury. Meanwhile, the anatomic and physiologic development of children influences the consequences -- severity, treatment, and rehabilitation -- of injury. Compared to adults, children are at higher risk both for being injured in the first place and for being more seriously affected by the injury. In other words, the precious lifesaving Golden Hour for adults is shortened to the Golden 10-Minutes for children.

Pediatricians have long known that children are at higher risk for injury. Several features can increase the susceptibility or risk of children being injured. Specifically, children have behavioral or developmental features that increase the occurrence of an injury. Children also have anatomic and physiologic features that can increase both the occurrence and the severity of an injury. The following pages give a break down of childhood behavioral, developmental, and anatomical features that place them at increased risk for certain types of injuries.

**CHILDHOOD BEHAVIORAL AND DEVELOPMENTAL FEATURES
THAT INCREASE THE OCCURRENCE OF INJURY**

Infants

- Completely dependent on care giver
- Require constant supervision
- Unable to verbally communicate and report events
- Explores by mouthing objects --spends a lot of time sucking
- Rapid changes in motor abilities, and mobility
- Begins to turn over and grasp objects

Resulting injury risks for infants include:

- Falls when left unattended or from infant walkers
- Suffocation and aspiration of small items
- Child Abuse
- Electrical cord mouth burns
- Burn deaths in house fires

Toddlers or Preschoolers

- Curious, exploratory, and impulsive
- Requires constant supervision
- Imitative of adult behavior with lack of awareness regarding potential danger
- Increased motor abilities
- Higher center of gravity
- Oral exploration puts objects in mouth

Resulting injury risks for toddlers and preschoolers include:

- Falls from stairs
- Scald burns
- Drowning
- Child Abuse
- Poisonings

Elementary School Age

- More mature motor skills
- May recognize dangerous situations but lack experience or judgment to make appropriate and safe decisions
- Increased mobility
- Increased independence
- Unable to assess speed and time of oncoming traffic

Resulting injury risks for school age children include:

- Pedestrian injuries
- Bicycle injuries
- Playground injuries

**CHILDHOOD BEHAVIORAL AND DEVELOPMENTAL FEATURES
THAT INCREASE THE OCCURRENCE OF INJURY, continued**

Young Adolescent

- Dynamic period of change and transition
- Need for peer approval and influenced by peer pressure
- Curious, experimental, risk taking behavior and feelings of immortality
- More agile, increased strength and abilities, however may lack experience in appropriate
- decision-making skills
- Increased involvement in sports and recreational activities
- Increased independence
- Imitate behavior of older adolescents and adults
- Increased incidence of depression, experimentation with drug/alcohol use
- Impulsive

Resulting injury risk this age group:

- Car occupant and motorcycle injuries
- Sports injuries
Bicycle, skateboard, in-line roller blading
- Drug and alcohol abuse
- Violence related injuries
- Suicide and suicide gestures

**CHILDHOOD ANATOMIC AND PHYSIOLOGIC FEATURES
THAT INCREASE THE OCCURRENCE AND/OR SEVERITY OF INJURY**

<u>General</u>	The surface-to-volume ratio of children is high. Dehydration can easily occur from overheating or sunburn. Also, rapid growth rates mean children's coordination and motor skills may be poorly developed in relation to their physical size.
<u>Airway</u>	Airway is smaller and more flexible. Airway is easier to obstruct with both food and non-food objects. Tongue is larger. Glottic opening is smaller.
<u>Breathing</u>	Normal ventilation requires minimal work. Respiratory rate decreases with age and varies with excitement, fear anger, fever, or pain. Stress may double respiratory rate. Most infants less than 6 months do not breathe through their mouth; they are nose breathers. Higher respiratory rates mean increased exposure to airborne toxins, for example smoke from house fires.
<u>Head</u>	Head is large relative to the child's body. The child's higher center of gravity makes falls more likely. Strangulation can occur in crib or high chair. Head is leading part in falls and car crashes.
<u>Neck</u>	Infant's short neck makes it difficult to palpate a carotid pulse and to intubate. Discrete movement of the infant's neck can occlude the airway. Fulcrum of neck movement is higher than in adult.
<u>Chest and Lungs</u>	Pediatric bony cage is less rigid, more compressible than the adult. Children have a decreased risk of rib fractures but an increased risk of pulmonary contusion
<u>Abdomen And Pelvis</u>	Abdominal wall poorly developed. Abdominal organs less protected by rib cage organs are large in relation to the abdominal cavity.
<u>G.I.</u>	Increased intestinal absorption increases likelihood of poisoning from nitrates, lead, or medications.
<u>Mouth</u>	Chewing mechanism not fully developed. Risk of aspiration from foods, for example popcorn, nuts, or chips.
<u>Back, Spine And Bones</u>	Children grow at rapid rate; coordination not consistent with growth. Bones are porous, flexible and can splinter and bend with stress causing spiral fractures and splintering.
<u>Skin</u>	Skin is thin relative to adults. Full thickness burns occur at lower temperatures.

WHAT EXACTLY CAN THE EMT DO TO PROMOTE INJURY PREVENTION?

There are many roles an EMT can play in injury prevention. Several of these roles may be familiar to you already as part of your regular duties or of someone you work with in your service unit. Keep in mind that the state EMS office have more information and materials to help you in the following areas. Some of the more familiar roles are:

- I. Teachers of first aid and CPR to members of the community
- II. Identifiers of potential hazards and preventable diseases
- III. Documenters and collectors of information important to prevention
- IV. Advocates for injury prevention
- V. Educators and information providers

I. TEACHING FIRST AID IN THE COMMUNITY



As the acknowledged experts in CPR, EMTs can teach the skills we use every day to people who do not normally come into contact with emergency situations, such as day care providers, parents, and teachers. By contributing our knowledge and experience, EMTs can seize the opportunity to literally breathe life into the community, preparing citizens to keep an injured or distressed person alive long enough to receive definitive care.

In addition to CPR, EMTs can educate children and community members how to access EMS, initial bystander care, and what to do until the ambulance arrives. At the same time EMTs are sharing these lifesaving skills, we are opening up communication about issues of concern to the people in the community.

II. IDENTIFYING STRATEGIES

Identifying hazards and preventable disease means asking the questions “Was there anything preventable about this victim’s injury or illness?” For example, over the Fourth of July, many children are injured by fireworks. EMTs will see these children with mostly hand and eye injuries. Would improved laws about fireworks help? Better enforcement of existing laws? Sponsoring a professional fireworks display and discouraging families from buying personal fireworks for their children?

Similar questions can be asked for serious illnesses. Are you seeing a lot of asthma victims because a local factory is emitting a certain substance? Are children having seizures because of lead poisoning from a smelter or sniffing leaded gasoline? You may not know immediately how to answer these questions, but you can notify someone who can: the state epidemiologist, for example, or the director of the EMS Division.

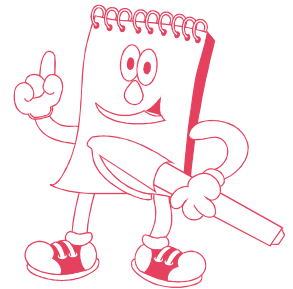
You may want to do more with your observation or hunch; some ways to proceed are discussed later in this section, Advocating for Injury Prevention, and again, in the specific injury prevention strategies toward the end of the curriculum.

EMTs and Injury Prevention

III. DOCUMENTATION

What is often missing from medical records of injury victims are details about the circumstances of injury. Pre-hospital care providers can make an enormous contribution to injury prevention by documenting the circumstances of the injury event. In many cases, the pre-hospital care provider is the only person in the position to capture this information. Where was the victim located in the vehicle? Was the car seat secured by the seat belt? Important details about how the injury occurred – as well as the nature of the injuries – can help design strategies to reduce injuries in the future.

Records not only convey information from one health care provider to the next, they also provide an analysis after the patient is treated and released. A large series of similar events can be compared and recorded, allowing for the recognition of trends. If, for instance, the use of seat belts is not documented by an EMT who is at the scene of a car crash, it may be difficult to prove whether seat belts work. Subsequently, when a bill to repeal our state seat belt laws is discussed, it may pass due to lack of evidence to the contrary. The documentation we provide about the scene of the injury is very important.



IV. ADVOCATING FOR INJURY PREVENTION

The role of EMTs in the community is growing in many ways. Becoming involved in injury prevention activities is one of these. Naturally, personal commitment or where an EMT works will influence the level and type of involvement. For example, the EMT who is a firefighter may be interested in preventing house fires or becoming involved in a smoke detector installation program, while an EMT in a rural area may want to become involved in farm safety or drowning prevention. Likewise, an EMT who is a new parent might feel strongly about child car seats or home safety inspections. The basic message for most injury prevention efforts is that the issue should be one that is important to you personally.

EMTs have tremendous opportunities to be advocates for prevention for two primary reasons. First, EMTs see the consequences of incidents immediately and repeatedly in ways few other citizens can understand. For this reason, EMTs are literally on-the-scene experts. Second, there is no hidden agenda in the work we do. EMTs are admired and respected by the public, legislators and the media for the services we perform. As a result, EMTs are in an unusual position of trust. People are more likely to be open to hearing information from an EMT as a relatively impartial member of the medical community. People are also more likely to share details that may be important to solving the recurring injury problems our communities face. EMTs have the ear of the community. All that remains is to understand how best to use this position for the benefit of everyone.

There are a number of ways to start taking direct action. EMTs are more likely to be aware of problems or potential hazards than the general community. When a potential problem exists – whether it is related to injury or preventable illness – there are specific steps to be taken. We have dedicated an entire section, entitled Project Development, later on in this manual that expands on the steps; however, a general outline follows:

GENERAL STEPS FOR A COMMUNITY INJURY PREVENTION PROJECT

1. **Problem Identification.** Gather information about the nature and extent of the problem. Do you have data to support your cause? Anecdotal descriptions or personal witness can provide further evidence. Find out what other communities with similar problems have done. Is there a group or coalition that is already working on the issue? Can you join efforts with them? Find out if there are resources to help your efforts.
2. **Strategize Interventions.** Review possible strategies for prevention. Join or recruit a group to work with you. Brainstorm the group's ideas, using the Haddon Matrix. Realize that education is not your only strategy. Remember the 4-E's of injury prevention – Education, Enforcement, Engineering, and Environment (these are detailed in a later section). Have a couple of ideas of what you think might work.
3. **Select the Intervention.** Choose a course of action. Allow the group to build consensus on the intervention. Outline your goal: what do you hope to accomplish. Identify that resources need to be mobilized. Identify who might support your effort and who might oppose it. Plan ahead how you might respond to objections. Try to identify potential obstacles and strategies for overcoming them.
4. **Prepare and Plan.** Devise a game plan and a time line. Share tasks among your group. Identify who will do what and by when. Who will coordinate the effort? What are the deadlines or necessary steps to proceed with your activities? Are you going to need funding to support your plan. If so, what are your resources?
5. **On-going Review.** Monitor and evaluate your efforts. Have appropriate people been contacted? Did the news release get written? Are police enforcing the new law? What is your measurement of success? Are you seeing a reduction in the problem or has a new problem arisen in its place? Can you list the number of community members you've reached or the number of school presentations you've conducted?
6. **Closure.** Congratulate yourself and your co-workers. Don't forget to thank people who have helped you. Analyze accomplishments and debrief project members. What did you learn? Will you do a project like this again, and what can you do better next time? With whom can you share your results? Is there a final report or summary? Have you shared your success with your supervisors, your community leaders and the media?

Advocating for injury prevention may seem like an additional task or burden on our already busy schedule, but the work load can make sense if we set our sights on the long-term. Imagine a shift where you didn't have to contact parents with the news that their teenagers were unrestrained and ejected from a motor vehicle crash. How many times have we said to ourselves, if only they had used seat belts. Or, if only we had smoke detectors to install in every trailer home..., or if only we could put up a fence around that pond. Advocating for injury prevention can delete many of the "if onlys" from our job.

V. INFORMING AND EDUCATING THE PUBLIC (PUBLIC RELATIONS)

Public relations, like injury prevention, calls on a different set of skills than acute care. It requires the EMT to initiate rather than respond to a situation. Public relations require us to look at a variety of concerns simultaneously. Establishing a good relationship with the community and creating a favorable public image require conscious effort. It may be helpful to remember that the public has some image of EMTs and the EMS system. The image may be based on a personal interaction with EMS, a popular television show, or a CPR class taken years ago.

Nonetheless, many opportunities exist where you can better develop or expand upon a preconceived – and maybe incomplete – image.

The importance of this relationship with the public is perhaps second only to the quality of medical care that EMTs provide. Public relations means public education and information. A community informed through presentations and health fairs about how to access the EMS system is less likely to panic and more likely to act in an appropriate and timely manner. A public educated in CPR and first aid can actively help in an emergency situation. Public education directed toward policy-makers and legislators who will support the EMS system is also important. Lastly, a public educated and informed about injury prevention is more likely to work with the EMT to promote safe behavior and prevent injuries from occurring in the first place.

1. **Using the Press.** The newspaper is an accessible and free means to get your message out. EMTs and our work make interesting copy because of the drama and personal perspective of the situation. By writing an article, editorial or press release, or having one written about you and your program, you can capitalize on the public interest. Your comments may help to shape the issue. A key point to remember though: when a paper does the writing, it may not be exactly as you like it, but that's the trade off with "free" publicity.
2. **Television and Radio.** EMTs can make use of television and radio interviews, public service announcements (PSAs), editorial moments, and other opportunities to inform and educate our communities about issues in injury prevention. The current popularity of TV programs based on emergency medical situations testifies to the public's interest, and presents a terrific opportunity for the promotion of injury prevention. For example, we can work with our local TV station to create and air a 30 second safety PSA to be aired after an episode of Rescue 911. Local cable stations and news programs can also be excellent sources for publicity and can often be appealed to on the basis of community collaboration.
3. **Public Speaking.** Most communities have ample speaking opportunities. Consider, for example, the Rotary Clubs, Lions, Chamber of Commerce, Toastmasters, other civic or business associations, Scouts, youth groups, medical or professional meetings, sports associations, or schools. Even the most basic message about injury prevention could have far reaching effects if presented well. Some excellent tips on public speaking are outlined in a later section. Also detailed in the back are ideas for targeting and presenting educational messages for different school age children.

EMTs and Injury Prevention

Before we start informing the public and the media about an injury problem in your community or a proposed project that your group plans to conduct, we need to understand how our activities fit into the larger picture. Why are we conducting our proposed strategy and not another? How do we convince our public that injury is indeed an important problem as well as a predictable event? The next section is designed to provide an overview of the scientific principles of injury prevention and control.

PRINCIPLES OF INJURY CONTROL

PRINCIPLES OF INJURY CONTROL

As mentioned earlier, injuries are not accidents. Injuries are often predictable and preventable. Described below is a common occurrence. The scenario describes an injury, but not an accident.

CASE STUDY: Young Boy Suffers Irreversible Brain Damage in Near-Drowning Incident

Seven minutes on a hot August day in 1994 changed the life of four-year-old Ronnie Cooper forever. That morning, he was romping around with his friend Eddie. Today, he lives on the second floor of Children's Hospital. When you first go into Ronnie's room, you might think that he is just sleeping. If you walk closer to his bed, you'll see his face is bloated and blotchy, and you'll notice the nasogastric tube in his nose. Ronnie is in a condition his doctors describe as a persistent vegetative state: he can breathe on his own, he retains some simple regulated reflexes, but he has no higher brain function. He can't hear or speak or even think. How did something so terrible happen to this small boy?

The weather forecast on that hot August day predicted a high of 102 degrees. Ronnie was spending the day with Eddie Miller, whose family home faced a pond. At about 9:30 a.m., Mrs. Miller received a phone call from her mother. The two boys, who had been watching cartoons in the living room, ran out to the patio. They immediately grabbed a large inflatable alligator raft and headed for the pond. Ronnie pronounced himself "king of the crocodile killers" as he jumped on the raft. Eddie insisted that he was "head king" and plopped himself down on top of Ronnie. In the resulting tussle, Ronnie rolled off the raft and into the water. Ronnie was unable to get a good grasp on the side of the raft and was unable to get out. Eddie watched his friend struggle and then, terrified, swam away and ran behind his house, where he hid. All this took about seven minutes.

At about 9:40, Mrs. Miller got off the phone. Returning to the living room, she saw the open sliding doors. She stepped out onto the patio. She saw Ronnie's small form floating face-downward in the pond. Mrs. Miller jumped in and pulled Ronnie out. She checked to see if Ronnie was breathing. He wasn't. She started for the phone and then an awful thought hit her: where was Eddie? It took Mrs. Miller another minute to find him, and another thirty seconds or so to get to the phone and get an answer from the emergency 911 number. It took the emergency rescue team about six minutes to get to the Miller's house. While waiting, Mrs. Miller stayed with Ronnie, turning him on his side to let the water drain from his mouth and lungs, and pleading softly to hang n there until help came. When the emergency team arrived, they began CPR. Ronnie started breathing again within a few minutes, but he did not regain consciousness. The team rushed him to the emergency room.

Eight months later, Ronnie had still not regained consciousness. The costs for Ronnie's care so far have reached more than \$150,000. It's hard to predict what the total costs will be; with good medical care, Ronnie could live for many years.

Consider the above case. Was Ronnie at increased risk for injury? Could this incident have been prevented? If so, how? Suppose your service responded to the 911 call that day Ronnie was injured. What questions would you ask about how this injury occurred? What would you do with the information? What opportunities are available to you, as a health care professional, to intervene or prevent similar injuries? What resources might be available to help your intervention plan? What obstacles or challenges would you anticipate? How would you overcome these?

MAGNITUDE OF THE INJURY PROBLEM: NATIONAL PERSPECTIVE

Injury death rates (per 100,000 population) have remained relatively constant in the United States during the twentieth century. In contrast, disease rates have declined. By 1980, death rates from tuberculosis and gastrointestinal disorders had declined by 99% compared to the turn of the century. Death rates from influenza and pneumonia declined by 85%. The decreased rates were a result of a focused energy and application of scientific principles to disease, both the spread and the control of disease. Infectious disease rates have decreased due to a better understanding of disease etiology, improved treatment and sanitary conditions, and targeted prevention efforts. In contrast to disease, during this century, injury death rates have declined by only 30%. Injuries are at present responsible for three times as many deaths as are influenza and pneumonia.

Nationally, injuries to children take a significant toll. Twenty-two thousand children die from injuries in the United States every year. Former Surgeon General C. Everett Koop said on the subject of childhood injury: "If some infectious disease came along that affected one out of every four children in the United States, there would be a huge public outcry and we would be told to spare no expense to find the cure – and to be quick about it." This same thought process should apply to the injury problem.

NATIONAL INJURY STATISTICS

- Injuries are the third leading cause of death for all ages, second only to heart disease and cancer. However, the death rates for injuries far surpass those for cancer and heart disease for ages 1 to 44 years. The potential years of life loss prematurely each year from injuries is much higher than for cancer, heart disease, AIDS, and strokes. Lifetime costs per death for injuries are almost four times the costs for cancer and more than six times the costs for cardiovascular disease. Injuries are the leading cause of medical spending for children ages 5 to 14.
- Every day, more than 39,000 children are injured seriously enough to require medical treatment, totaling more than 14 million, or one out of every four, children each year.
- Each year, 2.3 million residents of the United States are hospitalized as a result of injury, and 54 million seek some form of medical care for injuries.
- Injuries are the leading cause of death among children and young adults.
- Injury death rates are highest among those living in rural areas, minorities, and those of lower economic status.
- Motor vehicle crashes are the leading cause of all injuries, and the leading cause of all deaths in the United States among persons 1 to 34 years of age. Motor vehicle crashes have killed over 2.8 million people in the United States since 1900 – more than twice the number of Americans killed in all U.S. wars since 1775.
- According to the Child and Adolescent Emergency Department Visit Databook, between 1992-1994, 43% of the approximately 30 million child and adolescent emergency department visits were due to injury.

MAGNITUDE OF THE INJURY PROBLEM: OHIO

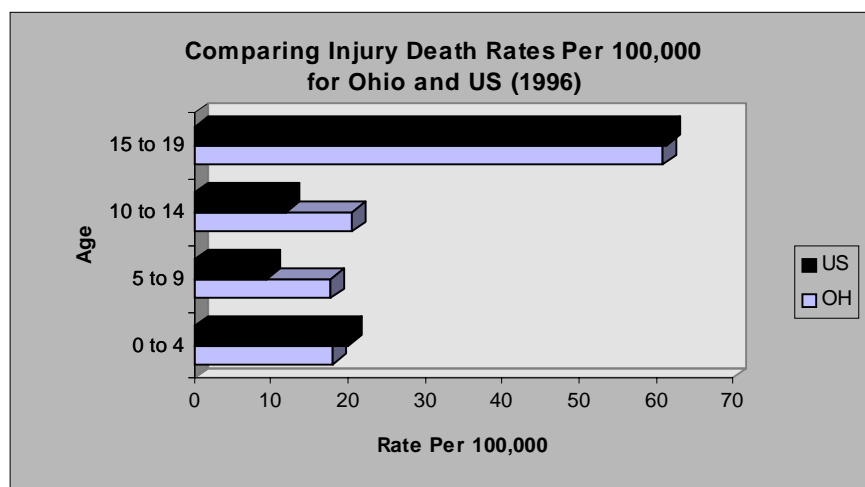
The overall death rate for Ohio children ages 1-14 is 25 per 100,000. Ohio ranks 19 out of 51.

TABLE 1. Number of deaths and death rate per 100,000 for ages 0-24, 1996.

Age	# of Deaths total	Death Rate (per 100,000)	# of Deaths due to unintentional injury	Death Rate (per 100,000)	% of all deaths due to unintentional injury
< 1 year	1168	769.98	age(0-4) 138	18.18	51.1%
1-4	255	41.86			
5-9	139	17.64			
10-14	165	20.57	81	10.06	49.1%
15-19	491	60.89	351	43.46	71.5%
20-24	582	78.86	385	52.21	66.1%
Total	1728		888		51.4%

Source: 1996 Ohio Injury Mortality Statistics

FIGURE 1.



From 1993-1995, injuries were the leading cause of death in Ohio from ages 1-34 years. Table 2 lists the five most frequently occurring types of death-causing unintentional injury by age. As you can see, motor vehicle crashes are always at the top of the list.

TABLE 2. Leading Causes of Death by Age, Ohio 1993-1995

1-4	5-9	10-14	15-24
Unintentional Injuries (237)	Unintentional Injuries (160)	Unintentional Injuries (185)	Unintentional Injuries (1,465)
Top 5 Causes	Top 5 Causes	Top 5 Causes	Top 5 Causes
1. MV traffic (72)	1. MV traffic (80)	1. MV traffic (103)	1. MV traffic (1,118)
2. Fire/burn (67)	2. Fire/burn (26)	2. Drowning (16)	2. Firearm (73)
3. Drowning (41)	3. Drowning (22)	3. Firearm (14)	3. Drowning (69)
4. Suffocation (20)	4. Suffocation (7)	4. Fire/burn (9)	4. Poisoning (52)
5. Fall (7)	5. Firearm (4)	Transport, other (9)	5. Transport, other (22)
	Struck by, against (4)	5. Suffocation (8)	

Data Source: National Vital Statistics System, NCHS, CDC

EMTs and Injury Prevention

According to the Child and Adolescent Emergency Department Databook, 1998, the Midwest region had the highest rate of emergency department visits due to injury in the nation.

Injury Risk Factors

The following information about restraint use of passenger car / truck occupants by age is from Ohio Department of Public Safety traffic crash records. The data includes *only* persons who have been involved in motor vehicle crashes.

Restraint Use of Passenger Car/Truck Occupants by Age

Persons Killed					
Age Group	Used	Percent Used	Not Used	Not Available	Total
0-5	15	60.0%	8	2	25
6-10	7	36.8%	10	2	19
11-15	5	14.3%	28	2	35
16-20	53	27.5%	132	8	193

Persons Injured					
Age Group	Used	Percent Used	Not Used	Not Available	Total
0-5	6,134	87.5%	525	351	7,010
6-10	4,486	78.9%	788	411	5,685
11-15	5,435	69.8%	1,661	692	7,788
16-20	27,861	73.8%	7,019	2,847	37,727

Source: 1998 Traffic Crash Facts Books.

Every two years, the Ohio Department of Education conducts a statewide survey of a representative sample of adolescent students in Ohio's schools to assess behavioral risk factors on a variety of health-related issues. Following is a summary of the 1997 survey results for injury-related risk factors. Also included is a comparison of Ohio to U.S. data. In four injury risk factor areas, Ohio percentages were higher than the rest of the nation.

Youth Risk Behavior Surveillance Data, 1997		
Selected Risk Factors	OH	US
Rarely or never used seat belts	24%	19%
Never or rarely wore a bicycle helmet during past year	94%	88%
Never or rarely wore a motorcycle helmet during past year	41%	36%
Rode with a drinking driver during past month	35%	37%
Carried a weapon during past month	18%	18%
Were in a physical fight during past year	37%	37%
Attempted suicide during past year	10%	8%
Reported episodic heavy drinking during past month	30%	33%

Ohio Department of Education

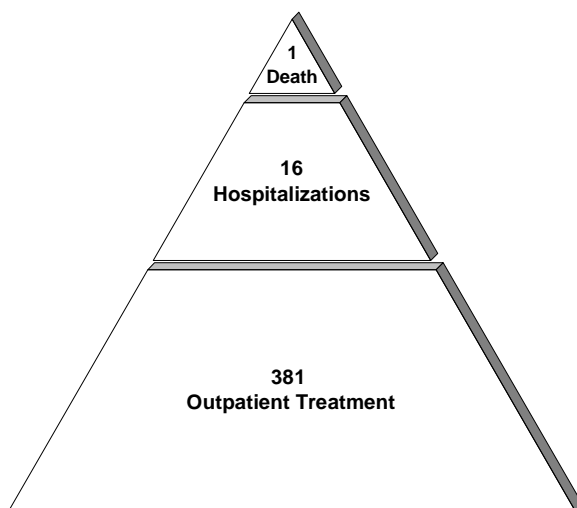
UNINTENTIONAL VERSUS INTENTIONAL INJURIES

Unintentional injuries, which account for two-thirds of all injury deaths, occur without intent to harm. Motor vehicle injuries compose about one-half of all unintentional injury deaths and about one-third of all injury deaths. Other causes of unintentional injury deaths include most burns, poisonings, drownings, and falls.

Intentional injury is purposely inflicted, either by a person to themselves (suicides or suicide gestures) or by another person. Homicide and suicide together make up about a third of all injury deaths. Other categories of intentional injury are rape, assault, domestic abuse, elder abuse, and child abuse

The differences between intentional and unintentional injury should be considered when targeting interventions. Some interventions may be effective regardless of intent; an example would be limiting firearm availability. Other interventions should be designed with intent as a focal point; an example would be better recognition and referral of suicidal persons. More information about intentional injuries is provided in a later section about Haddon's Matrix.

THE INJURY PYRAMID



Injury deaths are only the tip of the picture. The magnitude of the injury problem in the United States can be viewed as a pyramid structure, with death counts representing the tip of the pyramid. A much larger number, below death, is the number of hospitalizations. Below that is a larger number of visits to the emergency room or urgent care centers. Below that is even a larger base: those injuries that occur and are treated at home or are not treated at all.

Nationally, it is estimated that for every injury fatality, there are 16 injuries that require hospitalization and 381 injuries that require some form of outpatient

treatment. Interventions targeted only at injury deaths may neglect other injuries that may be serious in long term disability or in costs.

COSTS OF INJURY

In 1985, direct costs of injury care amounted to approximately \$45 billion. Direct costs include the actual dollar expenditures related to the injury, including physician services, medications, and rehabilitation. Of these direct costs, 55% is generally spent for hospital care, 15% is spent on physician visits outside the hospital, and 5% is spent for nursing home care.

EMTs and Injury Prevention

The indirect costs of injuries are those related to reduced productivity caused by illness, disability, or injury as well as the costs due to premature fatalities. Indirect costs are much greater than the direct costs and are not easy to measure. Indirect costs associated with injury include loss of future productivity and loss of income to parents who need to care for the child. Because injuries occur to younger people, the loss of life is that much greater. For a young person, a disability may impact the quality of life that much longer. The annual lifetime cost of unintentional injury among children ages 14 and under is nearly \$175 billion, which includes \$10.1 billion in direct medical costs, \$16.9 billion in future earnings and \$148 billion in quality of life. Injury is the leading cause of medical spending for children age 5 to 14. For every child injured, total costs are more than \$12,7000, including \$650 in medical costs, more than \$1,000 in future earnings and \$11,000 in quality of life.

If we can lower our injury rate, we will not only save many lives, particularly children's lives, but also reduce some of the enormous cost of injuries. For instance, each year, an estimated 600,000 children are hospitalized as a result of injuries, and injuries lead to more hospitalized days of care than any disease. In addition to the hospitalizations, almost 14 million children per year are treated in emergency rooms – many of these are transported by EMTs and ambulance services. It is estimated that every dollar spent on a child safety seat saves this country \$32 in direct medical costs and other costs to society. Every dollar spent on a bicycle helmet saves this country \$30 in direct medical costs and other costs to society.

Looking back at Ronnie's case of near-drowning, besides the direct medical costs of hospitalization, what other losses might be incurred from his injury? How can we begin to measure the personal loss or the burden on Ronnie's family?

CASE STUDY: A View from the Emergency Department Assessing the Costs and Benefits of Injury Prevention

"In the Emergency Department, much of what we see is motor vehicle injuries," says Dr. David Sklar who has worked for fifteen years in an emergency room. "I began to recognize certain patterns with the mechanism of injury, and the presence or absence of protective measures. For example, I was always struck by the difference seat belts seemed to make in the severity of the injury and in the rate of hospital admissions from the ER. I called up enough families to tell them someone they love has been injured, and I wanted to think of how I could play an active role that would make some difference – before making that phone call. In the seventies, there were many educational programs promoting seat belt use. But the injuries continued. Then a law mandating seat belt use was passed. The deaths and injuries from motor vehicle crashes declined. Education combined with enforcement really works – and I can document that with ER data."

STRATEGIES FOR INJURY PREVENTION: "4 E's" OF INJURY PREVENTION

Often the first idea that comes to mind in trying to reduce injuries is to educate people: educate the public about first aid, parents about supervising their children closely, and EMTs about advances in life support techniques. But there are other approaches that need to be combined with EDUCATION to be successful in reducing injuries: ENFORCEMENT, ENGINEERING, and ENVIRONMENTAL MODIFICATION. Combined with education, these are commonly referred to as the 4-E's of injury prevention. The most effective injury prevention efforts reflect a combination of the 4-E's.

EMTs and Injury Prevention

EDUCATION responds to the fact that injuries result from behavioral causes. Through education, we can change people's behavior or warn them about the potential dangers of a situation. Measuring the effectiveness of education can be difficult. Education is a gradual process; the effects may not be seen for years. Education needs to be targeted for specific groups and should be reinforced for different age groups. Also, members of our community may be educated about an injury problem but their behavior does not necessarily reflect their knowledge: we know better but do worse. Certain educational techniques seem to be particularly promising, including: using contracts or participant commitment, incentives, behavioral feedback, and modeling. A major advantage to educational efforts is that educating the public may increase the public's receptivity to legislative and technological changes.

ENFORCEMENT responds to the fact that some behaviors can be modified through regulatory change. Examples are laws that require drivers to use seat belts, police roadblocks to identify and get drunk drivers off the road, and regulations for the manufacture of safe toys. Legislation, regulation, and litigation are different methods for requiring individuals, manufacturers, and governments to comply with certain safety practices. Legislation is where governmental bodies enact laws requiring safe practices. Regulation is where governments or agencies pass laws and establish procedures to regulate the manufacture, sale, and/or use of products. Litigation is where suits are brought against manufacturers or distributors of dangerous products. Product liability litigation can encourage manufacturers to remove dangerous products from the market or make them safer. All these measures have been shown to be helpful in selected instances.

ENGINEERING responds to the technological advancements that change the design of products can offer automatic protection from injury, often without any conscious change of behavior by the individual. For example, flame retardant materials for sleepwear can prevent clothes catching on fire. The less the personal effort required, the greater the chance that the interventions will be successful. These are called "passive" interventions. For example, making child-resistant bottles is a passive intervention in reducing poisonings, and can be more effective than trying to keep the bottle out of children's reach. Other examples include airbags and anti-lock brakes for cars or automatic shut-off switches on lawn mowers.

ENVIRONMENTAL MODIFICATIONS must involve the community. Environmental changes in injury prevention help all community members, not just those who may receive the educational message, those at high risk, or those who can afford the intervention. Strategies to change the environmental factors can include social, legal, political, and cultural approaches. Environmental modifications reflect the community's awareness of the injury problem and acceptance of a mutual responsibility. For example, a community with a low cost car seat program enhances the child occupant protection for all members and acknowledges the injury risk of motor vehicle transportation for children. Other examples include communities that have broad-based DWI prevention programs or schools that sponsor conflict resolution efforts as an alternative to violence.

Each of the "4-Es" plays an important role in the injury prevention process. As you may guess by looking at the 4-Es, strategies may overlap categories. For example, in a small group discussion, one person may feel a seat belt law belongs in Enforcement while another may feel that it reflects an Environmental strategy. Labeling a strategy under the appropriate "E" is not critical; rather, we should view the 4-Es as a way to generate a *variety* of interventions.

EMTs and Injury Prevention

Education is often an essential ingredient for public acceptance of injury prevention strategies. While education is often the most familiar strategy, engineering, enforcement, and environmental countermeasures have the potential to reach and protect a large number of persons as well as have a longer lasting impact. When planning an intervention for your community, remember to think about all of the 4-Es of injury prevention.

“AUTOMATIC” PROTECTION IS MOST EFFECTIVE

Few of us like to do anything we don't have to. If someone invented a lawn that never had to be mowed, that person would become an overnight millionaire – after all, who wouldn't want a beautiful lawn without having to do anything to get it. The same concept applies to health promotion and injury prevention. If we can devise a way to protect people from injury that doesn't require them to do much, we are more likely to be successful in preventing injuries. This approach is usually referred to as “automatic” or “passive” protection. An example of an automatic or passive health promotion intervention can be found when fluoride was added to all public water systems. Fluoride helps prevent cavities and tooth decay. When it was added to public water systems, an automatic protection was provided to large groups of people – who don't even thank about it! We are provided protection around the clock in a manner which requires nothing of us, no conscious action or decision.

Consider the following strategies as they compare education to automatic protection:

Children drowning in public swimming pools.

- Option 1. Have signs in hotel lobbies warning parents to supervise their children around swimming pools.
- Option 2. Require all swimming pools to have fences with child-resistant locks.

Head and chest injuries of drivers in motor vehicle crashes.

- Option 1. Educate people to buckle up every time they drive.
- Option 2. Require that car manufacturers install automatic seat belts and air bags.

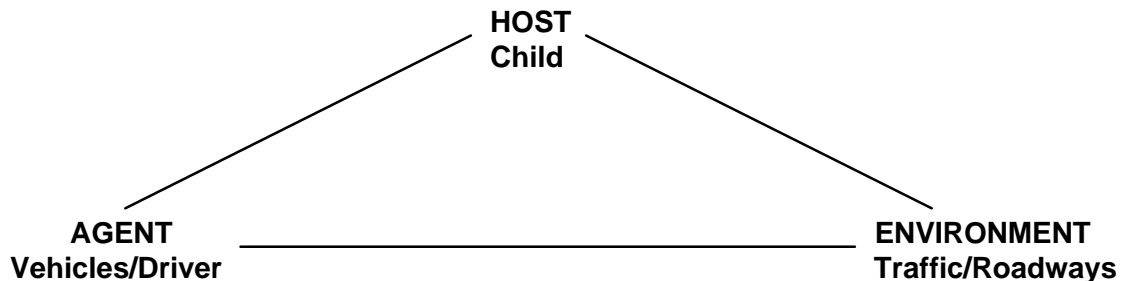
In each case, the automatic protection offered by “Option 2” is more likely to reduce injuries because people do not have to do anything to protect themselves each time they are at risk. Again, however, a combination of approaches – education, engineering, environmental modification, and enforcement – will result in the most effective strategy. Note that education is still an important aspect of the above examples. Adults still need to be warned about locking the gates around swimming pools and motor vehicle passengers need to know that airbags do not replace the need for seat belts.

MODELS FOR INJURY PREVENTION

A variety of visual models have been created to describe a health problem and how to approach it. One model, commonly referred to as the “Public Health Model,” identifies three influences that cause a health problem: the host, the agent, and the environment. The primary advantages of the public health model have been toward disease control – for example, malaria, influenza, and polio. For example, if you want to prevent malaria in a country, you can try to develop a vaccine, spray DDT to kill mosquitoes, or drain swamps to keep the bugs from breeding. These approaches target the HOST (people), the AGENT (mosquitoes), or the ENVIRONMENT (swamps).

EMTs and Injury Prevention

The public health model of HOST, AGENT, AND environment is often visualized as a triangle; an example is on the following page. This model has been applied to a variety of injury problems. Again, using the 4-E's of injury prevention, the model is used to identify appropriate strategies for each of the three factors. For example, if we wanted to explore the interactions and possible solutions of child pedestrian safety, the model would look like the following:



To reduce child pedestrian injuries, injury prevention would need to be threefold: educate the child (HOST-Education) about pedestrian safety, minimize the threat of vehicles to child pedestrians with safer bumpers (AGENT-Engineering), and separate traffic and roadways from where children walk or add speed bumps or flashing pedestrian crossing lights (ENVIRONMENT-Environmental Modification).

THE HADDON MATRIX

Another model that may offer another dimension of understanding and possible solutions to injury prevention is the "Haddon Matrix." This matrix was developed by Dr. William Haddon, Jr., of the New York State Health Department, a pioneer in the field of injury control. He identified several principles of injury prevention and summarized them in a table or "matrix." He divided the principles into two components, Phases and Factors, to outline the variety of approaches. Using the principles of disease control as identified in the Host-Agent-Environment model above, Dr. Haddon expanded our appreciation of examining the injury problem as if it were a disease. He also promoted a time-continuum approach to injury interventions. In the matrix, the Host, Agent, and Environment are seen as factors that interact over time to cause injury. These factors correspond to three phases of the event: pre-event, event, and post-event. The combination of all these factors results in a nine-cell matrix or table.

Most EMTs are trained to respond to the post-event. The emergency call is received by the dispatcher who sends the service unit to the scene where the team members administer emergency trauma care. As mentioned earlier, health care delivered at the post-event is a form of secondary intervention. Secondary intervention can stop the injury process and can change the outcome, severity, or result of the event.

The advantage of using the Haddon Matrix model is to trigger the EMT or community group into thinking about and planning for strategies before the 911 call comes through. Using Haddon's matrix involves us in primary intervention.

EMTs and Injury Prevention

The pre-event phase includes everything that can be done before an event to prevent it from occurring. The event phase includes interventions to prevent or minimize an injury at the time of the event. The post-event phase includes ways to lessen the severity of the injury once it has occurred. An example is given below, showing the nine-cell matrix, crossing time with the three factors identified in the public health model: HOST, AGENT, ENVIRONMENT. Compare the level of detail in the nine-cell table to the triangle model on the previous page.

CHILDHOOD PEDESTRIAN INJURIES – USING THE HADDON MATRIX

	HOST or INDIVIDUAL	AGENT or VEHICLE	ENVIRONMENT
Pre-Event	Education of parents in their kids' ability to interact with traffic and need for supervision; education of children in look left-right-left message; reflective clothing;	Reminder on rear-view mirror to look behind for small kids; electronic beeping on cars in reverse; infrared sensors around vehicle; improved vehicle body design.	Crossing guards or safety lights; enforcement of pedestrian walkways; enhanced bus service; no right-on-red; speed bumps near schools; separation of sidewalks from roadways.
Event	Protective clothing.	Energy absorbent vehicle bumpers.	Emergency phone booths.
Post-Event	Training of Parents as first responders.	Car or roadside phones for emergency 911 calls.	Trauma Center; Training for pediatric care.

As you can see from the example, using the time continuum, we see injuries as a process. We can recognize that our injury interventions can be effective at different points during that process.

Another thought that some of us have when reviewing the sample Haddon Matrix is that injury prevention requires innovative thinking – certainly some of these ideas may seem far fetched or expensive for a small community or an average parent. The variety of approaches, however, can get us thinking creatively. Looking at injury prevention within the context of a time line – pre-event, event, and post-event – can lift us out of the rut of education, education, and more education. We realize that there are unlimited ways to intervene over the spectrum of time. We can expand our problem solving abilities – we no longer blame the parent for lack of supervision or the driver for driving too fast. Rather we can generate solutions with physical and measurable attributes.

The value of using the Haddon Matrix is it offers new ways to think about preventing injuries. When someone says the only way to reduce a certain kind of injury is to “educate kids in school” or “buy more ambulances,” we can use the matrix to brainstorm additional ideas. We can outline the three factors – Host, Agent, and Environment – and the three phases – pre-event, event, and post-event.

For example, you might notice that your service is responding to an unusually high number of calls from your local high school football team. The school principal, football coach, and school nurse ask you to meet with them to discuss ideas on reducing the injuries that are happening to team members. The football coach wants you to provide a team and ambulance during all practice sessions; meanwhile, your service cannot afford to cover all afternoon practice sessions. Using Haddon's Matrix, what are some other possible solutions?

EMTs and Injury Prevention

Pre-Event and Environment: recommend new playing surface that reduces slipping or tripping.

Event and Host: recommend that team athletics must meet minimum standards of age and size.

Post-Event and Agent: recommend that cervical collars be included in first aid kits at schools.

Another example of using the Haddon Matrix to brain storm a variety of injury prevention ideas is provided on the following page. The problem is childhood motor vehicle crash (MVC) injuries, and the matrix details different types and times where we can intervene to prevent the injury from occurring or to reduce the severity of the injury once the event has occurred.

CHILDHOOD MOTOR VEHICLE OCCUPANT INJURIES: Using the Haddon Matrix

	Host/Human	Agent (Car Seat/Vehicle)	Environment
Pre-Event	Wear seat belt and use care seat at all times; make sure babysitter, day care, and extended family members use car seats; drive defensively; reduce time driving during rushhour or high-risk times like late weekends or high-speed long distance travel.	Maintain up-to-date recall information on car seats; manufacture easy to use car seats; provide 3-point seat belts in rear seating positions; regulate good maintenance and safety features of vehicles.	Enforce seat belt and car seat laws; encourage safer roads with lower speeds, breakaway poles, medians; encourage low-cost car seat programs; conduct media and education campaigns about seat belts, car seats and enforcement.
Event	Driver maintains control of vehicle; driver is belted and child is restrained.	Seat belt and correctly used car seat restrains and protects; vehicle provides crash protection.	Breakaway signs and light poles are in place; guard rails and medians are in place.
Post-Event	Bystanders are trained in first response; EMS personnel trained in car seat/seat belt extrication.	Ambulances outfitted with up-to-dated supplies and equipment.	Roadside call boxes in place; 911 system in place; adequate road shoulders for emergency use; quality EMS response and transport; nearby trauma center.

Most people are eventually convinced that certain injuries can be prevented. Once the range of possible interventions from the 4-Es of injury prevention and the time continuum of Haddon's Matrix are outlined, most people start thinking: Wow! How is it possible that injuries are such a serious problem? Surely, why can't most motor vehicle crashes, burns, falls and drownings be prevented?

But mention intentional injuries – injuries from homicides, suicides, child abuse, domestic violence, rape – and most people will probably say, forget it! It's inevitable – but work done in the public health field shows that is not true. While we have long accepted violence as a by-product of modern society, it has only recently been recognized as a public health problem. We tend to view the problem of violence as belonging to the criminal justice or judicial system. Yet the simple fact that violence results in physical injuries which in turn require EMS response makes it clear that injury prevention principles are relevant and applicable to violence and other intentional injuries.

EMTs and Injury Prevention

Recently, public health and medical professionals have become involved in violence prevention. We can use Haddon's time line of PRE-EVENT, EVENT, and POST-EVENT, and factors of HOST, AGENT, and ENVIRONMENT toward reducing violence. While it's true that we know a lot less about preventing complex intentional injuries than we do about motor vehicle crashes, for example, the tools for analyzing these injuries and approaches to solutions are very similar.

For example, let's look at preventing child abuse using the 4-E's of Injury Prevention— Education, Engineering, Environment, and Enforcement. Outlined below are some starting ideas. Certainly, you can think of more.

Child Abuse Prevention

- Educate the public with media campaigns that acknowledge the problem and make it clear that abusing children is unacceptable behavior. (Education and Environment)
- Pass and enforce laws that prohibit corporal punishment in schools. (Enforcement)
- Make parenting classes and stress-reduction workshops available. (Environment)
- Require that all new residential hot water heaters be pre-set at 120 degrees or less so intentional burns are less likely to occur. (Environment and Enforcement)
- Install temperature sensitive valves that shut off pipes when water heater temperatures reach over 125 degrees. (Engineering)
- Train emergency medical personnel to recognize and report suspected child abuse cases. (Education)
- Develop uniform and clear child abuse reporting procedures for health and medical personnel. (Education and Enforcement)
- Maintain a toll-free hot line and safe house for children to seek help. (Environment)

Now, what if we were to apply the idea of a time continuum to child abuse. We've taken some ideas listed above and put them into a Haddon Matrix. You'll notice some cells are blank. See if you can place the rest or come up with appropriate ideas of your own.

CHILD ABUSE PREVENTION: USING THE HADDON MATRIX

	Host or Child	Agent or Abuser	Environment
Pre-Event		Offer parenting/stress reduction workshops	Media Campaign Law against corporal punishment
Event		14 hour crisis hotline	Require maximum hot water temperature
Post-Event			Develop clear reporting procedures

EMTs and Injury Prevention

EMTs have a vital role in preventing injuries, both intentional and unintentional. There are many reasons why we can and should become involved. To summarize some points mentioned in the earlier section, EMTs should become involved in injury prevention because:

- We can identify hazards through patient treatment due to our strategic position in responding to injuries
- We can record important data on patient charts that can offer clues for preventing the injury from happening again.
- We can identify families or individuals at risk.
- We can spearhead a variety of interventions, such as education of patients, the public, and decision makers about injuries.
- We can advocate for policy and legislative change.
- We can make a difference, both as leaders of our community and as emergency medical providers within our service.

You personally can probably think of countless more reasons why you as an EMT can become involved in injury prevention. Are you a parent? Do you know of someone personally who died from an injury that might have been preventable?

If you are convinced why you should, the next step is thinking

How do you become involved?

What exactly can you do?

Where do you start?

Who do you call to get started?

Well, funny you should ask. The following sections of this manual can provide some of the specific answers to these questions and more, so...

READ ON!

Project Development

PROJECT DEVELOPMENT

ELEMENTS TO SUCCESSFUL COMMUNITY INJURY PREVENTION PROJECTS

Clear expectations about injury prevention projects can help us get started in our efforts to advocate for injury prevention and prevent burn-out. The following are some key elements to implementing a successful injury prevention project:

- Identify a lead person to coordinate the effort.
- Choose objectives that are feasible and measurable.
- Be certain the issue is important to you personally.
- Gather your facts.
- Build as broad a base of support as possible.
- Choose a plan of action that is likely to work on the basis of previous experience and community input.
- Have a realistic time line to conduct your project.
- Anticipate sources of opposition.
- Be brief in phone calls, letters, visits, and in testifying.
- Expect some losses.
- Maintain a sense of humor.
- Monitor and evaluate the impact of your efforts.
- Persist – changes don't happen overnight.

One of the points above mentions preparing for opposition. No matter where you are or what you want to do, there are the inevitable nay-sayers. They can crop up at different times throughout the life of your project. Listed below are some typical arguments you may encounter. It helps to rehearse your arguments for your plan and have your replies ready before you set out. Common arguments against a plan of action include the following:

- It is not that big or serious of a problem.
- The solution will cost too much.
- The solution is not legal.
- The solution places an undue burden on personal freedom or invades privacy.
- The project raises issues of liability.
- It is not feasible.
- It is not enforceable.
- It lacks the support of most citizens in the community.
- If people would only do what they are supposed to – supervise their children, wear seat belts, not dress provocatively – there wouldn't be a problem. This argument tries to "blame the victim."

Building a Coalition

Although one person can make a difference, forming a group or "coalition" of people who are interested in the issues is usually more effective. You might begin by identifying local groups already involved. You'll find several Ohio coalitions listed at the end of this manual. Joining such coalitions is an efficient way to learn quickly about a broad range of issues and to avoid false starts.

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If no groups exist, you may want to start a coalition in your community. At first, this may just be three or four people – for example, yourself, a police officer, a person with some public health background, a person active in politics, and the parent of an injured child. Your Regional EMSC Office could suggest community members who would be appropriate for your group’s effort. Later, your group may decide to invite a reporter, a medical doctor, a person with lobbying experience or other individuals that can offer resources, consultation or expert advice. One way to involve everyone from your very first meeting is to start with a Haddon Matrix that has a few cells filled in and brainstorm ideas for prevention and community action, identifying who could be helpful in making the change come about.

Most important, collaboration enhances the chances of success. A group working together on an effort has a greater energy than just one person working alone. A group reflects a unique combination of skills and strengths. A group effort can reach a wider audience.

More information on organizing your community, establishing coalitions, conducting meetings, and other hints to help in group dynamics is provided in Grass-Roots Community Organizing.

PRE-PLANNING YOUR PROJECT

PROPER PRIOR PLANNING PREVENTS POOR PERFORMANCE

Many groups lay claim to originating or owning the 6-P proverb – Prior planning prevents poor performance. But nowhere does it fit so appropriately than with injury prevention. Before we ever begin with any activity, planning our project is the most critical. Pre-planning is a crucial part of problem identification. Thinking about the following questions is part of prior planning and will pay off in the long term:

Can you identify the size and severity of the injury problem? Many of us may have strong convictions and gut instincts about an injury problem, convinced that “This is a problem!” But how do we know for sure? Just as important, how do we convince others that the problem is worth their time and energy? And if we get a group of people agreeing to work with us on an injury problem, how will we measure success? Can we prove to ourselves and to others, that our effort made a difference? We need to have a picture of the size and severity of the problem before we begin to know if our efforts had any result. We also should have an idea of what we hope to accomplish. What are our expectations?

What is currently known about the target population of your project? Having this information will help you plan your intervention. For example, what information is available that describes the age, sex, race, socioeconomic status or educational level of the group you intend to target with your project. Is this information available on a state, county, or citywide basis? How large will your project be and how long should it last to reach your audience? How will you advertise or reach this population? Are there cultural or physical barriers in reaching your target population?

Another aspect of identifying your target population is deciding whether your intervention is appropriate for the audience. For example, bicycle safety is often targeted to nine to twelve year olds because their cognitive as well as physical development is receptive to learning the skills – how effective would a bicycle safety program be for three year olds? At the other end of the continuum, a high school student would be seriously bored by the basic “If You Had Any Brains, You’d Protect Them With A Helmet” bike education safety message.

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Are there existing mechanisms for reaching this target population? If your project is directed at promoting safe driving behavior among high school students, can you identify existing programs that would complement or dovetail with your project? For example, can you join your effort with a high school seat belt program, a county-wide DWI awareness campaign, or a defensive driving program for new motor vehicle licensees? Joining efforts with an existing program can help prevent duplication and also stretch limited resources. Sometimes existing programs are hungry for new ideas, fresh volunteers, and welcome the infusion of energy that you might offer.

Can you learn from what others have tried to do before you? Some preliminary detective work early in your project planning can help later. Who can you call or where can you go to get some answers about what has happened already? Has another community tried to do a program similar to yours, were they successful, and what were their obstacles? Maybe another project has a summary that can help you streamline your thoughts or provide some baseline data that you can use.

What is the most effective mix of interventions? Education seems to be an all time favorite activity, but some health professionals question the value of “just” handing out brochures at a health fair. Can your project combine a policy or legislative change along with raising awareness for a longer lasting impact? Another approach would be to coordinate an educational project with engineering changes. For example, if you were planning a pedestrian safety project - can you work with your city planners to extend the time of the “Walk” lights at intersections in front of the schools. When planning your injury intervention, pull out a blank Haddon’s Matrix and brainstorm the 4-Es of Injury Prevention. We have included several copies of blank Haddon’s Matrix in this curriculum.

What is the political or cultural climate? Injury prevention does not work in a vacuum, and we have to be sensitive to the political and cultural surroundings, whether in our local community, at the state level, and even federal influences.

EVALUATION GUIDELINES

PURPOSE OF EVALUATION

Evaluation serves two basic purposes:

- a) to improve the process used to conduct a project
- b) to measure the project’s accomplishments or effectiveness

The first type of evaluation is known as “PROCESS” evaluation. Process evaluation describes how the project was done. Process evaluation is affectionately called “bean counting”. Process evaluations identify relevant numbers: how many coupons were distributed, how many school presentations were conducted, how many posters were mailed and to whom, how long did the project last, who joined in to help your project, and are there minutes or sign-in sheets for meetings? Process evaluations are meaningful to funding sources: where and how did we spend their money?

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Process evaluations answer the following questions:

- were steps of the program documented with sign-up sheets, meeting minutes, mailing lists, and correspondence?
- how many people were reached by the program and to what extent? (workshops, class presentations, one-on-one trainings)
- were the program's activities conducted as planned?
- how well was the program managed?
- were objectives met on schedule?
- could the program be improved and if so, how?

The second type of evaluation is known as "OUTCOME" evaluation. Outcome evaluation measures whether the program accomplished the desired goals: what happened as a result of the project? Outcome evaluations are most commonly associated with how success was measured and often compare pre-and post-program information. for example, compared to last year, are more people implementing a safer behavior, and if so, how many more? Outcome evaluation answers did fewer injuries occur as a result of your program.

Outcome evaluations answer the following questions:

- what was the impact of the program?
- were behaviors changed, and if so, how?
- how well did the program achieve its goals?
- for what groups were the program the most/least successful?
- which activities were most/least effective at meeting program goals?
- were injuries decreased as a result of your project?

REMEMBER

Evaluations are part of good decision making.
Evaluations help us describe what happened, what was learned, and how can we do it better.
Evaluations help determine if the program is worth repeating.
Evaluations are critical in providing rationale for funding support.
The evaluations plan needs to be part of your ongoing activity.

Many EMTs can be intimidated by evaluations, and we shouldn't be. We do it all the time when we fill out reports, when we share our learning experiences with a colleague, or when we ask for advice from another. Evaluations help us do our job better by showing what we've done and how we can do it better next time.

INCORPORATING EVALUATION INTO A PROJECT

In addition to appreciating the purpose of evaluation, the following points are offered as guidelines to help you conduct evaluations as a natural part of the project. The basic message throughout evaluation is to incorporate it as part of the activity. Do not wait until your bike rodeo or smoke detector installation project is over to think about evaluation. Rather, as your plan, ask yourself, what are we doing anyway that can be counted or measured or evaluated as a sign of our success?

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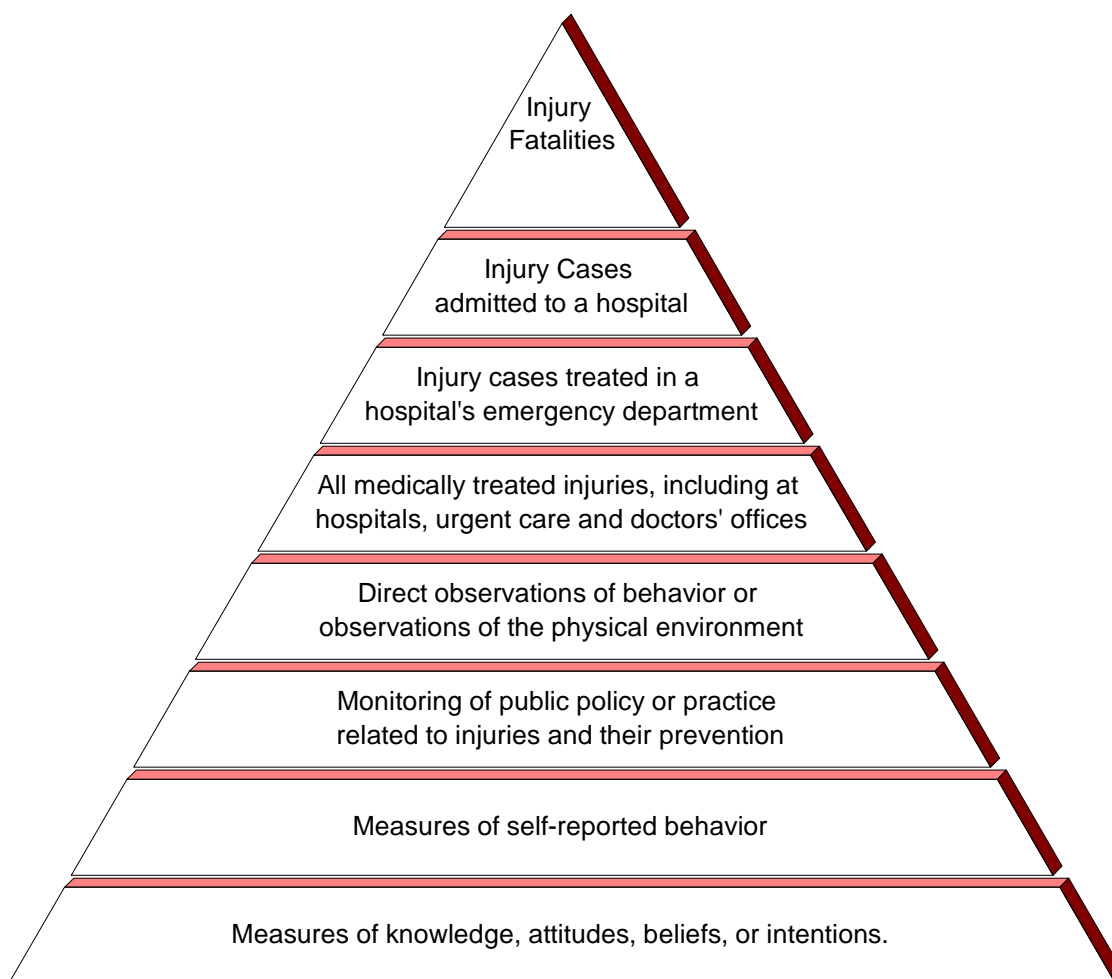
1. Design a project with objective, measurable and realistic goals. It is easier to work toward a specific goal like to “Increase the use of child car seats by 20% by the end of the year” than it is to evaluate “Parents will have a better understanding of why their child should be restrained.” Keep in mind that while the purpose of your project may be to reduce the number of children who are killed in motor vehicle crashes, this goal may be unrealistic. Remember: Injury prevention is not synonymous with accident prevention. Your project may not prevent a crash from happening; however if your project is providing car seats, you can prevent or reduce the severity of the resulting injury.
2. Outline the activities necessary to accomplish each goal. For example, if your project is to increase bicycle helmet use among school age children by 50%, then your first step is to survey how many school age children currently use a bicycle helmet. Your last step will be to conduct a final observational survey. The activities in between may include classroom presentations, distribution of materials or helmet coupons, and a bike rodeo event during which you provide free bicycle helmets. For each activity, outline the crucial steps and identify who will do what. This becomes your time line. For example, for the bike rodeo, the necessary steps include deciding where and when the rodeo will be held, who will ask the local newspaper for coverage, who will request the materials and by when, who has the form for conducting the observation, and who will recruit volunteers for the day. The value of written minutes for meetings becomes evident when outlining activities and responsibilities.
3. Design your evaluation activities as part of the ordinary daily tasks associated with your project. Evaluation efforts should occur throughout the life of the project. For example, if your goal is to distribute smoke detectors and batteries to low-income housing, and your activity is to distribute and install 10 smoke detectors per week, you would want to create a monthly report describing which housing complexes were targeted and how many smoke detectors were distributed. The report could show how many homes already had a smoke detector in place, how many required new batteries, and how many refused the smoke detector. Your report may want to describe at what time of the day you visited housing complexes, with general starting and ending times. These reports are part of the PROCESS evaluation; at the end of three months, your process evaluation may suggest that weekends are better visiting times than weekdays.
4. Consider who could benefit from learning about your project accomplishments. For example, let’s say you want to promote firearm safety among elementary school children. As a result of your project, you developed fact sheets on firearm injuries to children in Ohio, distributed brochures to schools, and encouraged students to draw pictures about what to do if they find a firearm. The question is who could use these materials? In the immediate sense, you could share your report with community leaders like the Chief of Police or your City Council members to get them thinking about the problem. Your local newspaper might be interested in receiving a short description of your project. Maybe there was a school in your community that didn’t want to participate in your project; if they received a report on how effectively you worked with the other schools, they might be convinced to reconsider your project. Maybe you learn that a nearby town is planning to conduct a similar program; your project description and reports can help their efforts. The evaluations you do can give credibility to you and your project.

MEASURING THE RESULTS OF A PROJECT

The results of a program can be measured in a variety of ways. As already mentioned, evaluation included both process and outcome measures. Process evaluations describe your activity and are probably familiar to your work: activity reports, minutes of meetings, or summaries of run sheets. Outcome measures can be a little trickier to get a handle on. Oftentimes, we think the ultimate outcome measurement is to reduce the number of injuries or deaths, but in a small community, this reduction may take a long time to show itself. Maybe the number of injuries and deaths was small to begin with so again, the effect is not visible or immediate.

A hierarchy of injury outcome measures, devised by Dr. Frederick Rivara is outlined in Figure A. below. This hierarchy can be helpful in recognizing the layers of results that can be identified as a measurement of success. The top four levels of the hierarchy represent measures of injury mortality and morbidity; these tend to be the most significant indicators of program outcome. Measures of knowledge and attitudes rank low because they do not necessarily lead to behavior change.

Figure 2. Hierarchy of Injury Prevention Outcome Measures



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When you start planning your injury activity, identify which measures you could feasibly obtain and would be relevant to your project. Some of these measures can be obtained from statewide resources. At the end of this curriculum is a partial list of national statewide, and regional organizations that can help you get started. Other measures of results may be found closer to home: your own service's run reports, local hospital monthly ER admission or discharge reports, or summaries from your EMS Medical Director.

And finally, other measures will require you to do your own legwork. For example, if you were planning a one-day bike rodeo and helmet give-away project for 4th graders at your local school: you can observe helmet use for all the students who ride bikes to school a month before your bike rodeo and a month after. This will give you a pre and post helmet usage rate but it would include all grades of students and your rodeo is targeting only 4th graders. Another measurement would be to ask the 4th grade teachers if you could conduct an informal survey in class, asking "Who wears a helmet when they ride a bike?" While this would be specific to your target group, the measurement relies on the kids' show of hands. Self-reported behavior is not as valuable as observable behavior, especially in groups where the individuals can be influenced by their peers. A possible solution would be to do both measurements in your community and contact one of the statewide resources listed in the back of this manual. Comparing local information with state level information will help to determine how your community measures up with other communities in the state.

Comparing local information with state level information will help to determine how your community measures up with other communities.

DATA SOURCES

Attached at the end of this curriculum is a list of resources nationally and in Ohio that can help with providing data and other resources to support your project efforts. Certain considerations should be taken into account when calling or writing these resources for their data. For example, have a specific idea of what data you are looking for and how the data will be used. Be able to identify your project's objective. You may be asked to submit formal assurances that you will give the data source credit for their information or that you will not abuse confidentiality. Allow enough time for them to respond to your request: lack of preparation on your part does not constitute an emergency on theirs. And finally, different types of data are collected by different sources. For example:

MORTALITY DATA

- Office of the Medical Examiner (Ohio)
- Ohio Department of Health, Vital statistics
- Fatal Accident Reporting System (FARS); maintained by the National Highway Traffic Safety Administration (Includes Ohio data that can be compared to other states.)
- Uniform Crime Statistics (UCS); maintained by the FBI (Includes Ohio data that can be compared to other states)

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MORBIDITY DATA

- Hospital discharge records
- Hospital emergency room records
- Emergency medical service run reports
- Worker's Compensation claim reports
- Local ambulance and rescue summary reports
- Police reports
- Fire Department Logs
- School health and day care center medical logs

INJURY SURVEILLANCE SYSTEMS

- State and regional trauma registries
- Emergency department surveillance systems
- Spinal cord, head injury and burn registries
- Behavioral risk factor surveys

Grass - Roots Community Organizing

GRASS-ROOTS COMMUNITY ORGANIZING

The days of the Lone Ranger are over. Nowhere is this more true than with injury prevention: you cannot take on an injury problem single-handedly and expect success. The long list of injuries, the variety of expertise involved in addressing these injuries, limited resources, and limited time – all of these and more preclude any one person from taking on the whole problem. Besides, even the Lone Ranger had help: his trusted horse Silver and Tonto, too.

But how do you get help? Where can you go in your community and ask for assistance, whether it's staff time, a building for an event, or mailing or copying support? The advantages of support are limitless but group dynamics can be tricky, even somewhat scary if you don't have much experience. Creating a group is not an automatic pilot kind of process, nor is group participation spontaneous. Think of your own experience: have you ever attended a meeting that started late, was poorly run, you felt your comments weren't heard, and when you left, you vowed never to waste time with that group ever again. Take the time to think of some recent meetings or group activities you have attended and consider: if you were running the group, how would you do it differently?

There are several key principles of community organizing that are essential for effective group work. These will be explored further in this section:

1. Grass Roots Members
2. Grass Tips Assistance
3. Technology of Community Organizing
4. Leadership Development
5. Staff Work
6. Running Effective Meetings
7. Media
8. Funding

PLANNING PHASE

With most community based injury prevention activities, knowing that we cannot take on the problem single-handedly, we want to gather a group to work with us. With a grass roots model, the people closest to the issue are the ones to recruit, not the agency or governmental workers who may be necessary at a later time in the project. Grass root membership of a group is essential for activities to get done. Grass roots, very much like the plant image the words conjure, are those people who are:

- Closest to the issue
- Reflect the ethnicity of your community
- Empowered to make change happen

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An Example: Your community recently has had several pedestrian injuries at a specific intersection. The injuries involve both adults and children, and some are alcohol-related. You want to recruit members to do something about it. You might outreach to the following groups, with attention to ethnic representation:

- Emergency Medical Technicians (EMT's) or dispatchers
- Other health workers
- Law enforcement officials
- Parents
- School teachers
- Survivors of crashes and of alcohol abuse
- Religious leaders
- Local business people including liquor establishment owners and managers

It will take some time and phone calls to identify our grass roots membership. We should probably have a one page summary to share with people as they are contacted. The summary should detail the problem, with support for why we feel a group effort is important. The summary may even include some data to support the problem. After key grass roots people have been identified and invited to participate, our next step is to exercise the technology of community organizing:

1. Find a neutral, safe place to meet that will not threaten the participation of all the individuals you have targeted. Realize the location can greatly color the tone of the project. For example, a meeting at a police station has a different feel than one held at a hospital conference room or at an elementary school cafeteria.
2. Find a regular time in the first few meetings that is convenient for all the members of the group. If people can schedule meetings ahead of time, this ensures greater participation.
3. Bring food and beverages to each meeting; it is a great organizing tool. Volunteer efforts require other sorts of perks than money! If we are planning a luncheon meeting and we can't supply refreshments, at least notify members to bring sack lunches.

Once we have grass roots members identified and invited to an appropriate place, the technology of community organizing continues. When gathering a group together to work on an injury problem, it helps to have a basic definition of what you want to accomplish. For example, encourage the group to define the parameter of the injury intervention. Different parameters include:

- Geographic limits of the community
- A commitment to developing several solutions that meet short and long term goals (most major community health issues are too complex for single solutions to have a significant effect)
- The time frame of your task (e.g., a 6-month planning phase)

Another parameter to define is how you expect the group to work together and make decisions regarding solutions to the problem. For most minor decisions, voting can be an effective decision process. The problem with voting, however, is not all group members may feel they are part of the group. The use of consensus critical in decision making process. We strongly encourage the use of brainstorming and consensus.

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Brainstorming meetings are different from regular decision making or planning meetings. Most of us are familiar with planning meetings: our group meets, we decide who does what and by when, and the meeting ends. In contrast, in a brainstorming meeting, we want to:

- Elicit the ideas of everyone present, over several meetings so that people will have time to reflect. Be sure those who don't usually speak get a chance to do so. This is called brainstorming.
- Remember that brainstorming means by definition that all ideas are welcome. A major outcome equally important to the creative ideas is the sense that the list was generated by full participation.
- Allow the originator of each idea enough time to explain the rationale for his/her idea but do not allow members to start to debate or reject each other's ideas. Brainstorming is a time for ideas, not arguments.

Some of the major elements of consensus-building include:

- Input solicited from all members, not just the loudest
- Finding solutions that the whole group can live with and support (they may not be a member's first choices)
- Listening respectfully to differences of opinion
- Working through minority opinions on given ideas to the point of group agreement
- The investment of time necessary to reach such "whole group decisions"

To effectively work toward consensus-building decisions, a facilitator is needed to move the group. The task of the facilitator is to move the group from a broad list of everyone's brainstormed ideas for possible solutions to a short list of realistic ideas that can still be supported by the whole group. To achieve this process, the group needs to feel that they are in a safe environment, one that will allow for full, honest discussion. Members also need to feel that their opinions can be aired and that differences can be discussed freely and fairly. Each member needs to feel that his or her opinion has been heard. It helps if the facilitator periodically repeats key points that have been said and summarizes and at the end of the meeting what group actions and decisions have been agreed upon. Recording the ideas on a chalk board or flip chart for the group to see is also helpful.

Certainly, building consensus is important for the major decisions of the group. Major decisions include selection of a strategy, meeting time and place, and the parameters of the project's efforts. In contrast, deciding who can bring refreshments for the next meeting with a show of hands.

IMPLEMENTATION PHASE

Making the leap from a planning phase to implementation will cause changes. For example, some people are not interested in implementation but only planning, and vice versa. One can expect turnover as well as new members at this time, provided there is careful outreach by the staff. In a grass-roots model, early implementation is a delicate phase.

Once you get to the level of “doing,” if the group is large enough, meetings can be divided into mini-group meetings – one for each intervention to be implemented. People should be grouped according to the following criteria:

- Personal interest in that intervention
- Expertise they can offer
- Diversity of the mini-group (e.g., not all medical providers working on one intervention, or all members of one ethnicity)

In addition to the grass roots members, two other types of people become very important during the implementation of a project.

1. Community leaders have credibility and respect; they often are activists who play larger roles than their specific titles. An example may be the school teacher who is also head of a neighborhood association, involved with the PTA at another school, and is on the Chamber of Commerce Board.
2. Grass tips people hold official posts in the community. They usually do not have the interest or time to attend meetings of this nature, but often delegate other people. If we think of grass roots members as the closest to the issue or local people, it should be easy to visualize that “Grass Tips” people are the designated heads of organizations or agencies. Examples include Chapter House leaders, school board members, or state governmental employees.

Some people are both community leaders and grass tips – not by definition but by personal record. Both groups are known as the gate keepers of the community – those who ultimately can make or break you by their support or opposition. During implementation they need to be mobilized for their support and technical assistance in order for the project to succeed. The Grass Tips people may not be actual members of your community, but their involvement is important. For example, if your group is working on a motor vehicle project, it may be appropriate to invite a representative from the Ohio Office of the Governor’s Safety Representative. This representative can both provide data to your group and be informed of what your group is doing. Grass Tips people often have knowledge of funding sources, data support, and awareness of what other communities are doing that may help your project.

The success of the project will depend on the ability to keep the grass roots effort at the center while engaging appropriate people to help. It will be very important to gain their support and assistance while not letting them take over the effort. Often these people will also want to take credit; the more successful you are the more you have to preserve the integrity of the working group.

EMTs and Injury Prevention

STAFF WORK IN PLANNING AND IMPLEMENTATION PHASES

You have to first be organized in order to do community organizing, and staff work is often the key in organizing. What does staff work mean exactly? It means that someone is taking care of the details. The details in organizing community meetings and activities include:

- Working Files: The staff person should keep a file that has the agenda, the minutes, and the sign-up sheet of each working group meeting.
- Contact Sheets: Develop a standard format that includes the name, telephone number, address, date(s) of contacts, nature of contact (e.g., phone, in person, or mailing) and summary of contact (e.g., person interested, interested in information only, gung-ho potential leaders). This will be very useful in exchanging information among staff.
- Minutes and Mailings: Keep minutes of all mini-group and whole working group meetings. Clarify who is responsible for producing and mailing minutes. It helps to rotate the responsibility for a given period of time.
- Intervention files: Once you start implementation, develop a separate file on each intervention you are staffing that tracks progress. For example, if your group has been working on a fire safety program every October and has recently decided to do a bike safety project over the summer, keep the projects separate.

Concurrent with the details of minutes, sign-in sheets and project time lines, your group will need new faces and fresh enthusiasm. Any community group is dying if there is not constant outreach to existing and potential new members. Part of this involves reminder calls to new and absent members within a few days of the meeting. Within the working files, it might help to keep track of the ideal, full representation of the group, including who is filling each role and how involved each “member” is.

The following is offered as an example. The ideal representation on an intervention to reduce alcohol abuse by Ohio teenagers might be schools, liquor establishments, survivors of a crash and EMTs. You have four people, but three are Anglo medical personnel, two of whom come irregularly, and one is a Hispanic school teacher who is moving next semester. Then you know you need to target outreach to liquor establishments and survivors immediately, increase contact with the irregular members and plan for a school replacement.

In addition to recruiting new members, existing members need reasons and support for continuing their participation. Different ways to ensure the continued participation of current members include:

- Allowing time for social interaction, for example snacks at the beginning of the meeting or a brown bag sack lunch break during the meeting. Some groups reward themselves with potlucks or year-end social events.
- Choosing initial tasks that have a high likelihood of quick success so the group can have a sense of accomplishment early on. Some groups identify several objectives, some long term and one or two immediate objectives to give the sense of continued satisfaction.
- Assigning tasks to all members so each participant feels recognized as important to the group effort and has a purpose for returning to the next meeting. Some groups even rotate leadership roles, asking each member to facilitate a different meeting.

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- Providing in-service or member development sessions to update and renew skills of the members. Some groups have invited speakers – for example, a health statistician to present current injury data or a pediatrician to present on childhood development related to injury – before the meeting starts.
- Offering certificates or awards to group members at annual meetings.

A significant part of community organizing is identification and development of leaders. Leadership development is a key component for two reasons during implementation: a) without it, the work load becomes overwhelming; and b) without it, the group becomes entirely dependent on the staff's leadership and therefore weakened. An easy way to identify leaders is someone who volunteers anything! It is often not the person who does a lot of talking. A leader may have a certain expertise, for example a health promotion or a cultural sensitivity trainer.

How to work with potential leaders:

- Give them a small, achievable task at which they can succeed
- Give them support in doing it
- Give them public praise
- Give them a second task with more responsibility

For example, within your group there is a teacher who often volunteers to work with your service unit on health fairs and bike rodeos. One of your project interventions is to promote pedestrian safety for students who walk to school and you want to do a "Safe Route To School" contest with the fifth grade. Ask the school teacher to set up a needed meeting with educational administrators. Check in to see how it's going. Thank him or her at the next working group meeting after it is arranged. You might want to consider asking the teacher privately if he/she would like to run the follow-up meeting with administrators. The basic caution in working with new leaders: Be careful of either rescuing them from the work they've said they would do, or requesting too large a first job.

Okay, so we've taken care of the details in identifying our group members, finding a neutral location and a good time for our meeting, we've invited the grass roots and appropriate grass tips people – the day of the meeting approaches. Oh NO! Suddenly you're thinking to yourself – I've never run a meeting before! I know what it's like to sit at meetings where nothing gets done and it's boring! I don't want that to happen to me! Don't panic. Realize that practice will make you better at running a meeting. Take a minute to review the last page of this section entitled, "Meeting Manners," and consider some of the following points as helpful guidelines.

1. Co-facilitation by person taking minutes: Recruit somebody to take minutes. The person taking the minutes should be assertive in clarifying discussion and action points. This person works with the person leading the discussion. Also, this person should welcome late individuals, show them where the group is on the agenda and have them sign in.
2. The person leading the discussion should focus on group process: Is someone being cut off? Is there someone the group hasn't heard from who would help the discussion? Is any one group getting blamed for the problem? Is the group getting off the point?
3. Constantly give ownership to the group, whether you are leading the discussion or clarifying action points for the minutes. For example, "We've heard several opinions on this idea. What does the group think?"

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Often groups are eager to invite media. You want to share what you're working on and your accomplishments. You want the publicity, the advertisement. However, be cautious in inviting media to working meetings. Media is an important medium for spreading the word; however, it can also overpower a group, like the grass tips leaders or state workers. Also, if your group is new or the dynamics shaky, media can interfere with the trust members feel within the group. If your group is brainstorming, presence of the media might stifle ideas. The following are guidelines on inviting members of the media to attend your meeting. There are other points on working with the media in a later section entitled, A Primer on Presentation.

1. Develop relationships with workable individuals in the local papers, radio, TV before you need them. With a relationship, there is a better chance at their playing an appropriate role.
2. Always ask to proofread an article or press release before its final stages. You may want to try to write the press release yourself.
3. Always know what your agenda is with the media, i.e., what message do you want to give them? Remember, you don't have to answer every question; you can turn a question to your advantage to get across a point they have missed.
4. With other contacts by letters or presentations, be well organized and clear in your presentation. Know what you want from them or what you want communicated ahead of time bring appropriate visual aids when in person.

Another important issue that usually arises in most meetings is funding. Your group wants to do something, and that something requires money. If you're planning a contest, you need prizes. Or you're planning a day's event and you need refreshments, materials or advertisement. How do you start identifying sources for funding support?

One idea already mentioned is to work with your state agency representatives. Libraries have extensive information funding sources, ranging from private foundations to federal funding agencies and programs. Also, your own city or county government may have a grant writing coordinator. Sometimes the only way to find this information is to ASK!

While the actual technical writing might be done by someone else, your community group can identify and screen potential funding sources. Once you've identified sources for assistance in locating possible funding resources, there are 6 key pieces of information to obtain and consider when thinking about applying for funds to help your injury project:

1. Who is the contact person, address, telephone number
2. A copy of the application or Request for Proposal (RFP)
3. Information regarding the average amount, as well as the range, of financial awards
4. The process by which the proposal will be reviewed
5. The date at which the announcement of award will be made and the date funds will flow; these are usually two different dates.
6. A copy of a successful application, if available.

MEETING MANNERS

- Welcome every one collectively. Express publicly your particular welcome for all those new to the group, even if there's only one new person; encourage new people to interrupt and ask questions any time they're confused about what's going on. Publicly welcome anyone who arrives late and ask them to simply say their name. Never chastise them publicly for coming late. The person taking minutes can bring the late person an agenda and handouts and briefly, in a whisper, fill them in on what happened.
- Always do a round of introductions (name, organization, how you got there), even if the "same people who already know each other" are there. You'll be surprised by what people who "know each other" don't know about each other!
- Recap the process to the date of the current meeting, whether there are new members or not. This reinforces a common group story, and helps people leave what they came from and settle into the group.
- Explain in detail what you are going to do at that particular meeting. If you have an agenda, refer to that. Remember the saying: "Tell them what you're going to say, say it, and tell them what you said."
- As you facilitate the meeting, check in with the recorder to be sure she/he is getting all the points down. Minutes of task-oriented groups fall into three areas: (a) a topic; (b) the major points discussed regarding the topic (not "He said revolvers....She said mermaids," but "The group discussed the connections between revolvers, mermaids and forestry."); and (c) action points that are agreed upon, with clarification of who's responsible and time lines. Good minutes provide group accountability, historical documentation of the group's existence and progress, and information for new or absent members. They can also serve as reports to funders.
- At the end of the meeting, briefly summarize what you have decided during that meeting, the action points to be accomplished before the next meeting, and when/where you will meet next. Again, you've told them what you're going to say, you said it; now it's time to tell them what you said.
- After the meeting: Within 2 days after the meeting, divide up the calls to all who came for the first time and those who said they would come and didn't. Welcome them again, ask if they understand what's going on or have any questions and ask for their input on the issues. Be sure the minutes go out 4-5 days after the meeting.

A PRIMER ON PRESENTATIONS

A PRIMER ON SCHOOL PRESENTATIONS

Children have different learning characteristics and capabilities at different ages. Understanding these differences can help EMTs choose the best educational approach and message when teaching to a specific age group.

The purpose of education is to teach children cognitive (thinking) and psychomotor (doing) skills. For younger children, the safety message should focus on psychomotor skills. Two examples are “look left, right, and left” for pedestrian safety or “Stop! Drop! Roll!” for burn prevention. As children grow older, their cognitive abilities develop. One very important aspect of cognitive ability is critical thinking skills. Critical thinking skills include: recognizing danger or hazards, identifying options and selecting an appropriate action. For fire and burn prevention, this would include drawing a home escape plan or recognizing smoke under a doorway as a signal to not open a door.

Learning is the change of knowledge or behavior that results from getting new information, skills, or attitudes. Practice and repetition enhances learning. There are three types of learning.

1. **Cognitive or thinking.** This is learning that results from recognition or recall of knowledge. Examples of cognitive learning include: learning facts or procedures, being able to explain principles, being able to apply facts and principles to a new situation, being able to analyze a situation.
2. **Psychomotor or doing.** This is learning that refers to the ability to manipulate an object or move a part of the body to accomplish a task. It involves brain and muscular activity and involves several steps, including: observing someone else perform a task, imitating or repeating the activity in a step by step fashion, practicing the activity until it is mastered, and personalizing the activity to meet specific situations.
3. **Affective or attitude.** This is learning that refers to the awareness, attitudes, and values of a student. Their attentiveness, participation, and willingness to apply newly learned skills are a measure of affective learning. Affective learning is not readily observed but inferred from other behavior, including: being receptive to a new idea, internalizing the new idea, and adopting/personalizing that idea.

The following pages highlight some specific learning characteristics of children at different ages and some tips on how to present to children. Also included are recommended injury topics for the different ages.

EMTs and Injury Prevention

PRESCHOOL – 3 to 5 year olds

- When working with preschool children it is important to gain their confidence and trust. Small children can be awed by uniforms – take the time to establish and build rapport.
- Be activity-based and keep presentations short and to the point. Lessons for 3 – 4 year olds should last no longer than 15 minutes. Lessons for 4 – 5 year olds can last 20 minutes. When children become restless, it is time to stop.
- These children learn best by seeing and doing. Doing will create the most lasting impression. Children learn best by example – model safety behavior for them.
- Messages need to be simple and so do the words. “Flame” and “smoke” are easily understood, “combustible” is not. Preschoolers need time to digest each new concept before building on the next idea.
- Focus on the positive what to do, rather than on what not to do. A good example is “A match is a tool, not a toy.” Do not use scare tactics with children.
- Keep the class size small, fewer than 10 students if possible. You want to be able to interact with each child, have a lot of participation, and not lose control as their attention wavers.

KINDERGARTEN THROUGH 2ND GRADE – 5 to 7 year olds

- | | |
|-------|---|
| Age 5 | Begin to develop the power of reasoning
Ask for definitions and talk constantly
Ask fewer, but more relevant questions
Are egocentric – think the world revolves around them
Need to be activity-oriented |
| Age 6 | Constantly in motion, assertive, opinionated, outgoing
Dawdle at many activities, particularly if authority |
| Age 7 | Are much more serious in their approach to the world
Are more sensitive about the way they are treated by others, so they are usually polite and courteous toward adults |

Generally, children between the ages of 5 to 7 children are receptive to learning, especially by a role model such as a fire fighter or EMT. This age is an excellent time to introduce and reinforce safety behaviors. Students at this age exhibit a curiosity and fascination about injuries and dangers. This age group also likes to tell personal stories that do not always pertain to the topic being presented. Redirect stories and ask students to ask questions only and save the stories for later, perhaps the playground! Limit class size to 10-25 students in this age group. Refrain from combining classes as this may lead to a loss of control. Be sure the teacher stays close to maintain discipline.

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3rd THROUGH 5th GRADE – 8 to 10 year olds

- Age 8: Eager to learn how things work
Begin to be able to judge and appraise why things occur the way they do
Curious about those who inhabit their social environment
Eager to cooperate and learn but on their terms
- Age 9: Are especially interested in group activities
Are discovering a new maturity, confidence and independence
Are becoming more self-directed and are motivated by their interests rather than by obligations
- Age 10: Very peer oriented
Feel increased pressure to conform to group principles and values
Fascinated with adventure
Have increased ability to use logic and reasoning

Older elementary school children may have lost some of their curiosity about injury and dangers. This is replaced by a confidence in being able to handle unsafe situations. The positive aspect of this is that as children grow older, they can accept more responsibility in preventing injuries and protecting themselves. The negative feature of this confidence is that these youngsters can become too confident. They may become victims of their own careless actions. For this age group, education modules dealing with water safety, firearm awareness, cooking hazards, and latchkey awareness are especially important.

6th THROUGH 8th GRADE -- 11 – 13 year olds

- Age 11 – 13: Can deal with increasingly complex problems
Can reason without always requiring the concrete experience
Are able to see problems from several points of view
Develop theories, explanations, and weighs the pro's and con's
Able to reason why things happen before they occur
Are risk takers and believe "it can't happen to me."
As peer pressure increases, risk-taking behavior increases

Generally, pre-adolescents have the ability to see alternative causes and solutions for different problems. They can imagine what it would be like to be in a dangerous or life threatening situation and can suggest a number of ways to cope with or remedy the threat. Best of all, they can think in preventive terms and can identify ways to stop injuries from occurring in the first place.

Real life stories make an impact on this age group. A description of someone's encounter with a real life situation, how they responded, and the end result will make an impression. Learning from their own personal experience (for example, scald burn or motor vehicle crash), pre-adolescents can make useful decisions about their future. Applying these learning experiences is extremely meaningful and much more motivating to this age group than memorizing a list of safety rules. Activity-based learning is likely to be well received, such as modules on fire extinguisher use and CPR training.

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Pre-adolescents desire independence and mobility. These factors increase their chance to engage in risk-taking behavior such as trespassing in an electrical substation or exploring a below-grade storm drain or abandoned mine. Modules on confined spaces, outdoor recreation safety or wilderness survival attempt to address these issues.

PRESENTATION METHODS

“ROPES” is an acronym that reflects one way to plan and structure a presentation with students.

- R** Review. State the topic that you’re going to teach; Explain it briefly. Tell them what you’re going to tell them.
- O** Overview. Discuss the topic in terms of your own experience with the subject. Tell them how it will effect them.
- P** Present. Reach the topic in an effective way so that information is easy to learn and retain. Tell them.
- E** Exercise. Allow the student to practice skills or apply information; provide feedback. Tell them to tell you what you’ve told them.
- S** Summarize. Review and clarify. Tell them what you’ve told them.

The following are other ways to present and reinforce a subject; these can be combined to fit your needs and your audience:

- Lecture
- Discussion
- Case studies
- Small group activity or activity sheets
- Exercises
- Visual demonstrations
- Music, characterization, puppets or role playing
- Videos
- Question/answer

When using questions to generate thought and discussion, the following guidelines can help keep both you and the students on track:

- Use open and probing questions
- Questions should be clear and cover a single topic
- Questions should be directed toward a logical answer
- Questions can be directed to a student or to the entire class
- Don’t be afraid to leave a period of silence after asking a question
- When questioned by a student, you can redirect it to another child

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VISUAL AIDS

Visual aids are the primary method of learning for most people and can add dramatically to comprehension and retention of new information. Students who hear retain about 10% of the information. Students who see retain 20%. Students who both hear and see a presentation retain about 65%. In addition, visual aids make a presentation interesting, focused, and enjoyable. Finally, if you are new or nervous about presenting to a group, visual aids take the audience's eyes away from you and onto the visual aid.

Each visual aid should represent only one major idea. It should also communicate the idea quickly, usually less than 10 seconds. Visual aids should emphasize only key points, allowing the speaker to expand background or supporting information. And finally, visual aids should support – never conflict or detract from – the presentation.

Types of visual aids are endless: chalkboard, flip chart, slides, transparencies, videos, handouts, brochures, coloring books, activity sheets, posters, pencils, and stickers. While videos are fast becoming the most requested visual aid, especially with young kids, you might consider some of their advantages and limitations. The advantages of the video presentation is that it may have a high interest factor for the MTV generation. A well produced video can be fast-paced and glamorous, and it can simulate complex situations. Videos may not need a commentary, which can be either good or bad. The limitations of videos is that they are expensive to purchase and can become outdated quickly with styles or music. Videos are usually not personalized to your locality or target group. They may be too long, too short, too dry and boring, or incomplete in providing the safety message you want to deliver. Two basic cautions in using a video for your presentation: make sure you review it before you use it and have a back-up plan in case of equipment failure.

READ YOUR AUDIENCE

It's a hot afternoon. It's the week before spring break, or worse yet, you've been asked to present right after lunch. Your task is to educate but your challenge is to keep the group alive. Do you know how to read your audience? More importantly, can you keep their attention?

Time tested teaching techniques for keeping your audience attentive include:

- Maintain eye contact.
- Use a friendly, sincere, and clear tone of voice. Project your voice to be heard; don't shout.
- Be happy and animated. Reinforce the positive.
- Move around the class; do not become planted in one location.
- Pace your delivery; pause for reinforcement and emphasis.
- Encourage participation with comments like "Good question!" or "That's a great idea!"
- Ask questions and if the students ask questions, redirect them to another student.

The advantage of being a special guest speaker is that students will anticipate your presentation. This is a break in their routine so interest will be high. Tap into that interest to keep the momentum.

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Clues that you're losing your audience include slouching, quizzical looks, side talking, daydreaming, and sleeping. So what do you do? Stop! Change the pace, increase your enthusiasm, try a different teaching method, do an activity, and if you have the luxury of time, take a break.

Certain students – sometimes, even certain classrooms – can require management. When dealing with a disruptive student, your goal is to minimize the problem, maintain the student's self-esteem, and avoid further disruptions. How do you do this? Make direct eye contact with the disruptive student, move closer, and courteously ask the nature of the student's disruption. You want to quickly refocus the class on the topic being discussed. If the student continues to be a problem, consult with the teacher – let the teacher discipline the child.

PROFESSIONALISM IN THE CLASSROOM

- Always wear your uniform, be neat and clean in appearance.
- Watch what you say. Children will take everything you say or do as gospel. They will also mimic you.
- Don't smoke, use chew, or chew gum on school grounds.
- Follow school rules – if there's a rule about ball caps, don't wear them.
- Always be positive.
- Be sensitive: Medical providers' sense of humor can be a little harsh or off the wall.
- Develop and maintain cultural sensitivities.
- Never belittle or cut down a student. Kids think of themselves as cool and sophisticated and so should you.
- Relax and have fun. Students will pick up on your attitudes and have fun too.

PREPARATION

In a nutshell: BE PREPARED. When preparing for a school presentation, know the class size, their ages, and the time you are allotted to present beforehand. Find out ahead of time where the class room is, where you can park your vehicle, and if you need to check in with the principal's office. Know and feel comfortable with your visual aids – if you need AV equipment, communicate your needs clearly and ahead of time. If you need notes, put them on 3 X 5 index cards and refer to them when needed. Do not read a script. Know your stuff – if you're comfortable with your materials, it will be easier to keep your presentation on track.

On the morning of the presentation: Get there early. Make sure the teacher stays in the classroom and always refer to the teacher as Mr., Mrs., or Ms. Unless told other wise. Stick to your time allotment.

And know that you'll be asked to return.

BASIC TIPS FOR SPEECH PREPARATION AND DELIVERY

As part of a coalition or on your own, you may need to speak to groups or individuals about the injury problem in your community. Listed below are some tips to help you prepare and present your talk. Keep in mind, public speaking gets easier with practice, practice, and more practice.

SPEECH PREPARATION

1. One of the best formulas for speech arrangement is: Tell them what you're going to say. Say it. Summarize what you've said.
2. Determine the theme of your talk: What are you going to talk about? Have you been given a topic?
3. Decide on the purpose. Exactly what do you want to accomplish? What do you hope your audience will do as a result of listening to you.
4. Audience. To whom are you speaking? What is the connection that gathers this group?
5. State your purpose clearly and simply. This really is the conclusion of your talk. The first thing to plan is the last thing you mean to say.
6. How can you introduce the subject to gain attention. A good opening should include a preview of the purpose.
7. Lay your course to lead from your opening to your conclusion. Make notes on the plan, throw away the nonessentials, and you have an outline for your talk.
8. Go through the outline repeatedly and with care. Test it to see whether it is logical, interesting, climactic, and convincing.
9. Memorize the outline, the opening and conclusion. Do not memorize words for the entire talk.

SPEECH DELIVERY

1. Speak clearly. There's no use in talking if you can't be heard.
2. Look at the audience. Maintain eye contact.
3. Talk about things you know. Knowledge gives you power as a speaker and will help you forget your fears. Leave no doubt as to your sincerity. Be honest and sincere.
4. Say what needs to be said – no more. Don't go into too much detail. Don't sidetrack with rambling stories or inconsequential facts.
5. Be enthusiastic and show your enthusiasm by your manner.
6. Don't worry about your hands. Gestures will come naturally as you become accustomed to speaking.
7. Be simple. Plain words and short, direct sentences are more easily understood than long, complex ones. Be clear in your argument, your facts, and your conclusions.
8. Never make something up. If you are asked a question and don't know the answer, acknowledge that you don't know or you'll get back to that person later.
9. Be friendly. Always put a smile in your voice, and occasionally show one on your face.

REMEMBER: Thorough preparation, full knowledge of the subject, and honest conviction about what you are saying are the vital ingredients to a good speech.

TIPS FOR WORKING WITH THE MEDIA

1. Treat reporters as professionals who are likely to be interested in important health issues. As an advocate, you should be equally professional – a reliable and knowledgeable source of information.
2. Get acquainted with as many media people as you can nurture your contacts frequently. Realize and respect that they are busy people with deadlines.
3. Use all media possibilities. This includes editorials, letters to the editor, feature stories, public service announcements, talk radio shows, call-in radio shows, and community access television when available.
4. Keep an up-to-date listing of all media available in your area. Company and association newsletters can be a useful way to reach the business community. United Way, city hall, or your chamber of commerce may be able to give you a local list of business publications.
5. Provide background on your organization, what its goals are, what services you provide to the public.
6. Press releases should be typed, double spaced, with wide margins, and be clear and factual. Keep it on one page if possible. Include the name of your organization with a contact person and number where they can be reached, days and evenings.
7. Write a press release for the general public. Highly technical press releases won't get printed.
8. Write the story inverted style, with the most important facts first. This allows it to be edited without harming the story. Be sure to include Who, What, When, Where, and Why.
9. News conferences should be limited to important statements or events. Be prepared to answer questions, and provide fact sheets that summarize your key points.
10. Health messages need to be based on what the target audience perceives as important and what they want to know, rather than what may be interesting to your agency.

BASIC TIPS FOR MEDIA INTERVIEWS

- Know your agenda, and identify your primary objective for the interview.
- Know your message, and identify the key points you wish to make throughout the interview. Identify a “catchy” phrase or simple way to summarize your message.
- Know the impression you want to make, and how you can best portray an image to convey that impression.
- Before an interview, identify the “worst” questions you could be asked and prepare responses that will reinforce your primary message.
- Don’t be afraid to repeat your key points as many times as you can throughout the interview.
- Know the intended purpose of the interview, how the interview will be used, and how long the interview will last. This information is best obtained by asking.
- Take the time to think – you can always buy a few minutes from even the busiest reporter in order to collect your thoughts.
- Know the primary audience you intend to reach throughout the interview, and match your message to the audience.
- You are the expert; don’t be afraid to get your message across with examples of your experience.
- Nothing is off the record. If you want it to be off the record, it shouldn’t be said.
- Always use short, concise sentences to respond to questions.
- Correct the interviewer whenever necessary; don’t explain a false premise, but clearly state that the interviewer has misunderstood and then restate your message. Concentrate on areas of agreement with the interviewer whenever possible.
- Rule out personal matters or issues that are not related to the purpose of the interview.
- Be mindful of your stress level and aware of what could increase your stress during the interview. As stress increases, your comfort level decreases and “slips” can easily occur.
- Remember that you have rights, particularly the right to be given time to prepare and the right to be treated with respect.

LETTERS TO YOUR LEGISLATORS

For a legislator, letters are the barometer that measures the constituents' concerns. The impact of writing a thoughtful letter to your congressmen should never be underestimated. For every written letter received, a legislator tends to assume that other constituents may feel the same but haven't taken the time to write. You do not have to be an expert to write a letter; however, some hints might make your correspondence project easier.

GENERAL GUIDELINES

- Keep the letter to one page. A single page letter indicates your recognition that you are writing to a busy person. A single page also compels you to keep to the issue at hand.
- Write legibly.
- Avoid form letters where you just sign your name. Rewrite the form letter, making it personal and different.
- It is worth knowing your legislator's membership on committees and associations. This is public information and can be obtained by telephoning the legislator's state office. A legislator's affiliations greatly determines his or her ability to act. For example, a Senator on the Labor and Human Services Committee has direct influence on health legislation. A representative on the budget or appropriates committee can help ensure funding.

HOW TO ADDRESS YOUR LETTER

- Your elected legislators are addressed as "The Honorable (Name)" in the address and "Dear Senator/Representative (Name)" in the salutation.
- Letters can be addressed to the Senators at the U.S. Senate, Washington, D.C. 20510. To the Representatives, letters are addressed to the U.S. House of Representatives, Washington, D.C. 20515. Room numbers and building names are helpful but not necessary.

FIRST PARAGRAPH

- Identify yourself as a constituent. This personalizes the letter. It helps if you can identify yourself both as an individual citizen and as a member of a larger group or organization.
- Cover only one topic. This helps keep the letter short but it also ensures that your letter goes to one staff person who is responsible for responding.
- Ask for specific action. Be reasonable in your request.

SECOND/THIRD PARAGRAPHS

- Show your interest or knowledge in the legislator's past record. Draw the parallel between your current concerns with the legislator's past actions. Acknowledge the legislator's past action that you thought was positive, if it's related to your current concern. If you can flatter, do so but be short about it.
- Be specific. Refer to a piece of legislation by title or name, by bill number, or by the legislator who introduced it.
- Give reasons for your position. Focus on two or three main reasons why you consider the legislation good or bad. Acknowledge the opposition without being insulting.

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CLOSURE

- Acknowledge your respect for the legislator's responsibilities. Indicate your appreciation for their work on your behalf on a larger scale; this is one way to slide in your request as reasonable on the smaller scale.
- Include your name and address on the letter itself; envelopes get lost.
- Indicate who else will be receiving copies of the correspondence. If you belong to an organization, indicate "cc: president of your group." If other agencies are affected by or would react to your position, indicate that you are sending them a copy. This strategy lends credibility and seriousness to your position. Depending upon the other recipients of your letter, it can also ensure proper follow-through to your letter.

PROPOSAL WRITING GUIDELINES & FUNDRAISING TIPS

Proposal Writing Guidelines

A significant aspect of injury prevention activities is finding the funds to support what you want to do. Finding funds may be as simple as picking up the telephone and contacting a local vendor to request a handful of donated prizes, or it can be as detailed as writing a fifty-page proposal to a federal agency with needs assessments, dozens of appendices, specific budgets, and interagency letters of support. Either way, to ask for money, you need to describe what you want to do, why your effort is relevant, what will happen as a result, and why YOU, of all people, should be selected. These aspects fall into a category of Proposal Writing.

The next few pages provide general guidelines for asking for funding support. While every funding agency will require different forms and will emphasize different aspects within their proposal, there are general similarities to every application. For example, most funding proposals want to know:

- What is the problem, who is affected, and why is this issue important?
- Who are you and why are you the best person to address the problem?
- How exactly are you going to change this problem for the better?
- What precisely are you asking for?
- How will you document or prove that you did what you said you would do?

Of course, this information can be requested in a variety of ways, from worksheets, narrative, abstracts, to fill-in-the-blank type forms. So, while the following is provided as general guidelines, it is important to emphasize two points: for every application you submit,

- 1. READ THE INSTRUCTIONS!**
- 2. IF YOU NEED CLARIFICATION, ASK QUESTIONS!**

With those two basic rules in mind, the following pages can help you collate your thoughts and plans for conducting an injury prevention program in your community.

GENERAL DO'S AND DON'TS OF PROPOSAL WRITING

DO'S

1. Read all instructions carefully.
2. Make duplicates of all instructions and forms. Pencil in all forms according to directions before making copies.
3. Develop a check-list for required items, forms, and attachments.
4. Inform the granting institution that an application will be made. If parts of the proposal are unclear, contact the granting institution for clarification. Make sure your questions are clear. Develop a good working relationship with the grant agency staff.
5. Identify the important individuals and organizations that may want to support your project. Make a list for these persons for letters of support.
6. Leave nothing for the last minute.
7. Make sure your objectives are measurable and realistic.
8. Clearly and concisely describe the evaluation methodology.
9. Give yourself ample time for a complete and thorough review of your proposal before sending it.

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DON'TS

1. Do not make careless mistakes on the forms- including white-outs and erasures.
2. Do not exclude key players at your institution or in the community.
3. Do not over-run the specified page limit.
4. Do not fill the appendix with materials that should have been in the narrative.
5. Do not use a small font to squeeze in information. Use specified font and spacing.
6. Do not be vague, especially about the objectives or evaluation.
7. Do not put your proposal in fancy binders or organizers. Most grant agencies want to duplicate the material and prefer that it be unbound and not stapled.
8. Do not promise to do more than you can realistically accomplish.
9. Do not ask for more funds than you need.
10. Do not overestimate or inflate your budget.

PROPOSAL INTRODUCTION

Your introduction, while usually short, is your opportunity to grab the attention of the funding agency. Oftentimes, a proposal may not have a specific or formal question to allow for the introduction. In which case, use your cover letter. The introduction is your chance to brag, to show your key accomplishments, to give an idea of why your application is better than the others or why your credentials outshine the competition.

DEVELOPING THE PROBLEM STATEMENT

Define the problem that your project will address

- **Define the general nature of the problem.**
 - ⇒ Who has the problem?
 - ⇒ How serious is the problem?
 - ⇒ What is causing the problem?
 - ⇒ What related factors contribute to or exacerbate the problem?
 - ⇒ Whom are you trying to help?
 - ⇒ Describe the population.
 - ⇒ Describe the setting, i.e. community, county, school, etc.
- **What is the purpose of solving the problem**
 - ⇒ Who will benefit?
 - ⇒ Why now and not later?
 - ⇒ If your project is successful, so what?
 - ⇒ Is what you're planning to do applicable to other communities?
- **What barriers or difficulties could be anticipated?**
 - ⇒ Have others tried to address a similar problem and were they effective?
 - ⇒ Why hasn't the problem been solved or addressed in the past?

GOALS AND OBJECTIVES

Goals, objectives, methods, strategies--often, the terms are used interchangeably and they do not mean the same thing. After several hours of planning and writing a proposal, the words can get confusing. So, slow down and breathe deep. Take a minute to review:

GOAL

- A goal is a broad statement of intent: what do you want to accomplish. Goals point to the general direction you want to head.
- A proposal tends to have one or two goals.

OBJECTIVE(S)

- The objective is an action statement related to the goal.
- Objectives are the strategies aimed at achieving the goal; some goals need multiple strategies.
- Objectives are specific, time-oriented and measurable.
 - ⇒ Specify the process or product expected: what is to be done and to whom
 - ⇒ State the measurable: how much will be done and by when.
- Sample objectives include:

“By the end of 6 months, at least 75% of our EMS providers will know how to correctly install a child car seat, as documented by certification and field experience in conducting 3 car seat clinics at the public health office. In addition, we will conduct observational surveys once a month at the public health office to measure increased car seat use among our clients of low-income moms.”

“During the month of October, 100 smoke detectors will be installed in low income housing; verification will be based on home visit check-off forms. Five school presentations, targeting 1st through 3rd grades, will be conducted during the same month to reinforce fire safety and burn prevention.”

“After attending the EMS bicycle rodeo on May 1st, 65% of 6th graders will be using bike helmets and practicing appropriate hand-turning signals as documented by observational surveys, to be conducted at the school during the last week of May.”

METHODOLOGY

Methodology is your strategy: how are you going to accomplish your objectives.

- What will be done and how? Identify the activities to accomplish the objective.
- Who will do it and who will help? Are they qualified, have they done something like this before, and are there other resources available to help?
- Where will it be done? Identify location for activities and why it was selected.
- When will it be done? Identify the time frame for each of the steps involved.
- Why will it be done this way and not another? What is the rationale for the plan?
- Be reasonable and realistic: Don't make your strategy look like a wish list.

EVALUATION

Evaluations are your opportunity to show how effective your project will be. Funding agencies rely on a project's evaluation to show that their funding was well spent. Refer to the curriculum section entitled "Project Implementation" for more details on evaluation.

- Identify the plan for how you will measure progress in achieving objectives
 - ⇒ Describe the method for monitoring progress
 - ⇒ Indicate a plan to make modifications if activity is not going as planned.
- Define the method for evaluating achievement of the objectives.
 - ⇒ Identify who will do the evaluation, the time frame, and the methods used for collecting information.
 - ⇒ If specific instruments (EMS run sheets, pre/post tests, evaluations) will be used, include them on the appendix.

SCHEDULE OF IMPLEMENTATION

Divide activities into phases or time lines

- Time lines help plan resources, both expense and work loads for staff
- Time lines identify landmarks or accomplishment of activities
- Time lines need to be reasonable.

Adapted from James Seidel, M.D., Ph.D.

POTENTIAL SOURCES OF MATCHING FUNDS

- **Community Organizations:** Civic, service, and religious organizations are good prospects for small grants for ongoing programs or special projects. Kiwanis, Jaycees, Junior League, Rotary, and auxiliaries are prominent examples. Contact is usually made through the local president or other leader, though some requests may be referred to the state funding levels. Most likely to be funded are projects that provide a shared community need.
- **Company Foundations:** Funded by profit making companies for the purpose of corporate giving. Often responsive to funding requests from organizations serving employee needs; research in company related areas, and community projects located near company headquarters, plants, or branch offices. Typically company foundations give a large number of small grants.
- **Community Foundations:** Funded by gifts and bequests from many sources who want their contributions to benefit a particular city or region. Most foundations approve requests during a particular time of year. For this reason, foundation applications may be a good long-range funding option.
- **Local Businesses:** Discount department stores, insurance agencies, car dealerships, hospitals, and grocery stores are all potential sources of donations. Remember, not all businesses are able to offer cash donations. Be prepared to ask for products (e.g., car seats or bike helmets) or in-kind contributions such as free ad space, volunteers for special events, copying/faxing services, and/or meeting space.

FUNDRAISING TIPS:

- Develop a clear, brief program description before you begin to solicit donations
- Be realistic about the amount you request. It enhances your credibility and chance for success.
- Matching funds programs give you leverage when soliciting donations for a project. Potential donors love to know that some level of the government will "match" their donation. Be clear to prospective donors that you are in the application phase of the project and that their donations will increase the likelihood of your project being funded.
- The Foundation Directory at your local library lists foundations according to preferred grant categories (capital, general operating, and special interest (safety, health, education etc.)). Remember to record the contact information for each foundation so that you can call and get a copy of their funding guidelines.
- Once you receive your first donation, use local print media to issue a "challenge" to other businesses and organizations in your community to match the amount. Remember to obtain permission from your first donor to use the company's name in the ad.

A portion of the information provided above is from the Mellon Bank Corporation's publication "Discover Total Resources"

INJURY PREVENTION RESOURCES

Safety Organizations and Resources

SAFE KIDS COALITIONS IN OHIO

Ohio SAFE KIDS Coalition

Ohio Department of Public Safety
Division of EMS
1970 West Broad St., 5th Fl.
Columbus, OH 43223
1-800-233-0785

Butler County SAFE KIDS

Butler Co. Educational Services Ctr.
6025 Dixie Highway, Ste 300
Fairfield, OH 45014
513-887-5534, 513-887-3709 FAX

Central Ohio SAFE KIDS

Columbus Health Dept.
181 Washington Blvd., Columbus, OH 43215
614-645-6138, 614-645-6745 FAX

Cincinnati SAFE KIDS

Children's Hospital Medical Center
3333 Burnet Ave., Cincinnati, OH 45229
513-636-8639, 513-636-3827 FAX

Clark County SAFE KIDS

Clark Co. Combined Health Dist.
529 E. Home Rd., Springfield, OH 45503
937-390-5600, 937-390-5625 FAX

Columbiana Co. SAFE KIDS

Columbiana Co. Health Department
7360 SR 45, PO Box 309, Lisbon, OH 44432
330-424-0272, 330-424-1733 FAX

Delaware Co. SAFE KIDS

Delaware Co. Health Department
109 N. Sandusky St., Delaware, OH 43015
740-368-1700, 740-368-1736 FAX

Greater Cleveland SAFE KIDS

Rainbow Pediatric Trauma
11100 Euclid Ave, WRN B51
Cleveland, OH 44106
216-844-7830, 216-844-7841 FAX

Greater Dayton SAFE KIDS

Children's Medical Center
One Children's Plaza, Community Relations
Dayton, OH 45404-1815
937-226-8332, 937-226-8454 FAX
www.cmc-dayton.org - website

Greater Toledo SAFE KIDS

Toledo Children's Hospital
2142 N. Cove Blvd., Toledo, OH 43606
419-471-3486, 419-479-3269 FAX

Lancaster Area SAFE KIDS

Lancaster Health Department
117 W. Wheeling St., Lancaster, OH 43130
740-687-6679, 740-687-6625 FAX

Mahoning Co. SAFE KIDS

Tod Children's Hospital
500 Gypsy Lane, Youngstown, OH 44501
330-740-5437, 330-740-5672 FAX
www.cboss.com/safekids/

River Cities SAFE KIDS

Washington-Morgan Comm Action Corp
218 Putnam St., Marietta, OH 45750
740-373-3475

Sandusky Co. SAFE KIDS

Sandusky Co. Health Department
1909 Robert Ave. Fremont, OH 43420
419-332-2744, 419-334-6380 FAX

Stark Co. SAFE KIDS

Stark Co. Health Department
3951 Convenience Circle, NW,
Canton, OH 44718
330-493-9904, 330-493-9920 FAX

Summit Co. SAFE KIDS

Children's Medical Center
One Perkins Square, Akron, OH 44308
330-379-8130, 330-258-3302 FAX

Tuscarawas Co. SAFE KIDS

Tuscarawas Co. Health Department
897 East Iron Ave., Dover, OH 44622
330-343-5555, 330-343-1601 FAX

**STATE OF OHIO INJURY
PREVENTION PROGRAMS**

EMTs and Injury Prevention

Ohio EMS for Children (EMSC) Program

Ohio Department of Public Safety
Division of EMS
1970 West Broad St., 5th Fl.
Columbus, OH 43223
1-800-233-0785
614-466-9461 FAX
www.state.oh.us/odps/division/ems/default.htm

Ohio Department of Public Safety

Resource Library 614-466-4775

Division of State Fire Marshal

Ohio Department of Commerce
8895 East Main St.
Reynoldsburg, OH 43068
Fire Prevention Bureau 1-888-243-0305

Ohio Department of Health Injury Prevention Program

246 N. High St., PO Box 118
Columbus, OH 43215
(614) 466-2144
(614) 644-7740 FAX
<http://www.odh.state.oh.us/>

Shriners Burn Institute

3229 Burnet Ave.,
Cincinnati, OH 45229
513/872-6000

Sudden Infant Death Network of Ohio

One Perkins Square, Akron, OH 44308
1-800-477-7437

OHIO POISON CONTROL CENTERS

Poison control centers offer poison prevention education materials.

Central Ohio Poison Control Center

Emergency Number: 1-800-682-7625 (OH only)
Health Education phone: 614/722-2643

Cincinnati Drug & Poison Information Center

Emergency Number: 1-800-872-5111 (OH only)
Health Education phone: 513/636-5055

Greater Cleveland Poison Control Center

Emergency Phone - 1-888-231-4455 (OH only)

EMT AND MEDICAL RESOURCES

Ohio Association of EMS (OAEMS)

PO Box 4158
Sidney, OH 45365
1-800-382-9960

Ohio Chapter, American College of Surgeons

P.O. Box 2307, Dayton, Ohio 45401-2307
Phone: (937) 586-3717 FAX: (937) 586-3699
<http://www.ohiofac.org/> (website contains a list of Ohio Injury Prevention Programs under the trauma committee)

Ohio Chapter, American College of Emergency Physicians

3510 Snouffer Rd., Suite 100
Columbus, OH 43235
614-792-6506

Ohio Chapter, American Academy of Pediatrics

6641 N. High St., Suite 200
Worthington, OH 43085
614-846-6258

YEAR 2000 OHIO SAFE COMMUNITIES CONTACTS

Name of Agency	County	Address	Telephone	E-Mail
Lima - Allen County Regional Planning Co.	Allen	130 W. North Street Lima, Ohio 45801	(419) 228-1836	Lacrpc@bright.net
UHHS Geneva Memorial Hospital	Ashtabula	870 West Main Street, Geneva, Ohio 44041	(440) 415-0162 (216) 844-1384	
Butler County Educational Service Center	Butler	6025 Dixie Hwy., Suite 300, Fairfield, OH 45014	(513) 887-5534	BBBO-KM@swoca.ohio.gov
Middletown Safety Council	Butler	29 City Centre Plaze, Middletown, OH 45042	(513) 423-9758	scma@infinet.com
Clark County Combined Health District	Clark	529 East Home Road, Springfield, OH 45503	(937) 390-5600	
Miami Township	Clermont	119 Main Street, Amelia, Ohio 45102	(513) 753-8936	safecommunities@fuse.net
Columbiana County Health Department	Columbiana	7360 St. Rt. 45 P.O. Box 309 Lisbon, OH 44432	(330) 424-0272	
Wellsville City Schools	Columbiana	929 Center Street, Wellsville, OH 43968	(330) 532-2885	
Rainbow Babies & Childrens Hospital	Cuyahoga	11100 Euclid Ave., WRN B51, Cleveland, Ohio 44106	(216) 844-7830	k_wesolowski@hotmail.com
Delaware County Health Department	Delaware	109 N. Sandusky Street, Delaware, OH 43015	(740) 548-7055	jsmeltzer@iwaynet.net
Fairfield County Health Dept.	Fairfield	1587 Granville Pike, Lancaster, OH 43130	(740) 653-4489	cindiwest_fchd@hotmail.com
Children's Hospital of Columbus	Franklin	700 Children's Drive, Columbus, OH 43205	(614) 722-6464	GronerJ@chi.sou.edu
Columbus Health Department	Franklin	181 Washington Blvd. Columbus, OH 43215-4096	(614) 645-6751	mikes@CMHHealth.org
Greene County Combined Health District	Greene	360 Wilson Drive, PO Box 250 Xenia, OH 45385	(937) 374-5600	beplayer@excite.com
Anderson Township Board of Trustees	Hamilton	7954 Beechmont Ave., Cincinnati, Ohio 45255	(513) 474-4802	JEG4IU@aol.com
Hamilton County General Health District	Hamilton	250 William Howard Taft Rd. # 2 Cincinnati, Ohio 45219	(513) 946-7800	K.LORDO@HEALTH.HAMILTON-CO.ORG
Holmes County Health Department	Holmes	931 Wooster Road, Millersburg, OH 44654	(330) 674-5035	hdmslhth@valkyrie.net
Knox County General Health District	Knox	17604B Coshocton Ave., Mount Vernon, OH 43050	(740) 392-2200	healthpromo@knoxhealth.com
Lake County General Health District	Lake	33 Mill Street, Painesville, OH 44077	(440) 350-2442	DLucci@LCGHD.org
Licking County Health Department	Licking	675 Price Road, Newark, Ohio 43055	(740) 349-6535	BOBMAI@MSMISP.com
Lorain County General Health District	Lorain	9880 South Murray Ridge road, Elyria, OH 44035	(440) 322-6367	75672.2517@compuserve.com
Lucas County Traffic Safety Program	Lucas	4955 Seaman Rd, Shuer Center, Oregon OH 43616	(419) 698-4049	gwenn@accesstoledo.com
District Board of Health Mahoning County	Mahoning	50 Westchester Drive, Youngstown, OH 44515	(330) 270-2855	John_Hazy@HMIS.ORG
Medina Twp. Police Dept.	Medina	3801 Huffman Road, Medina, OH 44256	(330) 723-1408	Jerome.Klue@tri-c.cc.oh.us

EMTs and Injury Prevention

Miami County Health District	Miami	3228 N. Co. Rd. 25A Troy, Ohio 45373	(937) 335-8549	
Greater Dayton Area Health Info. Network	Montgomery	32 N. Main Street. Suite 1441, Dayton, OH 45402	(937) 228-1000	jzak@gdahin.org
Morrow County Sheriff's Dept.	Morrow	101 Home Road, P.O. Box 359, Mt. Gilead, OH 43338	(419) 946-4444	
Erie - Ottawa Co. Educational Ser. Cen.	Ottawa	310 Main Street, Genoa, Ohio 43430	(419) 855-3589	EHOESC@noeca.esu.k12.oh.us
Ravenna Police Department	Portage	220 South Parkway Street, Ravenna, OH 44266	(330) 296-6486	
Robinson Memorial Hospital	Portage	6487 N. Chestnut Street, Ravenna, OH 44266	(330) 297-2860	
Preble County Dept. of Health	Preble	119 S. Barron St., Eaton, OH 45320	(937) 456-8187	manderso@infinet.com
Preble County Sheriff's Office	Preble	1139 Preble Drive, Eaton, OH 45320	(937) 456-6301	
Putnam County Educational Ser. Cen.	Putnam	336 E. Main Street., Box 190, Ottawa, OH 45875	(419) 523-5951	PM_K_SCHROED@NOACSC.Ohio.gov
Ross County General Health District	Ross	475 Western Avenue, Suite A, Chillicothe, Oh 45601	(740) 775-1146	(740) 775-3598
Summit County Sheriff's Office	Summit	53 University Avenue, Akron, Ohio 44308	(330) 643-2112	dcbailey@summitshe riff.com
2 North Park	Trumbull	720 Pine Avenue, SE Warren, Ohio 44483	(330) 399-3677	SafeMom@aol.com
Union County Health Department	Union	239 West Fifth Street, Marysville, OH 43040	(937) 642-2053	jorcena@yahoo.com
Union County Sheriff's Office	Union	221 West Fifth Street, Marysville, OH 43040	(937) 644-8447	
Williams County Combined Health Dept.	Williams	PO Box 146, 310 Lincoln Ave. Montpelier, OH 43543	(419) 485-3141	wise103w@bright.net

**COUNTY CHILDREN SERVICES AGENCIES -
CHILD ABUSE HOTLINES**

County	Emergency Phone	County	Emergency Phone
Adams	937-544-2511	Licking	740-349-6333 740-349-6400 (after hours)
Allen	419-221-5680 419-221-2680 (after hours)	Logan	937-599-7290 937-592-5731 (after hours)
Ashland	419-289-2276 419-289-1911 (after hours)	Lorain	440-329-5340 440-329-2121 (after hours)
Ashtabula	440-998-1811 888-998-1811 (after hours)	Lucas	419-213-3200
Athens	740-592-3061 740-592-8500 (after hours)	Madison	740-852-4770 740-852-1212 (after hours)
Auglaize	419-738-4311 419-738-2147 (after hours)	Mahoning	330-783-0411
Belmont	740-695-1074	Marion	740-389-2317 740-382-8244 (after hours)
Brown	937-378-6104 937-378-4155 (after hours)	Medina	330-722-9283 330-725-6631 (after hours)
Butler	513-887-4055 513-868-0888 (after hours)	Meigs	740-992-2117 740-992-6663 (after hours)
Carroll	330-627-7313 330-627-2141 (after hours)	Mercer	419-586-5106 419-586-2345 (after hours)
Champaign	937-652-1346 937-632-1311 (after hours)	Miami	937-335-4103 937-339-6400 (after hours)
Clark	937-327-1700 937-324-8687 (after hours)	Monroe	740-472-1602 740-472-1612 (after hours)
Clermont	513-732-7111 513-732-7173 (after hours)	Montgomery	937-276-6121
Clinton	937-382-2449	Morgan	740-962-3838 740-962-4044 (after hours)
Columbiana	330-424-7781 330-424-7767 (after hours)	Morrow	419-947-9111 419-946-4444 (after hours)
Coshocton	740-622-2292 740-622-2411 (after hours)	Muskingum	740-455-6710 740-849-2344 (after hours)
Crawford	419-468-3255	Noble	740-732-2392 800-686-5500-277 (after hours)
Cuyahoga	216-431-4500 216-696-5437 (after hours)	Ottawa	419-898-3688 419-734-4404 (after hours)
Darke	937-548-7129 937-548-9066	Paulding	419-399-3756 419-399-3791 (after hours)
Defiance	419-782-3881 419-784-1155 (after hours)	Perry	740-342-3836
Delaware	740-368-1990 740-368-1890 (after hours)	Pickaway	740-474-3105
Erie	419-624-6435 419-625-7951 (after hours)	Pike	740-947-5080 740-947-2111 (after hours)
Fairfield	740-653-4060 740-653-5223 (after hours)	Portage	330-297-3750 330-296-2273 (after hours)
Fayette	740-335-2755 740-335-6170 (after hours)	Preble	937-456-1135
Franklin	614-275-2571 614-229-7000 (after hours)	Putnam	419-523-4580
Fulton	419-337-0010	Richland	419-774-4100
Gallia	740-446-4963 740-446-9237 (after hours)	Ross	740-773-2215
Geauga	440-285-9141	Sandusky	419-334-8708

EMTs and Injury Prevention

	888-285-5665 (after hours)		
Greene	937-376-7522 937-372-4357 (after hours)	Scioto	740-456-4164
Guernsey	740-439-5555	Seneca	419-447-5011
Hamilton	513-946-1000 513-241-5437 (after hours)	Shelby	937-498-7213 937-298-1111
Hancock	419-424-7022	Stark	330-438-8846 800-233-5437 (after hours)
Hardin	419-673-1101 419-673-1268 (after hours)	Summit	330-379-9094 330-379-1880 (after hours)
Harrison	740-942-3015 740-942-2197 (after hours)	Trumbull	330-372-2010 330-372-2011 (after hours)
Henry	419-592-4210 419-592-8010 (after hours)	Tuscarawas	330-339-7791 330-339-2000 (after hours)
Highland	937-393-3111 937-393-1421 (after hours)	Union	937-644-1010 937-644-5010 (after hours)
Hocking	740-385-4168	Van Wert	419-238-5430 419-238-6666 (after hours)
Holmes	330-674-1111 330-674-5437 (after hours)	Vinton	740-596-2571 740-596-5242 (after hours)
Huron	419-668-8126 419-668-5281 (after hours)	Warren	513-933-1546 513-933-1600 (after hours)
Jackson	740-286-4181 1800-252-5554 (after hours)	Washington	740-373-3485
Jefferson	740-264-5515	Wayne	330-345-5340
Knox	740-397-7177 740-392-5437 (after hours)	Williams	419-636-6725 419-636-3151 (after hours)
Lake	440-350-4000	Wood	419-352-7566 419-354-9001 (after hours)
Lawrence	740-532-3324 740-532-1176 (after hours)	Wyandot	419-294-4663 419-294-2362 (after hours)

**NATIONAL INJURY PREVENTION RESOURCES
AND SAFETY AWARENESS EVENT SPONSORS**

American Academy of Pediatrics

141 Northwest Point Boulevard
Elk Grove Village, IL 60007
1-800-274-2237
Child Health Month - October

American College of Emergency Physicians

1111 19th St, NW, Suite 650
Washington, DC 20036
202-728-0610
National EMS Week - May

American Society of Safety Engineers

1800 East Oakton
Des Plaines, IL 60018-2187
847-699-2929
customerservice@asse.org (email)
National Safety Month - June

Healthy Child Care America Campaign

1-888-227-5409
www.aap.org/advocacy/hcca.htm

Juvenile Products Manufacturers Association

236 Route 38 W., Suite 100.
Moorestown, NJ 08057
Baby Safety Month - September

National Committee to Prevent Child Abuse

200 South Michigan Ave, Suite 1700
Chicago, IL 60604
312-663-3520
National Child Abuse Prevention Month - April

National Fire Protection Association

One Batterymarch Park
Quincy, MA 02269-9109
800-344-3555
National Fire Prevention Week - October

National Highway Traffic Safety Administration

NTS-13, 400 7th St., SW,
Washington, DC 20590
202-366-9550
www.nhtsa.dot.gov/people/injury/childps
*National Child Passenger Safety Awareness Week
- February*

National SAFE KIDS Campaign

1301 Pennsylvania Ave. NW, Suite 1000
Washington, DC 20004-1707
202-662-0600
National SAFEKIDS Week - May

National Safety Council

444 N. Michigan Ave., Chicago, IL 60611
1-800-621-7619

National Youth Sports Safety Foundation

333 Longwood Ave, Suite 202
Boston, MA 02115
617-277-1171 NYSSF@aol.com (email)
National Youth Sports Safety Month - April

Newark Beth Israel Medical Center

973-926-7846
National Lead Poisoning Prevention Week - July

Poison Prevention Week Council

P.O. Box 1543
Washington, DC 20013
301-504-0580
National Poison Prevention Week - March

Prevent Blindness America

500 East Remington Rd.,
Schaumburg, IL 60173
1-800-331-2020
*Fireworks Safety Month - June through July 4
Safe Toys and Gifts Month - December*

Safety By Designr, Ltd.

P.O. Box 4312, Great Neck, NY 11023
516/488-5395
National Childhood Injury Prevention Week

SIDS Alliance

1314 Bedford Ave, Suite 210
Baltimore, MD 21208
1-800-221-SIDS
*SIDS Awareness Month - October
Materials available - Contact: Public Affairs*

EMTs and Injury Prevention

U.S. Consumer Product Safety Commission

Washington DC 20207

1-800-638-2772

National Electrical Safety Month - May

3D Prevention Month Coalition

1900 L Street, NW, Suite 705

Washington, DC 20036

202-452-6004

*National Drunk and Drugged Driving Prevention
Month - December*

WEB RESOURCES

Most of these sites can also be referenced under links on the Ohio EMSC website at www.state.oh.us/odps/division/ems/emsc/emsc.htm

General Injury Prevention/Safety

www.safekids.org

National SAFE KIDS Campaign

www.cdc.gov/ncipc/ncipchm.htm

National Center for Injury Prevention and Control

www.injurycontrol.com/icrin

Injury Control Resource Information Network

www.cpsc.gov

U.S. Consumer Product Safety Commission

www.nsc.org

National Safety Council

www.sph.unc.edu/vincentweb

Getting Started in Injury Control and Violence Prevention Course

www.injurycontrol.com

Injury Control

<http://www.edc.org/HHD/csn/>

Children's Safety Network

www.kidshealth.org

Kidshealth

<http://www.ems-c.org/>

EMSC National Resource Center

www.aap.org

American Academy of Pediatrics

<http://www.acep.org/>

American College of Emergency Physicians

www.redcross.org

American Red Cross

<http://www.amhrt.org/>

American Heart Association

<http://www.amtrauma.org>

American Trauma Society

<http://www.kidsandguns.org>

Common Sense about Kids and Guns

http://www.albany.edu/sph/injr_012.html

Electronic Highway Safety Library

<http://www.safestates.org/>

Injury Prevention Web

www.nfpa.org

National Fire Protection Agency - Risk Watch Curriculum

<http://www.nichd.nih.gov/>

National Institute of Child Health & Human Development - "Back to Sleep Campaign"

Ohio-Specific Safety Resources

<http://www.state.oh.us/odps/default.htm>

Ohio Department of Public Safety

www.state.oh.us/odps/division/ems/emsc/emsc.htm

Ohio Emergency Medical Services for Children (EMSC) Program

www.state.oh.us/odps/default.htm

Ohio Traffic Crash Reports

www.ohioaap.org

Ohio Chapter, American Academy of Pediatrics

<http://www.ohiofacts.org/>

Ohio Chapter, American College of Surgeons
(Click on "Ohio Committee on Trauma" for a list of Injury Prevention Programs in Ohio)

<http://www.odh.state.oh.us/>

Ohio Department of Health

<http://www.cincinnatichildrens.org/safekids/index.asp>

Cincinnati SAFE KIDS Coalition

<http://www.cboss.com/safekids/>

Mahoning Valley SAFE KIDS Coalition

EMTs and Injury Prevention

Statistics

[U.S. Census Bureau](http://www.census.gov/)

<http://www.census.gov/>

http://www.ode.state.oh.us/student_dev/

Ohio Youth Risk Behavior Survey

www.cdc.gov/nchswww

National Center for Health Statistics

www.fedstats.gov

Federal Agency Statistics

www.state.oh.us/odps/default.htm

Ohio Traffic Crash Reports

www.nhtsa.dot.gov/people/ncsa

National Center for Statistics and Analysis and Fact Sheets

<http://www.aecf.org/kidscount/kc1999/>

Anne E. Casey Foundation: Ohio Profile

<http://www.injurypreventionweb.org/index.htm>

Injury Prevention Web

<http://www.cdc.gov/ncipc/osp/leadcaus/ohtable.htm>

Ohio Leading Causes of Death: CDC

<http://wonder.cdc.gov/wonder/anonx/injuryshtml>

CDC State Injury Mortality Data

<http://www.childstats.gov/ac1999/ac99.asp>

ChildStats.gov

Traffic Safety/Injury Prevention

www.nhtsa.dot.gov

National Highway Traffic Safety Administration

www.hwysafety.org

Insurance Institute for Highway Safety

www.ncsbs.org

National Coalition for School Bus Safety

<http://www.nts.gov/>

National Transportation Safety Board

Child Passenger Safety

<http://www.nhtsa.dot.gov/people/injury/childps/>

National Highway Traffic Safety Administration - Child Passenger Safety

<http://www.airsafe.com/kidsafe.htm>

AirSafe.com

<http://www.fitforakid.org/ffak/home/home.htm>

Daimler Chrysler's Fit for a Kid

<http://www.carseat.org/>

Safety Belt Safe USA

<http://www.childsafety.org/index.html>

Child Passenger Safety Web

Bicycle Safety

www.bhsi.org

Bicycle Helmet Safety Institute

Farm Safety

www.fs4jk.org

Farm Safety 4 Just Kids

Playground Safety

www.uni.edu/playground

National Program for Playground Safety

Poisoning Prevention

<http://www.aapcc.org/>

American Association of

Poison Control Centers

Head/Brain Injury

<http://www.ohiovalley.org/index.html>

Ohio Valley Center for Brain Injury

Prevention and Rehabilitation

<http://www.neuro.pmr.vcu.edu/>

National Resource Center for Traumatic Brain Injury

Drowning Prevention/Water Safety/ Boating Safety, etc.

EMTs and Injury Prevention

www.redcross.org/news/common/96/watertip.html
American Red Cross

www.dot.gov/dotinfo/uscg
U. S. Coast Guard

www.cgaux.org
U. S. Coast Guard Auxiliary

www.boatsafe.com
BoatSafe.com and BoatSafeKids

www.ymca.net
YMCA

Sports Safety

www.asmi.org/default.htm
American Sports Medicine Institute

www.nays.org
National Alliance for Youth Sports

www.nyssf.org
National Youth Sports Safety Foundation

www.iisa.org
International In-Line Skating Association

www.rollerblade.com
Rollerblade "Asphalt Bites" Safety Program

www.skatecity.com/index
Skating the Infobahn

Child Care

www.state.oh.us/odhs/cdc/index.htm
Ohio Dept. of Human Services

www.acf.dhhs.gov/programs/ccb
Child Care Bureau

www.healthychild.net
Healthy Child Care Home

<http://www.nccc.org/homepage.html>
National Network for Child Care

Toy Safety

www.toy-tma.com
Toy Manufacturer's Association

Ohio Children's Hospitals

www.childrenshospital.columbus.oh.us/
Columbus Children's Hospital

<http://www.akronchildrens.org/>
Childrens' Hospital Medical Center of Akron

<http://www.cincinnatichildrens.org/index.asp>
Childrens' Hospital Medical Center of Cincinnati

www.cmc-dayton.org/cmc/homepage.nsf/
The Children's Medical Center of Dayton

<http://www.promedica.org/hosp/tch.asp>
Toledo Children's Hospital

<http://www.forumhealth.org/>
Tod Children's Hospital, Youngstown

<http://www.uhrainbow.com/first2.html>
Rainbow Babies and Children's Hospital

<http://www.clevelandclinic.org/childrensrehab>
The Cleveland Clinic Foundation Children's Hospital for Rehabilitation

http://www.ghg.net/cjm/shriners_hospitals_for_crippled_.htm
Shriner's Hospitals & Burn Institutes

Safety Awareness Event Sponsors

www.aap.org
Child Passenger Safety Week - February
American Academy of Pediatrics

www.burnprevention.org
National Burn Awareness Week - February
Burn Prevention Foundation

www.redcross.org
Red Cross Month - March
American Red Cross
www.acih.org
Children and Health Care Week - March
Association for the Care of Children's Health

www.aawhworldhealth.org
World Health Day - April
American Association for World Health

www.naeyc.org
Week of the Young Child - April

EMTs and Injury Prevention

National Association for the Education of
Young Children

www.nrpa.org/playsafe/playsafe.htm
National Playground Safety Day - April

www.amtrauma.org
National Trauma Awareness Month - May
American Trauma Society

www.nhtsa.dot.gov/index.html
Buckle-Up America Week - May
National Highway Traffic Safety Administration

www.acep.org
National EMS Week - May
American College of Emergency Physicians

www.safekids.org
National SAFE KIDS Week - May
National SAFE KIDS Campaign

www.safeboatingcouncil.org
National Safe Boating Week - May
National Safe Boating Council

www.bikeleague.org
National Bike Month - May
League of American Bicyclists

www.nsc.org
National Safety Month - June
American Society of Safety Engineers

www.preventblindness.org
Fireworks Safety Month - June -July
Prevent Blindness America

www.nsc.org
National Safety Month - June
National Safety Council

www.jpma.org
Baby Safety Month - September
Juvenile Products Manufacturers Association

www.preventblindness.org
Children's Eye and Health Safety Month - Sept
Prevent Blindness America

www.fs4jk.org
National Farm Safety Week - September
Farm Safety for Just Kids

www.nfpa.org
National Fire Prevention Week - October
National Fire Protection Association

www.biausa.org
Brain Injury Awareness Month - October
Brain Injury Association

www.aafp.org
Family Health Month - October
American Academy of Family Physicians

www.aap.org
Child Health Day - October
American Academy of Pediatrics

www.sidsalliance.org
SIDS Awareness Month - October
SIDS Alliance

www.schooltrans.com
National School Bus Safety Week - October
National School Transportation

www.ncadd.com
National Drunk and Drugged Driving
Prevention Month - December
3D Prevention Month Coalition

www.preventblindness.org
Safe Toys and Gifts Month - December
Prevent Blindness America

EMTs and Injury Prevention