

## Ten Steps for Developing an Injury Prevention Program

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### Step One: Gather and Anlayze Data

The beginning point of any injury prevention program is to examine the data related to deaths and hospitalizations from injuries. Looking at actual numbers will help you discover who is dying and being disabled and the cause. With this information you should be able to make a list of which people are most likely to be injured and what types of injuries are most frequent. It can also reveal injuries that most likely require hospitalization and those that most often lead to deaths.

*Example:* Injuries on school playgrounds are common, though they rarely lead to death or permanent disability. Instead, there are many scrapes and bruises and an occasional broken bone. Your decision to start a prevention program for playground injuries will be based on careful weighing of the answers to "How many children are being hurt, how badly and what can be done to decrease those injuries?" and "Are there other injury problems causing, more death and disability that we should turn our energy and resources toward?"

How extensive your data search will be depends on your resources and level of information that you need. Your need will be shaped by how narrowly you wish to define the target injury and the target population. The level of credibility and amount of convincing necessary to obtain resources and implement a program may also dictate the extent of data you need. Special studies and requests can often be arranged with local agencies such as your community hospital, university or college, or the state or local health department.

### **Nonfatal Injury Data**

1. Your state may collect injury data through the use of E-coded hospital discharge data bases. These codes show the external cause of injury on the patient's hospital discharge record. When used uniformly by all hospitals, this is an effective source to evaluate state or county injury. Contact your state department of health for access to this system.
2. The state highway patrol may have information about motor vehicle, pedestrian and bicycle crashes.
3. Emergency Medical Service systems may also have data. While it may not be collected and coded in the same way by all services within a state, it could be helpful for a particular community.
4. Local police and fire department data may also be helpful if available.
5. Regional poison control centers have data from telephone calls.

### **Fatality Data**

1. Your state's vital statistics department will have information from death certificates.
2. The county coroner and the state highway patrol may also have information.

The state department of health and local or state trauma registries are other sources of both nonfatal and fatal injury information.

### **Keep in Mind....**

Data from your community will build a more convincing case for an injury prevention project than national information.

Injury trends do not vary greatly from year to year so do not be concerned if your information is a few years old.

The numbers you receive from different sources may not match up.

The criteria for coding deaths can differ between organizations.

### **What Next? .....**

Collecting and analyzing data is the first building block of your prevention program. However, do not let it be the only one. Too often people get stuck in the data phase, postponing prevention because they use searching for more data as an excuse to avoid decisions. You may not be able to get all the data you would ideally wish, yet there is enough to give a picture of the injury situation and a clear direction of what needs to be done. There comes a point where you must be satisfied that the data you have is enough to tell you where and how to begin. Then move to Step Two.

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## Step Two: Select the Target Injury and Population

Selection of a target injury and target population will help you focus your prevention efforts. Keep in mind that a narrowly defined injury prevention goal and target population will make program planning and evaluation much easier. *Example:* Imagine the program loosely shaped by the admonition, "Be careful" as compared to a program molded by the phrase, "Wear your seat belt."

After identifying injuries that cause a significant number of deaths or disability, other factors can help you narrow your choice:

### Severity

*To what extent do the injuries cause death or severe injury or disability?*

### Frequency

*How often does the injury occur and to how many people?* Data on injuries should be examined across all age groups. The lives saved and disabilities decreased must be weighed against the frequency of occurrence. The most vulnerable population should be identified. *Example:* In 1994, bicycle crashes killed about 800 people in the US. Approximately 175 of these deaths occurred in children 10 - 15 years old, even though this group only made up about 9% of the national population

### Prevention Method

*Is there an effective strategy to reduce frequency and/or severity of the injury?* Many injuries still lack effective prevention measures even though numerous deaths make them obvious targets for prevention. *Example:* Bicycle injuries are common among school-age children. The use of a properly fitted helmet can prevent serious head injuries. Pedestrian injuries cause more deaths in

this age group but there are no inexpensive, readily available strategies which have been shown to reduce the frequency or severity of these injuries.

Also consider....

*Are there monetary and staff resources available?*

Think about the cost of the program. Also consider whether program educational materials are already available in-house or if they could be easily developed. Is there an interested staff person that can be trained to address the problem? If the problem is large and the community is committed, resources can usually be found to address the problem.

*Does the community care about the problem?*

Consider if the community knows and cares about the problem. While it is possible to educate the community about a serious problem, it will be easier to mobilize people if the community already cares about the injury topic. Also keep in mind that some injuries are seasonal and your community might be more interested in a specific injury, such as drowning, at certain times of the year.

*Are there existing programs in your agency or another local agency to address the issue?*

If so, not only may printed materials already exist, but this provides a natural opportunity to work with another agency. Conversely, you will want to consider whether an injury problem is already effectively addressed within your community. Duplicating the efforts of another agency would not be a good use of your time and resources.

## **What Next?...**

Having chosen the injury you wish to prevent and the particular population you will target, the next step is to decide how to actually accomplish reduction in death and disability. An injury occurrence is composed of many factors. Strategies can be developed to address as many of these factors as possible.

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## **Step Three: Determine Intervention Strategies**

### **Examination of the Factors Involved in a Specific Injury**

After identifying a target injury, you will want to spend some time considering the many factors that play into the injury's occurrence. These factors will help you

identify how the injury might be prevented. The factors can be divided into three main areas: the person, the causes of injury and the environmental conditions surrounding the injury event. If you consider what happens in each of these main areas before the injury occurs and what you might do to prevent those events, you are on your way to selecting an intervention strategy. *Example:* Think about motor vehicle collisions. The drive may bring such factors as alcohol intoxication, poor vision, fatigue and lack of driving experience. The causes of injury may include brakes, tires and speed of travel. The environmental conditions may include a wet roadway, dark night and poor road signage. Obviously there are many more possible factors.

## **Intervention Strategies**

Successful interventions will include a mix of passive and active methods. Strategies that are passive happen automatically and therefore do not require a conscious decision by the individual. An example of this is the protection a seat belt provides in a motor vehicle collision. Active interventions necessitate "action" on the part of the individual. For example, an individual must fasten a seat belt for it to act as protection in a collision. Those strategies that require decision making on the part of the individual are going to be more difficult because they require someone to make a conscious choice to change their behavior and, often times, repeat this new behavior over and over again.

You can appreciate the challenge of behavior change if you consider New Years' resolutions. How many of us pledge to make a change in our lives only to have our good intentions fall by the wayside? This is why designing intervention strategies that utilize a mix of passive and active methods is ideal.

Examination of some examples will help illustrate how passive and active strategies are intertwined. Look at smoke detector use. First an individual must purchase a smoke detector (active). They need to install it (active). In the event of a fire, the smoke detector will warn the individual (passive).

Another example is bicycle helmets. An individual must buy a helmet (active). He/she must remember to wear the helmet every time they ride (active). The helmet protects the head in the event of a crash (passive).

There are three different arenas where passive and active methods are frequently used: education, legislation and technology. Education includes the use of personal interaction with others, media, and printed materials to disseminate information. Legislation refers to a law or policy that individuals or organizations must follow.

Technological interventions include equipment or devices that protect an individual such as airbags, smoke detectors, seat belts or bike helmets.

*Example:* You may choose to focus on promotion of bicycle helmets. You may choose to create education materials and have a bicycle rodeo that encourages bicycle safety (education). As part of the program perhaps you will try to get a law passed to require bicycle helmet use in your area (legislation). Bicycle helmets themselves could be considered a technological solution. These are simply examples of possible pieces: you do not necessarily need to use all three strategies in your program though the more you use them, the greater success you are likely to achieve.

*Example:* Mixing different strategies together allows you to address the target injury both in the long- and short term. Think about life jacket use. They can't save lives unless they are worn. You might decide on education as a short-term method to increase their use. Legislation to mandate their use could be a long term and very effective goal if the community supports it.

## **Selection of Strategies**

As you look at the different factors involved in an injury occurrence, consideration of the following will help you identify the strategies you may want to use:

### **1. Consider who will implement the strategy.**

The selection of the prevention strategy and particular technique chosen to accomplish it may depend on who in the community will be doing it. *Example:* Given the goal of improving pedestrian safety, schools are likely to choose educational techniques such as a pedestrian safety curriculum. City engineers might install a walking signal and crosswalk (technology) to improve a dangerous street crossing and police may choose to strictly enforce speed limits in school zones (legislation).

### **2. Remember to target your message.**

You should tailor your interventions to the specific population and need. *Example:* In Hawaii, bathers must be educated about surf and undertow. Because Hawaii has many Japanese tourists, warning signs need to be in Japanese as well as English. When writing educational material targeted at the elderly, bigger font size will make the piece easier to read. Adolescents might respond better to a fast paced video than a brochure.

3. The strategy must be acceptable to the target audience.

You will want to be sure that you are promoting something reasonable and practical for your target audience. There is no use in promoting something so outlandish that no one would ever do it. Consider if you wanted to reduce injury in motor vehicle collisions. One way to do this might be to encourage drivers to wear helmets in their cars. While individuals who wore helmets might reduce/avoid injury, it is not very practical to think that the public would be amenable to this idea.

### **What Next? ...**

When you know the strategies to prevent your target injury and have decided upon the interventions to accomplish the strategy and the techniques to use, you are ready to proceed to the next step of your program-developing an implementation plan.

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### **Step Four: Develop An Implementation Plan**

The implementation plan maps out how you are going to do what you want to do. It is based upon your choice of target injury, target population and intervention strategies.

### **State Your Goal - Be Specific!**

The goal should be clearly stated in measurable terms. It must be specific as to exactly what you plan to do, for whom and in what time period. The more focused and specific the goal, the more guidance it will provide for your program implementation and evaluation measurement.

The goal of "reducing injury" does not give good clues as to what to do, for whom, and certainly not how. It is a set-up for failure because seeing a change in death and injury statistics may take years and will be difficult to attribute to your program. Try this instead: "Reduce childhood death and hospitalization due to head injury by increasing the wearing of bicycle helmets 30% among children 5 - 12 years in Spokane County over the next five years". Exactly who, what and how is clear.

### **Write Objectives**



Objectives tell you how you are going to go about accomplishing your goal. Again, remember that the more focused the program, the more easily it is accomplished. *Example:* Using bicycle helmets for children again, the following objectives might be some of those utilized to reach the above goal:

Educate parents that their children can be seriously injured from bicycle crashes.

Educate parents that bicycle helmets can reduce serious injuries.

Reduce peer pressure so children will wear helmets.

Ensure the availability of low-cost helmets.

Increase general community awareness of the problem of bicycle related head injuries.

### **Develop Program Ideas**

The above objectives are clear, aim at the goal, and are measurable. Each objective needs specific actions on your part to accomplish it. This is where coalition members start to take part (See Step 5). Programming might include participation in a health fair, hosting a bike rodeo or conducting school assemblies. Think about events that occur in the community throughout the year where your program theme would fit in well. For example, a local hospital might have a fair in which you could take part.

You will want to choose an implementation strategy that has already been designed and evaluated for efficacy. Your role will be shaping and tailoring this strategy to fit your community's resources and needs. For example, you may not have the resources available to do all of the program parts. Instead, you can prioritize and choose the most fitting pieces for your community. You may decide that you want to narrow the focus of the target audience. For example, a strategy may be designed for the general population and you want to really focus on adolescents. This tailoring will make an intervention strategy work best for you and provides a sense of ownership.

### **Make a Timeline**

A timeline is an excellent organizing tool for both the overall project and for community activities. It is a good idea to put both time lines in written form so that the project staff and community agencies can see where their commitment to an activity falls in the grand scheme and when they must perform it. This also helps ensure that the task gets done. Activities are often keyed to community events and a time line ensures forethought so as not to miss these opportunities. *Example:* For a community scald prevention program, the annual hospital health fair in October may have a display of hot water gauges, bathtub thermometers, stop-hot decals,



scald burn prevention posters and temperature charts, anti-tip mugs and a video that shows the prevention of scald burns.

### **What Next?....**

Before considering methods more thoroughly, you must choose who in your community should be involved in your program. These groups will help to shape the activities but they first must be chosen for a clear connection to the objectives.

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### **Step Five: Identify, Select and Commit Community Agencies to Implement the Program**

You and your agency cannot run an entire injury prevention program yourself. A coalition of community agencies can achieve more because of the opportunity it provides to pool resources and draw from the skills of many people.

#### **Coalition Formation**

A coalition is a loosely organized group of individuals that each represent agencies and organizations that work toward a common goal. Each member contributes knowledge, expertise and action appropriate to their field of interest. Three elements are essential for an effective coalition.

The **lead agency** takes responsibility and leadership for the injury prevention program. Within the lead agency there should be a designated coordinator. This is preferably a paid position or a percentage of a staff job.

The **coordinator** is responsible for planning the goal and objectives for the project and ensuring that they are accomplished. The coordinator may draw upon his/her lead agency or a consultant for assistance, direction and advice. The coordinator plans and leads meetings, serves as a communications hub for the coalition members, motivates the members to perform activities and moves the project along toward completion.

**Enthusiastic and committed members** are vital to the project. They are the individuals who will disseminate information and conduct activities. As the lead agency, you will already have developed the program objectives and framework. Lay those out for them, get them to agree and thus buy-in to the program, and then move right into the methods - what they will actively do.

## Locating Potential Coalition Members

Consider the following as you search for coalition members:

1. Agencies should have a mission consistent with that of the program's goal. *Example:* If you are implementing a bike helmet program, bike shops may not be a good addition to your coalition. Bike shops want to make money. This is not the same goal as saving lives. Although bike shops are an important piece in a helmet program, it may be disruptive to have them in a planning role with the coalition. It may be better to ask for their cooperation later and tell them how they can help.
  2. Members who represent an agency have the buy-in and back-up of their agency both to accomplish tasks and for credibility of the program. Individuals may not have this kind of support.
  3. Consider all aspects of the injury problem and all the interventions you may employ to insure that you have the mix of professions and disciplines that will facilitate your goals.
  4. Non-traditional agencies and groups should be considered. *Example:* Insurance companies are beginning to play a role in injury prevention. Those offering auto insurance may be very interested in joining traffic safety efforts.
  5. Think about what resources you will need and make sure you include members who can help supply those resources.
  6. Remember that it is not the quantity of coalition members that is important, but the quality. A few energetic people can accomplish a great deal!
- Many organizations, both public and private, should be contacted in order to find those who will join the coalition and contribute. Fewer will join than are asked and fewer will actually continue as members and do activities than will come to the first meeting. It is best to start with a long list of agencies because it will dwindle. Another reason for this is that it is far better to include groups than exclude and possibly anger those that were not contacted.

It is also important that groups that are important for their influence be asked to join, even if they will not directly participate in conducting activities. *Example:* Political invitees may actually do nothing but can lend valuable influential support. A media representative may not be an active member in the coalition but could sponsor the program. *Example:* A newspaper could take on the prevention effort as an editorial agenda item. Editorials would be published periodically. They, like most organizations, want their name on the efforts.

Agencies, organizations and groups can be found by brainstorming, looking through local listings such as the Yellow Pages and asking local people. It is best

to make initial contact with the most important agencies by telephone or in person. This way you can assess their level of interest and ask them for suggestions of other organizations. Send a letter to the entire list of potential members that states the community concern with the injury problem and announces the formation of a coalition to address the concern.

### **What Next?...**

The next step gives the coalition members actual tools to accomplish the objectives laid out in Step Four. It is time to create the plan to achieve the program goal.

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### **Step Six: Develop an Action Plan**

While the goal and objectives should be developed by the coordinator, activities to accomplish the objectives are the responsibility of the coalition members.

Developing a an action plan will formalize each members' commitment to specific activities and how they will contribute. Duties can be selected and assigned based on the activities. Coalition members must be able to choose activities which they are accustomed to doing and have the resources and skills to accomplish.

Your action plan will vary depending on the strategy or strategies that you have selected.

### **Educational Strategies**

Many programs rely heavily on education as a technique. The most effective educational efforts couple personal interaction with printed educational materials and a media campaign. The more ways and places a person sees and hears the injury prevention message, the more likely it will produce an effect.

- **Printed Materials**
  - Printed materials such as posters, brochures, flyers, curriculums or guides will help in education.
- **Media**
  - Public information through the media can act as an effective complement to your other strategies and allows you to get your message out to man people.
- **Personal Interaction**

- Personal interaction is the most effective educational tool and must be used in addition to printed materials and media messages. Assembly programs in schools, presentations at meetings, and counseling by health care providers are ways to relay a personal message to many people.
- See appendix under "Choosing Materials" for more information on this subject.

## **Legislative strategies**

Legislation is very effective once enacted but requires extensive planning and usually long-term work is required to influence the legislative process. The following specific tools are helpful:

1. A packet designed for legislators that clearly presents the facts, costs and sides of the injury issue and the legislation being proposed as an intervention. Ideas about how this legislation could be enforced should be included.
2. Convincing data. Often the economic argument is more persuasive than death statistics. *Example:* At the major trauma center in the state of Washington, 63% of the cost of motorcycle injuries is paid for by public funds. This was an influential fact in the passage of the 1989 legislation requiring motorcycle helmets.
3. One or more legislators who will sponsor the bill. They can work to influence other legislators and will appear before the media to reach the public.
4. Close contact with a legislative staff person and the services of an organizational lobbyist such as that of a state medical association can be invaluable.
5. Grass roots involvement. Legislators need to hear that their constituents want the bill. A coalition can brainstorm for organizations and individuals to contact. Every person on a coalition must contact their own stakeholders to explain the legislation and encourage letters and telephone calls to legislators. This is a final step but must be done quickly and efficiently as the bill comes before the legislature.

## **Technological strategies**

There are two vital steps to technological strategies. One step is to develop and produce the technological method and the second is to market it. Development and production of the technological device certainly may be beyond the capabilities of your community coalition. However, a community-based program can be extremely effective in distribution of the item and promotion of its use once it has

been developed. *Example:* Life jackets are now attractive and comfortable to wear. The boating public needs to know that and be educated about the importance of buying and using life jackets. Creating a demand can also result in lowering the cost which would be an additional benefit to the public.

Incorporating a coupon discount plan into your prevention program may increase the program's success. You can work with a manufacturer or distributor to negotiate a discount.

The coalition may also want to raise funds to buy the prevention item, such as bike helmets or smoke detectors. A bulk purchase such as this often makes the item less expensive which means that you can sell the item to the public for a nominal charge.

### **What Next?...**

With the above tools for program implementation, your coalition members can go forward to activate the injury prevention plan. But first, you will want to make sure that your members are knowledgeable and ready for the upcoming activities.

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## **Step Seven: Orient and Train Agencies/Individuals Implementing the Intervention Plan**

The orientation and training of those implementing the program helps to insure that they understand their role. It is also helpful for the coalition members to have an overall understanding of the scope of the program, how it addresses the need for injury prevention and fits into the larger picture - at least a picture as large as your state's efforts for injury prevention. Although knowledge of the philosophy of injury prevention is not necessary for community people, it can be helpful because everyone working on the program in effect an ambassador for injury prevention. They will interact with others and represent the program so the better understanding they have, the more they may influence others. As the project continues and grows, new members will need to be trained as well.

This step also implies open and two-way communication between those working on the program. As people begin their tasks they must know what is expected of them and how to go about their activities. They can bring feedback to the group as to the workability of the methods, effectiveness of the tools and reaction from the community. They can contribute ideas and suggestions for changes.

## **What Next?...**

In the next step the program is finally off and running!

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## **Step Eight: Implement the Program**

Start - don't plan forever. The initial enthusiasm of coalition members will be lost if you have too many meetings before activities begin. Plans can be changed and tailored even as the program is being implemented. In fact, this is ideal because it will allow your program to be flexible and responsive to obstacles.

Remember that not everything can be done the first year. Save activities that need more planning for the second and subsequent years. First do the activities that are easiest and most likely to succeed.

## **What Next?...**

As the program is underway and actually happening, you will need to provide support and make program changes as needed.

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## **Step Nine: Monitor and Support the Program**

1. Stay in touch with everyone involved with the program to insure that all parts of the project are running smoothly. The coordinator should give encouragement, listen to problems and offer suggestions. Meetings can provide much of this communication and are a mechanism to involve the entire group in success stories and problem areas.
2. Once the program is underway, most decisions should be made by the coalition. Group decision-making enhances cohesiveness and promotes a sense of ownership and responsibility. However, individual communication from the coordinator to a coalition member may be necessary to give technical expertise or deal quickly with a decision involving only that member.
3. Track activities. A reporting form can be distributed for each agency to return as an activity is completed. This is a valuable source for numbers such as how many people were reached by the activity, number of brochures handed out,

hours spent, etc. This information will be important for later program evaluation.

4. Be flexible. The ideal program as mapped out on paper must be able to change according to the reality of implementation. The coordinator and coalition must be sensitive to the need for a change and then enact a method more suited to the actual situation.
5. Be aware of group dynamics. A coalition is made up of people with different backgrounds, viewpoints and expertise. Group process is rewarding but can be quite challenging

### **What Next?...**

Ongoing evaluation is necessary to manage your program and measure the results. Evaluation is discussed in step ten.

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## **Step Ten: Evaluate and Revise the Program**

You will want to know if your program is helping you reach your stated goal. Evaluation will supply this information. Evaluation must be planned at the beginning of your program and be ongoing in order to be a useful tool. It will allow you to report the effect of your program and provides accountability to funding sources and the community. Good program management also makes evaluation a necessity. There are two kinds of evaluation that answer different questions.

### **Program evaluation**

Even if you are implementing a program that has already been developed and evaluated, you still need to evaluate your program to monitor its progress and measure its success in your particular community. There are two parts to program evaluation: process evaluation and outcome evaluation. Each answers a specific question.

#### **Process evaluation**

*Are you doing what you said you would do?*

Process evaluation involves quantities. Every method or activity to accomplish the objectives should be quantifiable and counted. This is where reports on activities from coalition members becomes vital. *Example:* Number of school assembly programs done, number of posters distributed, number of physicians counseling patients, etc. Weak spots of implementation can be found and improved.



## Outcome evaluation

*Is what you are doing making a difference?*

Outcome evaluation measures the final outcome you are aiming toward - usually a reduction in injury. You should have access to a data surveillance system which will give you baseline figures before your program begins. You can then track data for changes. However, a warning is in order - the numbers are so small for each injury problem that a change for a year can only be considered a facetious "blip". You must watch for a gradual decline over at least a five year period and even then you must be very cautious about attributing such a decline to your program. Be aware of what else has gone on in the community which may have influenced the decrease in death and injury.

Outcome evaluation can also measure the more specific goal you have been aiming toward - the one which will accomplish the reduction in injury. Exactly what to measure for evaluation will be directed by your specific goal. Outcome evaluation often measures knowledge change because it is easily measured and many programs aim for knowledge change. However, what you really want your program to attain is behavior change. As a result, the outcome evaluation should measure behavior. *Example:* Use of seat belts, installation of smoke detectors or purchase of life jackets are all measurable behaviors

A mid-program evaluation is also valuable because it can alert you to revisions that are needed in the program to make sure that you are moving toward your goal. *Example:* Helmet users could be counted at the beginning of activities for the biking season and at the end for each of the five years of the program. A steady increase should be seen. If not, revisions in activities need to be made.

## Experimental Research

Experimental research refers to the usage of scientific research methods and design which conform to the experimental model to measure the effectiveness of new programs. This is best left to academic settings where there are adequate evaluative resources. If you are developing a program from scratch with strategies and interventions never before tried, you must evaluate it for its effectiveness. If you are not equipped to conduct such research, contact your local university, teaching hospital, or regional injury prevention center for help.

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## Summary

The preceding ten steps outline an approach that can help you create a successful design for your injury prevention program and ensure the best use of your resources. These steps are broad enough to be applied to any injury topic.

Now that You understand the basic framework for your injury prevention program, you might want to further explore three areas of activity that health professionals may not be accustomed to utilizing but which are very important to the implementation of your prevention program. Working with the media, program expenses and funding, and choosing educational materials are discussed in the next section to familiarize you with some of the possibilities in each of these areas

Following the discussion on supporting activities, a case study of a bicycle helmet program has been provided to show you how the ten steps become part of a "real life" intervention. While the nature of the bicycle helmet program may make some of the steps seem obvious, many injury issues are more complex. Because it is not always clear what to do next, these steps will help you proceed in a logical and effective manner to create a beneficial program for your community.

## Supporting Activities

### Working with the Media

The importance of the media is often overlooked in community-based health programs. Yet it is a powerful tool to use in raising public awareness about your injury problem and its solutions. The most effective way to Utilize the media is to have them join in a partnership with you on your prevention program. They may not join the coalition per se but would sponsor the program. For example, a newspaper could take on the prevention effort as an editorial agenda item. Editorials would be published periodically. The public affairs division of your local radio or television station could sponsor the program through their own work in community relations. They, like most organizations, want their name on the efforts.

Such partnerships are beneficial as they keep your message before the public for an extended period of time: the media may use their own resources to further your program; they provide you valuable contacts; and these ties can serve to strengthen your pursuits for coverage.

When conducting a community injury prevention campaign, be sure to consider how you can use some of the following aspects of public information. These include:

### **Public Service Announcements (PSA's) - TV and Radio**

A PSA can capture attention and be used as a complement to other public education efforts; by itself a PSA is ineffective. A station might film a PSA (at no charge to you) or would certainly air one the coalition has made (these are very expensive unless the filming is donated). Remember, a PSA is not bought and paid air time, it is a service provided by the media, so PSA's are usually aired at odd hours. A television PSA should be no more than 30 seconds in length.

An effective radio spot should read for 10-15 seconds. Stations usually want the copy rather than pre-recorded announcements.

### **Programming**

A news story, talk show, or specific program can be an excellent vehicle for publicity. However, before approaching a station, do your homework. If you think your prevention pro-gram is worthy of news coverage, be able to explain why it is important. If you are able to detail some "angles" for coverage, outline possible visuals for TV, and offer to help arrange the interviews and details required for reporting a story you will increase the chances for coverage. Keep in mind that while filming a news report may take several hours or even days, coverage is often limited to one or two minutes of air time. Also remember you need to demonstrate exciting and different aspects of your program in order to receive more than just coverage at the "kick-off".

### **Newspaper and Newsletter Articles**

The newspaper is a powerful tool in public communication. A news article can convey more information than brief TV and radio coverage. You can either write a press release and mail it to newspapers or talk with a reporter about covering your story. The same applies to newsletters. There are hundreds of newsletters that would be appropriate for information on your prevention program. Most newsletter editors want articles but would rather have one arrive on their desk already written that allows them editorial liberty to fit it into their upcoming issue.

### **"Victim Story"**

The victim story is an interview or article with an injured child or the family and is a great way to receive coverage. It humanizes the injury problem and gives your program a personal dimension. It is also the most likely to receive attention from the media. A "victim story" is particularly effective in smaller local newspapers. Families are often very glad to give interviews as it allows them to tell others how to avoid injury.

### **Program Expenses and Funding**

A paid coordinator is the most important and perhaps the largest expense for the program. This should be a staff person paid by the lead agency. One day a week (.2FTE) is adequate to accomplish one injury prevention program. However, if there are additional funds available more time could certainly be spent on one program, a second program undertaken, and information on numerous injury areas disseminated. A full-time injury prevention specialist or coordinator could really be very busy as there is much to do!

Beyond this, every successful community program will incur expenses along the way. However, an effective program doesn't need to be expensive nor does the cost burden need to be shouldered by one or two organizations. The entire community can share in supporting this worthwhile effort.

The second most likely expense of your program is the development of the necessary educational materials. You will get the best quality from an advertising agency. To get their expertise at low or no cost, employ the concept known as "worthy cause," which is advertising work-performed on a donation or "pro bono" basis. The ad agency will develop quality materials for your program which they then submit to advertising contests. The opportunity to give you free materials allows them to use the full range of their creativity; since you are not paying, you can't have a rigid set of demands for the product. Rather than bogging down one agency by asking for help in designing all of your materials, ask each agency to do a different piece. For example, one agency can design a poster, one a brochure, etc.

The next step is to ask another agency or organization to sponsor the printing of the materials. Examples are banks, insurance companies, city/county agencies. Some businesses have their own print shops and are particularly willing to give this in-kind donation. Contributors often like to give an item, such as a brochure, poster, printed guide or curriculum that can display their name, rather than a sum of money.

A local organization may be willing to support a community-wide campaign. Seek support from a range of sources including civic organizations such as the Lions Club, Kiwanis, YMCA/YWCA, the local Chamber of Commerce, etc.

Another excellent source of funding may be local foundations. They are most likely to provide initial funds. Research the foundations in your area to learn who they are, what causes they are interested in supporting and then ask for appointments to introduce yourself and the program. This personal contact is very important in fundraising.

Finally, look to local corporations for support of your project. Many companies have "corporate giving" or community relations" departments. Introduce yourself and the program. Insurance companies are logical places to seek funds as they have a vested interest in the health and safety of their clients. Banks may be another good source.

Always remember to offer to publicize the participation of a group who donates to your program - we all like to be recognized for our efforts!

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## **Choosing Materials**

Development and selection of educational materials for your program can be fun but difficult. Developing your own materials is time-consuming, expensive and requires a certain amount of expertise. The services of a health educator and an advertising agency can be helpful.

Rather than "reinventing the wheel" you may wish to choose from the numerous materials "on the market" from various organizations across the country. It's a good idea to get a sample copy of an item you are considering before ordering large quantities.

Review the piece for its message, target audience, visual appeal and reading level. First, decide what message you wish to convey - a focused and positive one is best. "Wear a life jacket" gives a much more specific and action-oriented message than "Be careful" or the negative "Don't fall overboard." Will it reach the audience you want? Brochures should be directed toward parents or adults, other items such as coloring books are better for children. All materials should be technically correct, concise and informative. A colorful poster is no help at all if the caption relates incorrect information.

Good graphics are very important. They should catch the viewer's attention and give a message in themselves independent of any caption or text. Good graphics help to avoid the problem of the words not being read. This usually happens for two reasons: the reading level is too high for the target audience and/or the text is too long.

When one reads a book one expects a long text but a brochure must convey its message in 3 seconds to 3 minutes of reading time. People who read brochures fall into three categories: those who look for 3 seconds, 30 seconds or 3 minutes - the message must pop out whether you have a three second or three minute reader.

Finally, be wary of spending too much money. The materials themselves may be too expensive in the first place. Prices vary, often according to the quality. Match your need to the quality. For example, at a fair where many people just grab stuff and never look at it, glossy brochures probably aren't worth their cost. Better to photocopy single age flyers for a fair and save glossy brochures for personal contacts such as in medical provider counseling. Second, be sure the item will be used. Stacks of bumper stickers sitting on a shelf because no one wants one on their car is a waste of resources. Third, all the materials in the world won't do any good unless they are being distributed. Through your coalition you have the person power and activities to get the materials out. You may have printed brochures to be distributed but it is also very effective and efficient to have "boiler plates" of flyers available for groups to copy when they are doing an activity that will disperse the items. This saves the lead organization or coalition from doing all the printing.

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## Case Study: Bicycle Helmet Program for Elementary School Children

*The following pages include an example program developed and implemented by the Harborview Injury Prevention and Research Center. This case study is presented to help clarify how the steps can be applied. Please contact the HIPRC if you want more information and educational materials in order to implement these particular programs, as they are merely outlined in this guide and the information presented here is only a sample of what was used. Also note that the statistics are no longer current.*

### Step One: Gather and Analyze Data

Here is a sample of the type of information that was used to support the need for the program.



According to the National Electronic Injury Surveillance System (NEISS), there were over 500,000 emergency room visits per year due to bicycle crashes. Nearly 400,000 of these were children. Bicycle injuries were the main recreational cause of emergency room visits and the second cause of hospital admissions.

According to the Washington State Department of Health, from 1985-1989 there were 40 children (1 - 19 years of age) who died from bicycle-related injuries and 322 were hospitalized over the same time period.

Nationally about 2% of children wore helmets in 1986.

### **Step Two: Select Target Injuries and Population**

According to the above information as well as other data, children were at greater risk for injury and death due to bicycle crashes. While the 10 - 14 year olds were at somewhat higher risk, the 5 - 9 year old group was targeted because the age group was known to be more amenable to parental influence and had spent a shorter time riding a bike bareheaded.

### **Step Three: Determine Intervention Strategies**

A few of the ideas developed in brainstorming for strategies included:

Educational strategies:

- Don't let children ride in streets.
- Don't let children ride after dark.
- Train children to ride properly.

Technological strategies:

- Barriers to separate bicyclists from motor vehicles.
- Helmets resistant to impact.

Legislative strategies:

- Stop producing bikes.
- Outlaw sale of bikes to children under 15 years old.

Of the above strategies, the most effective, easily accomplished and realistic was to promote the use of a helmet to prevent head injury. Because the HIPRC is a research institute, there were resources available as well as the desire to examine factors of the potential program in greater detail. It was decided that answers to the following questions could help shape the program further:

- 1 How effective are helmets in reducing injury to the head'?
- 2 Why don't parents buy their children helmets?



### 3 Why don't children wear bicycle helmets?

#### **Step Four: Develop An Implementation Plan**

To address question #1 above, a research study looked at people coming into five Seattle-area emergency rooms for bicycle-related head injuries. The study also surveyed people who didn't come into the ERs because they had been wearing a helmet that worked. The results of the study showed that helmets reduce the risk of serious injury to the head by 85% and to the brain by 88%. Therefore, helmets were proven to be a very effective prevention intervention.

A survey of 1,000 third graders and their parents answered questions #2 and #3. The most common reason parents gave for not having bought a helmet for their child was they had never thought about it, the second reason was cost and the third was they didn't think their child would wear one. The children responded that helmets were uncomfortable and they worried about what their friends would think.

Based on these results the specific program goals and objectives were:

#### 1. Increase helmet purchase by parents

- Increase awareness of problem and solution

- Reduce financial barrier: discount coupons, bulk buy programs, subsidies

- Focus on helmet use only; not on riding behavior

#### 2. Increase helmet use by children

- Focus on 5- 9 years olds who are susceptible to parent pressures and have less history of bare-headed riding

- Increase pressure to use - parent modeling, more colors and styles, stickers, etc.

- Increase availability - department stores, toy stores, etc.

- Link helmet wearing with fun activities - "hero" modeling, incentives

- Require use when possible

#### **Step Five: Identify, Select and Commit Community Agencies to Implement the Plan**

The lead agency in the Seattle/King County helmet program was the HIPRC. In other counties across the state it was, in most instances, the local health department for the county.

The designated coordinator for the Seattle program was a staff person at the HIPRC and a nurse or health educator in the local health departments.

Enthusiastic and committed coalition members included:

- Health Departments
- State Medical Association
- Bicycle organizations/clubs
- Health maintenance organizations, hospitals & clinics
- Helmet manufacturers and distributors
- Advertising and marketing representatives
- Representatives of TV, radio or print media

### **Step Six: Develop an Action Plan**

A multifaceted approach was developed to involve the entire community which required the contribution of all coalition members:

- Physician advice
- Media - victim stories, Public Service Announcements, repeated articles in the press, TV and radio talk shows, press conferences
- Informational materials - posters, brochures, flyers, videos, etc.
- Manufacturers and distributors - discount coupons, bulk purchase, more helmet choices
- PTAs, youth groups, schools, health fairs, rodeos and other community events

### **Step Seven: Orient and Train Agencies/Individuals Implementing the Intervention Plan**

Initial coalition meetings were the most appropriate time to orient people to the prevention program and the reasons for its implementation. The problem was described both nationally and locally through references to data. The program plan was outlined.

### **Step Eight: Implement the Program**

The coordinators of programs in communities across Washington gathered local data and planned the program goal and objectives prior to the first meeting. Coalition meetings started early in January. Some coalitions met once a month, others met more frequently. Activities took place in spring, summer and fall. During the late fall and early winter coalition members could rest but the coordinators were planning for the next season's program and activities.

## **Step Nine: Monitor and Support the Program**

Meetings were held and memos and information were sent to coalition members. Telephone contact was frequent by the coordinator. Small decisions were made by the coordinator, larger ones brought to meetings for coalition consensus. Coalition members were encouraged to share stories of activities and keep each other aware of opportunities for making helmets visible.

## **Step Ten: Evaluate and Revise the Program**

Program evaluation

Process evaluation

Some of the measurements used included:

Number of parent groups reached

Number of educational brochures and flyers distributed

Number of discount coupons for helmets distributed and the number redeemed

Number of helmets donated

Number of low-cost programs: discount programs, bulk purchase plans

Outcome evaluation

Observations of helmet use also took place:

Observation by the HIPRC of the number of children wearing helmets in the early spring before activities began and again in the fall when activities were over for the bicycling season showed an increase from 5.5% to 33% over five years of program implementation in the Seattle/King County area.

Experimental research

A survey was done by the HIPRC in 1986 through King County pediatricians' offices which revealed the helmet use by children to be at 1%. A year later, when a few program activities had already started, a study compared the use of helmets by children in Seattle with the use by children in Portland, Oregon where there was no helmet promotion program. The usage in Seattle was 5.5% compared to 1.0% in Portland. After two seasons of the program in Seattle the usage had risen to 15.7%, while in Portland it was 2.9%.

The following surveillance mechanisms were used to detect changes in bicycle head injury trends:

County vital statistics

Hospital discharge records

State Patrol data registry at the regional trauma center

See a sample of a [Children's Bicycle Safety](#) flyer used in the campaign. Please remember that the **statistics are not current**.

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University of North Carolina Center for Health Promotion and Disease Prevention, You Can Make The Difference: Preventing Injuries In Your Community, University of North Carolina, CB#7460, Chapel Hill, NC 27599-7460, send \$10. Or contact Carol Runyan at the Injury Prevention Research Center (919) 966-2251.

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