Guidelines to Planning an Effective Injury Prevention Program

The more defined a program is the easier it will be to implement. To define a program, one must start with planning. Time invested in planning will save time and resources and reduce frustration.

If keeping track of the Public Health Approach, Planning is step 4 and is part of the implement and evaluate step.

Program Planning Steps

1. Identify and define the injury problem. This involves deciding how you will define/classify an injury. Is it by severity? Is it intentional, unintentional, etc. (Step 1 of the Public Health approach)

2. Measuring the injury problem. This involves determining the extent of the injury problem. How many injuries do we actually have? This is where data becomes useful. (Step 1 of the Public Health approach)

3. Identifying key determinants. This involves determining causal or contributing factors. By identifying the contributing factors (risk factors) of injuries, we can understand the circumstances in which they happen. (Step 2 of the Public Health approach)

4. Identifying potential intervention strategies. Once you know what the problem is and what is contributing to its occurrence, then you can identify intervention or ways to change the problem. (Step 3 of the Public Health approach). Use Haddon's matrix and the 3 E's model to brainstorm intervention strategies.

5. Selecting a strategy to implement. This step will involves choosing an intervention or strategy that best suits your community. See the following section for more information on the selection process.

6. Develop an injury prevention goal and possibly several objectives.

7. Develop an action plan for each objective.

Because the first 4 steps have been covered in other documents on the website, we will start with step 5 in this document.

Selecting an Intervention (Step 5)

One way to select an intervention is through the use a decision tree or matrix . We will present here a matrix developed by Dr. Carolyn Fowler. The decision matrix is a simple tool designed to identify intervention options and choose between them. It can also identify long-term goals and intervention options that support each other. A matrix is any general tool to help you make decision; don't confuse this section with Haddon's Matrix.

There are 7 elements of the matrix that are used as decision criteria. They are:

- Effectiveness
- Feasibility
- Cost feasibility
- Sustainability
- Political acceptability
- Social will
- Possible Unintended consequences

Decision Matrix: Effectiveness

Effectiveness is the likelihood that the intervention will do what it is intended to do. Specifically, will the intervention reduce the number and/or severity of injuries. In assessing the effectiveness of an intervention, you might want to ask yourselves: Is the intervention:

- Questions to ask:
    - Is the intervention active vs. passive?
    - Is the intervention community orientated vs. individual?
    - Are there multiple targets for change vs. a singular target?
    - Is the intervention a proven one?

Decision Matrix: Feasibility

Feasibility means is it capable of being done. What is the likelihood that an intervention will actually happen.

- Questions to ask:
    - Is the intervention technically possible, practical, achievable and viable?
    - Are safer products and technical solutions possible and available?
    - Do I have staff that are trained to apply the intervention?

Decision Matrix: Cost Feasibility

The affordability of an intervention.

- Questions to ask:
    - Is the intervention affordable? If so, will it yield injury prevention returns?
    - Do I have enough staff, and salary to pay staff.
    - What other resources do I need (car, office space, special equipment)?

Decision Matrix: Sustainability

The potential for continued effect.

- Questions to ask:
    - Will the effect persist after the intervention is completed?
    - Will the intervention become institutionalized? Meaning can it become a permanent program for long-term success?

Decision Matrix: Political acceptability

The likelihood that the intervention will be acceptable politically.

- Questions to ask:
    - Is the intervention ethical? (consider human subjects ethics)
    - Is it equitable? (just and impartial)
    - Is it constitutional? (lawful)
    - What is the prevailing mood in the community about this intervention?

Decision Matrix: Social Will

Support for the intervention.

- Questions to ask:
    - Does the community support this intervention? If not, why and what can we do about it?

Decision Matrix: Possible Unintended Consequence

The consequences both positive or negative that could result from the intervention.

- Questions to ask:
    - What are the negative and positive consequences that could result if intervention is successful?

Decision Matrix: Example – Dog Bite Intervention

Suppose that these four interventions have been brainstormed to address the high incidence of dog bites occurring in your tribal community. Using the decision criteria in the first column, how would you rate each intervention. Rating is low, moderate, or high. Answers will be different for each program and community. You should be able to justify each rating you give.

Decision Criteria	*Passage of a Leash Law*	*Getting rid of all dogs*	*Electronic fencing (home)*	*Animal Control to pick up strays*
Effectiveness				
Feasibility				
Cost Feasibility				
Sustainability				
Political Acceptability				
Social Will				
Unintended consequences				
Intervention Rating				

Goals of Program

Once you have prioritized or selected your intervention, the next step is the development of a goal. Goals are general statements about what you hope to accomplish when your program is completed. They are broad statements of intent and are usually health related. Goals refer to long term change.

Examples

Reduce dog bites (from above example)
Reduce deaths from house fires
Reduce motor vehicle crash injuries and deaths

Objectives

Objectives specify how goals are going to be accomplished. They are measurable, specific statements that lead toward program goals and define what change the community or coalition will try to achieve. Goals are important because they anchor the planning process and are used for evaluation purposes. They specify who will receive the intervention, what the intervention will be, where it will take place, how much benefit will be received, and by when it will be achieved. In order to achieve all this, objectives must be written SMART.

- Measurable, specific statements on how the goal will be achieved.
- Shorter term (typically a year)
- Specify who, what, where, how much, and when
- SMART
  S – Specific
  M – Measurable
  A – Achievable
  R – Relevant
  T – Time-framed or based

Specific. They must identify exactly what you want to happen or are seeking to achieve. Example- Increase care seat use among children.

Measurable. This means that there must be something you can quantify and detect change in over time. Example- An increase in the number of children riding in car seats.

Achievable. People need to be capable of attaining an objective. So, there must be a likelihood of success. Setting target that are ridiculous does not motivate people. Example- Does a 20% increase in car seat usage seem achievable? It may for some communities, for others this number may be too high.

Relevant. The target must be something that the coalition or community can actually impact upon or change and it must be important to the organization. Example- Do you think that increasing seat belt use would be relevant to an injury prevention coalition?

Time-framed or have deadlines. This way it is clear to everyone when results can be expected – in 6 months, a year, or 2 years. Example- We want to increase smoke detector use
within one year.

Example using the dog bite example from above:

By the end of the year, there will be a 20% decrease in number of visits made by community members to the hospital for treatment of dog bites by implementing a mandatory leash law

Action Planning

Once your objectives have been developed, the next step is to develop an action plan for each objective. Action plans also help focus your activities. Action plans define what actions or activities need to occur to achieve the program objectives and they define who will be responsible for what actions. If keeping track of the Public Health Approach, Action Planning is step 4 and is part of the implement and evaluate step.

Action Planning Basics

- Specifies the actions needed to address each of the top organizational issues and to reach each of the associated goals and objectives defined above.
- Specifies who will complete each action and according to what timeline.
- A good action plan is clear and time specific for all actions.

Action Planning Benefits

- Clearly defines the purpose of the program.
- Communicates those goals and objectives to program's customers.
- Staff ownership.
- Effective use of program resources.
- Provides base for measurable progress.
- Efficiency and effectiveness of program.

Action Planning Worksheets

In general, the Worksheet method involves a group using worksheets similar to what is shown here to brainstorm the what, resources, by when, by whom, and status of completion for each action step identified. See next page for example worksheets. See website for blank, full-page worksheets.

Action Planning Worksheet 1

Goal: Reduce fire related injuries in the Piney Point Reservation.

Objective: To conduct home fire safety surveys in 85% of homes within 4 months.

Activity	Action Step	Person Resp.	Resources	Timeline
Conduct home fire safety surveys	Make a list of possible volunteers	Injury Coordin. IHS/Tribal EHO	Computer Equip Telephone	Sept. 1
	Train volunteers on how to complete surveys	Injury Coordin. IHS/Tribal EHO	Classroom for meeting	Sept. 15
	Send flyer/letters to community re: home surveys	Injury Coordin.	Computer Equip Paper, Mailing address labels	Sept. 30
	Conduct home surveys	Volunteers	Transportation, blank forms, pens, pencils, educ. materials	Oct. 1 – 31
	Enter survey data	IHS/Tribal EHO	Computer software Epi Info	Nov. 21

Action Planning Worksheet 2

What	Resources Needed	By When	By Whom	Status

References

Decision Matrix information was supplied by Dr. Carolyn Fowler, Assistant Professor (Joint Appointed) Johns Hopkins School of Nursing; and Director, Injury Prevention Program, Baltimore County Department of Health