Evaluation of the Fall-Related Injury Prevention Projects

Safe Kids Nebraska Program

Report prepared by
Jeanne Bietz, MA, Safe Kids Program Coordinator
Ming Qu, PhD., Injury Epidemiologist / Nebraska CODES Administrator
Ying Zhang, MEd, Injury Research Assistant

February 2007
**Introduction**

Accidental fall-related injuries are the leading cause of hospital discharge for Nebraska-resident children under 15. Every year, children's fall-related injuries account for about 12,000 hospital discharges.

The purpose of the fall-related injury prevention program is to reduce the number of fall-related injuries among children and to bring about public education and awareness.

Safe Kids Coalitions and Chapters across the state have implemented programs within their communities to educate families about preventing fall-related injuries. Programs implemented include: Baby walker exchange for stationary play centers, putting stair gates in low-income homes, educating schools about playground safety issues, educating coaches on sports safety, distribution of bike helmets and public awareness through the media including radio, television and newspaper.

As part of the project, participants were asked to complete a survey after completing the program. They were asked questions to determine a variety of quantitative variables. These variables provided information about the participants' reaction to the program, how they heard about it and what they learned.

**Evaluation Methods**

The survey was developed by the Safe Kids coordinator along with state epidemiologists (See attachment 1). Safe Kids coordinators at three chapters completed seventy-five surveys with parents or caregivers in their area who were involved in the Safe Kids Fall-Related Injury Prevention Program. Participants were surveyed via phone or on-site with written responses.

**Survey results**

Seventy-five residents from three chapter areas in Nebraska completed the survey. The participants were from Scottsbluff (32), O’Neill (10), Superior (10), Gering (20), Bayard (1), Bridgeport (1) and Melbeta (1). Most of the participants (73.3%) were involved in the baby walker exchange program, while 13.3% of them were involved in the playground safety program and another 13.3% of them in the home safety program. (Table 1)

| Table 1 City Where Respondents Live and Type of Program |
|-----------------------------------------------|---|---|
| City          | Number | %  |
| Scottsbluff   | 32     | 42.7|
| O’Neill       | 10     | 13.3|
| Superior      | 10     | 13.3|
| Gering        | 20     | 26.7|
| Bayard        | 1      | 1.3 |
| Bridgeport    | 1      | 1.3 |
| Melbeta       | 1      | 1.3 |
| Total         | 75     | 100.0|

<table>
<thead>
<tr>
<th>Type of Program</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby walker</td>
<td>55</td>
<td>73.3</td>
</tr>
<tr>
<td>Playground</td>
<td>10</td>
<td>13.3</td>
</tr>
<tr>
<td>Home safety</td>
<td>10</td>
<td>13.3</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The gender of 61 of the participants is known out of the 75 completed surveys. Fifty-six of the respondents were female (91.8%). Of the 55 participants who identified their age, the mean age was 30. The range
was from 18 years to 56 years. Information regarding the number of children in the home is available for 48 participants. Of them, more than one-third (35.4%) have one child, more than a quarter have two children (27.1%), and about another one-third (31.3%) have three children. (Table 2)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>5</td>
<td>8.2</td>
</tr>
<tr>
<td>Female</td>
<td>56</td>
<td>91.8</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Mean</th>
<th>SD</th>
<th>Range (Min) (Max)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30.1</td>
<td>10.3</td>
<td>18 (Min) 56 (Max)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of children in household</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>17</td>
<td>35.4</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>27.1</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>31.3</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2.1</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Survey Questions**
When asked if they were aware of the Safe Kids program, 71.6% of participants answered ‘Yes’.

<table>
<thead>
<tr>
<th>Awareness</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>53</td>
<td>71.6</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>28.4</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Nearly two-third of parents or caregivers indicated ‘Other’ on the survey in how they knew about the local fall-related injury prevention program. ‘Other’ included Good Beginnings/Head Start, arrival at event, Safe Kids contact, nursing school, daycare and flyer. Another 14.9% and 23.0% of them reported through ‘Newspaper’ or ‘Friends’.

<table>
<thead>
<tr>
<th>Channels</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper</td>
<td>11</td>
<td>14.9</td>
</tr>
<tr>
<td>Friend</td>
<td>17</td>
<td>23.0</td>
</tr>
<tr>
<td>Radio</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Other</td>
<td>45</td>
<td>60.8</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
</tr>
</tbody>
</table>

When asked how much they learned from the corresponding program based on a scale from 0 (did not learn anything) to 10 (learned a lot), on average respondents responded at 7.8 with a range from 2 to 10.

When asked ‘What did you learn from the program?’, most participants (89.3%) answered they did learn something from the program. Items by program learned include:

**Baby Walker Exchange**
- How dangerous baby walkers are and injury statistics
- Stationary play centers are safer
- Walkers cause many injuries
- Mobile walkers can fall down stairs
- Great service
- Many children visit the ER because of walkers
• Walkers don’t help babies to learn to walk
• Walkers help children get into stuff and tip over

Playground Safety
• Proper supervision and the need for proper supervision
• Age-appropriate equipment
• Who is responsible for maintenance
• Proper surfacing
• Types of playground injuries
• Why rules are important
• Not have long strings on children’s clothing
• Need for trash clean up
• Checking equipment for loose bolts, broken parts

Home Safety
• Safety tips for the home
• Where to put up gates in the home
• Child proofing the home
• Fall-prevention: use strap on dressing table and highchair
• Correct use of safety gate
• Outlet safety

When asked, “As a result of the program, did you take some safety actions following the program?”. Of 63 participants who answered this question, most (93.7%) took action as a result of the program. Safety actions taken by program participants include:

Baby Walker Exchange
• Became more cautious
• Exchanged walker for stationary play center
• Made furniture changes for safety
• Disposed of walker
• Blew out candles when not in the room
• Kept kids away from stairs

Playground Safety
• Increased active supervision

• Looked at equipment more closely
• Conducted trash pickup
• Added another monitor and decrease kids on playground

Home Safety
• Put up safety gate received
• Put locks on cupboards
• Removed fluffy blankets and toys from crib
• Installed car seat correctly
• Won’t let kids jump from furniture
• Won’t lay infant on sofa

Fifty-five participants answered the question, “What did you like most about the program?”. More than 16% said they liked it ‘some’, 34.5% reported they liked it ‘a lot’, and 32.0% stated they liked it ‘very much’. Items liked by participants include: able to exchange walker for stationary play center, information provided to keep their kids safe, presentation techniques, getting children involved, Safe Kids came to us, getting a gate and car seat because we don’t have the money, knowing my child was safer after receiving the services, safety tips given and safety home visits.

When asked, “How could we improve the program?”, of the forty-two respondents, nearly half (40.5%) had comments. Improvements include: inform more people, better signs, keep it going, nothing, advertise better/more publicity, great, more funding, come more often, helmets check done once a year, more hand-outs, keep doing what you are doing and reach all parents in the county.

At end of the survey, participants were given the opportunity to add
any additional suggestions or comments. Of the thirty-six respondents who answered this question, 27.8% commented as follows: great program, great idea to ensure safety, thank you!, wonderful idea, this is a great thing you’re doing to keep kids safe, very friendly people, good program, you would think walkers were safe if they sell them, excellent program, come more often, thank you for the help, I like that they come to my home and teach me fall prevention and information helps me to safely take care of children in my daycare. The remaining 72.2% had no comments or suggestions.

Summary
This study examined the immediate effects of the children’s fall-related injury prevention program in three Safe Kids chapter’s programs in Nebraska. The program was established in 2004 to address the leading cause of hospitalization to children: falls. Overall, comments about the programs conducted were very positive and participants learned new safety information. The fall-related injury prevention program will continue while funding is available. The program hopes to see changes in hospital discharges in the next few years. The participants’ surveys will continue in order to glean more valuable information about how to improve the program and ways to reach more families.

Limitations
The first limitation is that many records were missing data on one or more of the key variables including demographics, what was learned, and actions taken questions. Missing information weakens the power of this study due to a small sample size of this survey. Second, this study examined the immediate impact of the prevention program. The long term effect was not evaluated. Parents or caregivers should be asked about the frequency and severity of their child’s fall-related injuries in the long term. It would be ideal to have some other communities as control groups. Other data sources such as hospital discharge data or emergency room visit data may be utilized to track the differences and trends between the communities that implemented the children’s fall prevention program and those that did not. Those data sets will also be used to show the trends in those communities conducting the program.

Acknowledgement
Safe Kids Nebraska wants to thank Jeff Armitage for his assistance in developing this survey and Peg Prusa-Ogea and Bill Wiley for editorial comments. We also want to thank the Safe Kids Chapter coordinators in Superior, Scottsbluff and O’Neill who interviewed the parents and caregivers who participated in their program. With their participation, valuable information was learned about the participants’ reactions to the program and the effects of the program on changing behavior and knowledge.

Contact
Safe Kids Nebraska at 402-471-8749 or Jeanne.bietz@hhss.ne.gov.
Attachment 1

General Interview Guideline for the Fall Injury Prevention Program

Purpose of the interview: to assess the impact of the program in terms of awareness, knowledge, belief, and attitude for parents/families/older children who were involved in your program. This information will be used to guide future activities.

Below are the interview questions that are designed to cover points related to YOUR falls project. Information can be collected through phone interviews, face-to-face interviews or a template for participants to fill out. The surveys will be turned in at the end of the project along with the other evaluation assessments included in your grant application. **Complete 10 interviews.**

This interview will provide qualitative data that will help to understand how people perceive what we do and how to improve it. A report of all program activities and results will be put into a year end report.

Procedures:
Introduction
Hello, I am calling on behalf of the Safe Kids of __________. My name is (name). We are gathering information from individuals who participated in the falls related injury prevention program put on by our organization. Any information provided will be confidential and will only be used to improve program development. If at any time you wish to end the interview, please let me know.

(During the conversation, you can probe further to gather as much information as possible.)

1. Are you aware of the Safe Kids program in general?
   a. Yes
   b. No

2. How did you find out about the (your program here; playground safety, home safety, product exchange, bike helmet) program?
   a. Newspaper
   b. Friend
   c. Radio
   d. Church
   e. Other (please specify): ____________________________
3. On a scale from 0 to 10, where 10 is learned a lot and 0 did not learn anything, how much did you learn about (home safety, bike safety, playground, recalled products, baby walkers etc...) Indicate your program here) program?

10  9  8  7  6  5  4  3  2  1  0

Learned a lot Did not learn anything

What did you learn from the (your project here) program? (Specific items)
1. 
2. 
3. 

4. As a result of the program, did you take or will you take any actions to improve safety?
   1. yes, what?
      __________________________________________________________
   2. no,
      why?____________________________________________________

5. What did you like most about the program?

6. How could we improve the program?

7. Anything else you would like to mention/comment on about (your program here)?
Demographics

1. City in which you live?

2. What is your age?
   __ __ Code in years
   __ __ Refused

3. How many children less than 14 years of age live in your household?
   __ __ Number of children
   __ __ None
   __ __ Refused

4. Indicate sex of respondent. (ask only if necessary)
   1. Male
   2. Female

Thank participant for the interview. Do you have any additional comments about the Safe Kids program?