CHILDHOOD UNINTENTIONAL INJURY PREVENTION

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APRIL 8, 2013
OUTLINE

- Public Health
  - Burden
  - Risk & protective factors
  - Best practices
- Organizations
  - JCDHE
  - Safe Kids
  - Charlie’s House
- Activities
  - Development
  - Implementation
  - Review
- Reflection
  - Challenges
  - Knowledge gained
  - Opportunities
PUBLIC HEALTH BACKGROUND
FACTS ABOUT UNINTENTIONAL CHILDHOOD INJURY
CHILDHOOD UNINTENTIONAL INJURY: U.S.

- #1 cause of death and disability
- Greater than mortality for all diseases combined
- 42% of all YPLL 2000-2009

Annually:
- >9000 deaths
- 20 million need medical care or restricted activity
- >9 million seen in ER
- 200,000 hospitalized
- >$300 billion U.S.

Effects:
- Child: from pain to functional limitation to permanent disability; psychiatric problems; missed school
- Caregivers: lost productivity; psychiatric & social problems; costs of medical care
# LEADING CAUSES OF MORTALITY

<table>
<thead>
<tr>
<th>Rank</th>
<th>Age &lt;1</th>
<th>Ages 1-4</th>
<th>Ages 5-9</th>
<th>Ages 10-14</th>
<th>Ages 15-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Suffocation</td>
<td>Drowning</td>
<td>Motor Vehicle (MV) Traffic</td>
<td>MV Traffic</td>
<td>MV Traffic</td>
</tr>
<tr>
<td></td>
<td>907 (77%)</td>
<td>450 (31%)</td>
<td>378 (49%)</td>
<td>491 (68%)</td>
<td>3,242 (67%)</td>
</tr>
<tr>
<td>2</td>
<td>MV Traffic</td>
<td>MV Traffic</td>
<td>Drowning</td>
<td>Transportation - Other</td>
<td>Poisoning</td>
</tr>
<tr>
<td></td>
<td>91 (8%)</td>
<td>363 (25%)</td>
<td>119 (15%)</td>
<td>117 (15%)</td>
<td>715 (15%)</td>
</tr>
<tr>
<td>3</td>
<td>Drowning</td>
<td>Fire/Burns</td>
<td>Fire/Burns</td>
<td>Drowning</td>
<td>Drowning</td>
</tr>
<tr>
<td></td>
<td>45 (4%)</td>
<td>169 (12%)</td>
<td>88 (11%)</td>
<td>90 (10%)</td>
<td>279 (6%)</td>
</tr>
<tr>
<td>4</td>
<td>Fire/Burns</td>
<td>Transportation - Other</td>
<td>Transportation - Other</td>
<td>Fire/Burns</td>
<td>Transportation - Other</td>
</tr>
<tr>
<td></td>
<td>25 (2%)</td>
<td>147 (10%)</td>
<td>68 (9%)</td>
<td>53 (6%)</td>
<td>203 (4%)</td>
</tr>
<tr>
<td>5</td>
<td>Poisoning</td>
<td>Suffocation</td>
<td>Suffocation</td>
<td>Suffocation</td>
<td>Fall</td>
</tr>
<tr>
<td></td>
<td>22 (2%)</td>
<td>125 (9%)</td>
<td>26 (3%)</td>
<td>41 (5%)</td>
<td>58 (1%)</td>
</tr>
<tr>
<td>Rank</td>
<td>Age &lt;1</td>
<td>Ages 1-4</td>
<td>Ages 5-9</td>
<td>Ages 10-14</td>
<td>Ages 15-19</td>
</tr>
<tr>
<td>------</td>
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<td>------------</td>
</tr>
<tr>
<td>1</td>
<td>Fall</td>
<td>Fall</td>
<td>Fall</td>
<td>Fall</td>
<td>Struck by/against</td>
</tr>
<tr>
<td></td>
<td>147,280 (59%)</td>
<td>955,381 (45%)</td>
<td>631,381 (37%)</td>
<td>615,145 (29%)</td>
<td>617,631 (24%)</td>
</tr>
<tr>
<td>2</td>
<td>Struck by/against</td>
<td>Struck by/against</td>
<td>Struck by/against</td>
<td>Struck by/against</td>
<td>Fall</td>
</tr>
<tr>
<td></td>
<td>31,360 (13%)</td>
<td>372,402 (18%)</td>
<td>406,045 (24%)</td>
<td>574,267 (27%)</td>
<td>468,967 (18%)</td>
</tr>
<tr>
<td>3</td>
<td>Bite/sting</td>
<td>Bite/sting</td>
<td>Cut/pierce</td>
<td>Overexertion</td>
<td>Overexertion</td>
</tr>
<tr>
<td></td>
<td>10,922 (4%)</td>
<td>137,352 (7%)</td>
<td>104,940 (6%)</td>
<td>276,076 (13%)</td>
<td>372,035 (14%)</td>
</tr>
<tr>
<td>4</td>
<td>Foreign Body</td>
<td>Foreign Body</td>
<td>Bite/sting</td>
<td>Cut/pierce</td>
<td>Motor Vehicle Occupant</td>
</tr>
<tr>
<td></td>
<td>8,860 (4%)</td>
<td>126,060 (6%)</td>
<td>92,590 (5%)</td>
<td>118,440 (6%)</td>
<td>341,257 (13%)</td>
</tr>
<tr>
<td>5</td>
<td>Fire/Burns</td>
<td>Cut/pierce</td>
<td>Pedal Cyclist</td>
<td>Pedal Cyclist</td>
<td>Cut/pierce</td>
</tr>
<tr>
<td></td>
<td>7,846 (3%)</td>
<td>84,095 (4%)</td>
<td>84,590 (5%)</td>
<td>118,095 (6%)</td>
<td>184,972 (7%)</td>
</tr>
</tbody>
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CHILDHOOD UNINTENTIONAL INJURY: LOCAL

- Kansas childhood unintentional injury mortality rate is higher than the US rate
- Rate is higher in >1, 1-4, 5-9, and 10-14 year olds
- Rate is higher for almost every type of injury

- 19% of Kansas population lives in Johnson County
- 25.5% of residents are children
- Unintentional injury is the leading cause of death for Johnson County children over 1 year of age
RISK AND PROTECTIVE FACTORS

- Gender
- Racial/Ethnic background
- Socioeconomic factors
- Age

Johnson County
- Less diverse than KS (86% white)
- Median income > KS, US
- Education levels > KS, US
- 17% in poverty
- 17% in single parent households
- Of children 0-17, 8% poor and 20% low income
### PREVENTION: BEST PRACTICES

Comprehensive strategies combining education, environmental &/or product modification, and legislation

<table>
<thead>
<tr>
<th>Examples:</th>
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<tbody>
<tr>
<td>• Child passenger safety seats</td>
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<tr>
<td>• Bike helmets</td>
</tr>
<tr>
<td>• Smoke alarms</td>
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<tr>
<td>• Window bars</td>
</tr>
<tr>
<td>• Playground standards</td>
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</tbody>
</table>
ORGANIZATIONS
LOCAL GOVERNMENT AND NON-PROFIT AGENCIES
JOHNSON COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT

“to prevent disease and to protect and promote the health of the community”
HEALTH EDUCATION DIVISION

Population Served in 2011

- Disease Containment: 21,366
- Family Health Services: 13,666
- Health Education: 23,675
- Child Care: 61,935

Total: 10,998,469

Fees Collected
- 2010: $4,887,309
- 2011: $3,517,648
- 2012: $1,326,858
- 2013: $1,488,425
- 2014: $1,649,401

Total: $11,438,795

Revenue
- 2010: $10,998,469
- 2011: $10,299,434
ACTIVITIES

• Child Passenger Safety Seat Check-Up events
• Child Passenger Safety technician training
• Bike Rodeos/Bike helmet fittings
• Information and events on:
  • Home Safety topics
  • Sports Safety topics
• National Safe Kids Week events
• Community injury prevention education for professionals, parents, and caregivers
• Information and contact points for media
CHARLIE’S HOUSE

“to prevent injuries to children in and around the home”

charlie’s house
BACKGROUND & ACTIVITIES

• Safety demonstration house
  • Room-by-room safety tips
  • Use of safety devices
  • Examples of home hazards

• Provision of furniture straps

• Development of educational materials for parents
**EDUCATION COMMITTEE**

### Members
- Pediatricians
- Pediatric nurses
- Representatives from Safe Kids and other area non-profits
- Fire and police department members
- Area parents

### Activities
- Monthly meetings
- Review current CIP research and activities
- Assess educational needs of Charlie’s House
- Collaborate on upcoming events
- CIP presentations to community groups
FIELD EXPERIENCE ACTIVITIES
DEVELOPMENT

• Projects overseen by Katie Schatte
  • JDCHE Health Educator
  • Lead SKJC coordinator
  • Charlie’s House Education Committee chairperson

• Priorities determined by Education Committee
  • Standardized, modifiable educational presentations on home safety for use with lay audiences
  • Catalog of CIP best practices and free available materials
  • Additional educational documents to supplement presentations and for media dissemination

• Goals
  • Raise public awareness about unintentional childhood injury prevalence, risk factors, and potential hazards
  • Highlight opportunities and best practices for CIP
HEALTH EDUCATION

Education
Awareness, Knowledge
Changes in social norms
Support for policy/legislation
LITERATURE REVIEW

- Review and documentation of existing content
  - JDCHE and SKJC materials
  - Online materials from national organizations
  - Consultation with local content experts
  - Online journal articles related to CIP statistics, best practices, and evidence-based interventions
ANALYSIS

Approaches of existing educational materials:
• Topical
• Sub-topical
• Geographic
• Age-based

Limitations
• Extent of injury types and variety of possible interventions
• Relevance
• Generalizability
• Presence of multiple children
PROJECT FRAMEWORK

ORGANIZATION

• Season-specific
  • Winter/Holiday
  • Summer/Outdoors

AUDIENCE

• Caregivers
  • Able to make changes in home environment
  • Emphasis on adult supervision

CONTENT

• Age range
  • 1-14 years

• Excluded topics
  • Safe Sleep
  • Child Passenger Safety
REVIEW OF PRODUCTS

Reviewers

- Agency mentor
- Charlie’s House education committee

Reviewed

Style and content

- Impact
- Accuracy
- Thoroughness
DISSEMINATION

• Project materials & resource library organized electronically
• Disseminated through JCDHE’s Health Education division
• Copied onto thumb drives for Charlie’s House health educators
PERSONAL REFLECTIONS

THE GOOD, THE BAD, THE UGLY
CHALLENGES

• Gaps in data collection
  • Local injury surveillance

• Direction of Charlie’s House
  • Role of education in CIP
  • Home injury interventions
  • Home injury hazards
  • National vs. local
KNOWLEDGE

- Burden of unintentional childhood injury
- Preventability of unintentional injury
- Worldwide relevance of CIP
- Personal priorities & skills (or lack thereof)
- New interests and opportunities
OPPORTUNITIES

Evidence + Theory + Communication = Successful Interventions
REFERENCES

ACKNOWLEDGEMENTS

• Katie Schatte
• Dr. Cates & Barta Stevenson
• Drs. Renberg, McElroy, and Muturi
• Jane & Thom Marshall
• Nancy & Steve Sackrider
• Dee Yoesting
• Jeff Sackrider
QUESTIONS?