Discover the Connections: Unintentional Injury and Child Maltreatment

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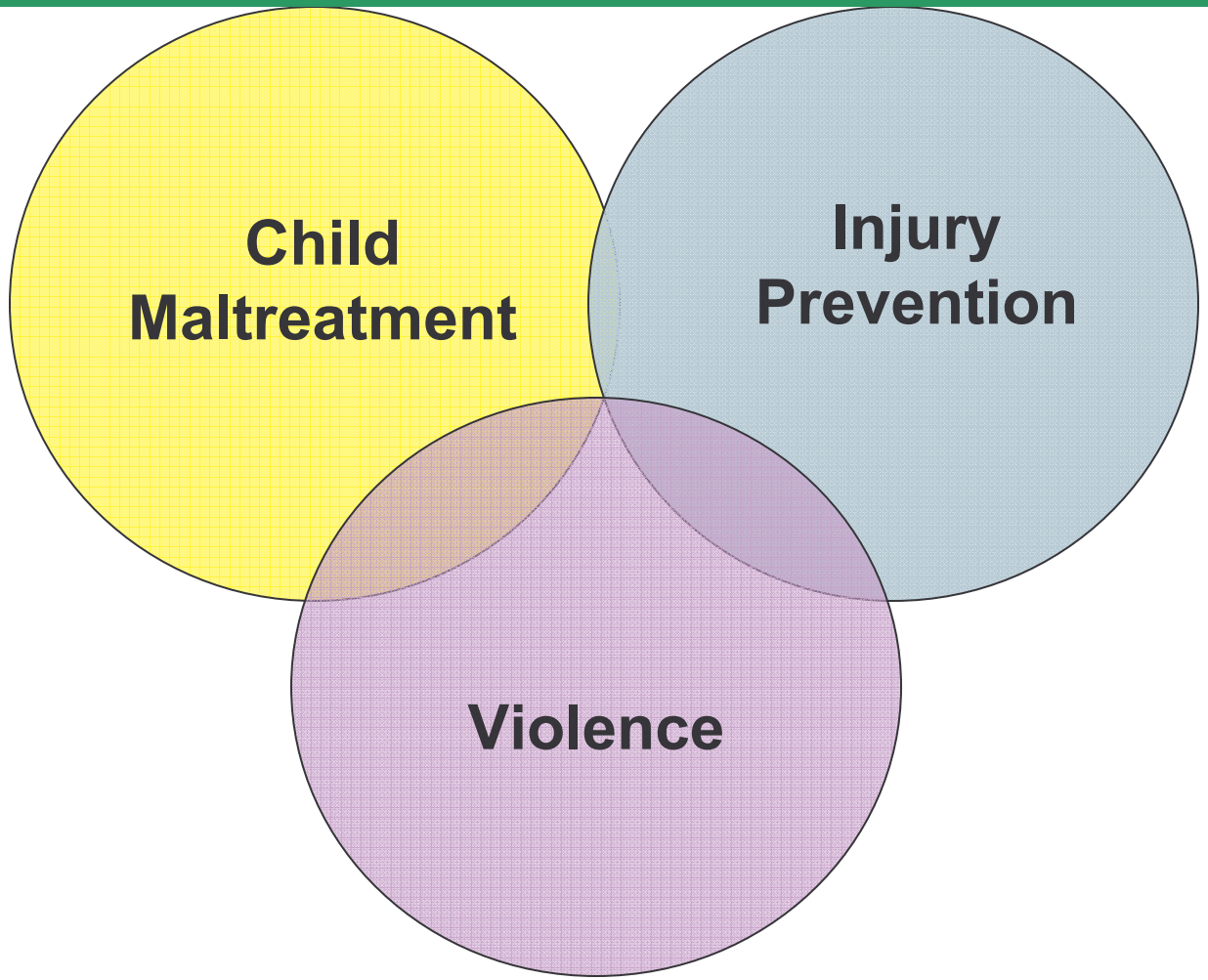
Objectives

- Explore similarities and differences
- Strategize on how to identify potential partners and build relationships
- Explore how injury prevention benefits from collaboration with child protection
- Action planning to foster future community collaboratives

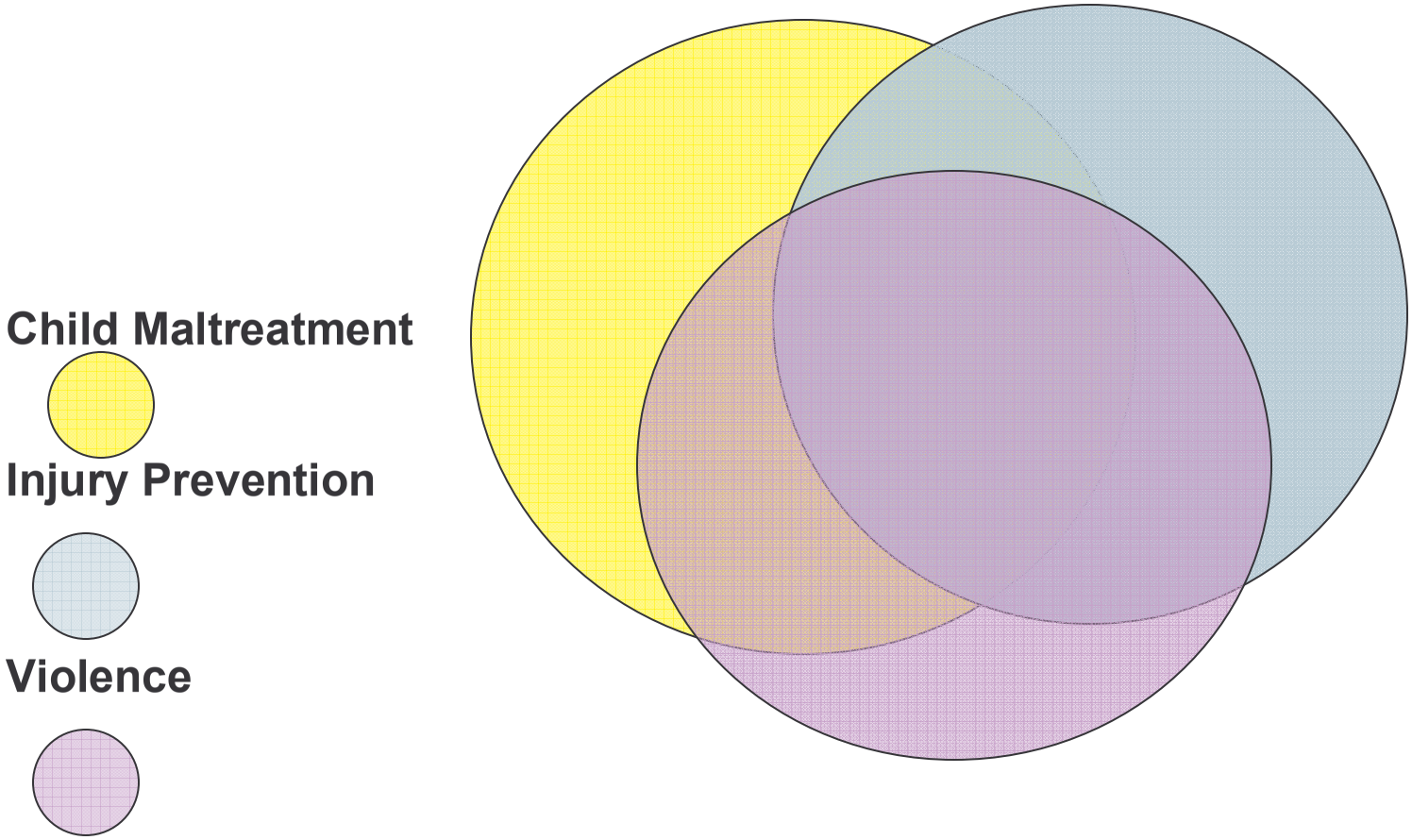
Overview

- Overlapping Missions in Public Health
  - Intersecting circles of activity
  - Multidisciplinary and community-based
- Conceptual Models
- Exploring the connection
  - Work of Lizette Peterson, PhD
  - Work of Tom Christoffel, JD and Susan Scavo Gallagher, MPH
- Team Work: The Connection
- Action Planning for Future Collaboration

Intersecting Circles



Intersecting Circles: Need More Overlap



Child Maltreatment as a Public Health Problem

Abused children:

- Suffer a wide variety of physical, emotional and developmental problems
  - hampers their ability to live healthy and productive lives.
- Have difficulty in school, problems with substance abuse and problems with the law.

A public health issue of vital importance for WHO, and it represents a challenge for the next millennium

Dr Bjorn Thylefors, Director of WHO's Division on Disability, Injury Prevention and Rehabilitation.
http://www.who.int/inf-pr-1999/en/pr99-20.html

Child Maltreatment as a Public Health Problem

- Experts from both developed and developing countries,
  - disciplines as diverse as violence and injury prevention, medicine, social science, public health, psychiatry, psychology and law.
- Determined that it is possible to reduce the prevalence of child maltreatment
  - when parents are provided training in parenting skills before and after birth in a supportive environment by nursing personnel and/or community health workers.

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Child Maltreatment as a Public Health Problem

The experts recommended:

1. The development of worldwide data collection on child abuse and estimates of the public health impact and related costs.
2. Sharing of interventions and best practices which are successful in the prevention of child abuse and neglect.
3. Continuing evaluation and research on child abuse prevention.
4. National programs for prevention, as well as that provide social support to victims and families.

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Injury Prevention as a Public Health Problem

- WHO and UNICEF collaborate on World report on child and adolescent injury prevention
  - Advocacy tool as well as a science-based book on:
    - what we know about child and adolescent injuries and
    - how these injuries might be prevented.
- The report covers:
  - Child injuries in context
  - Road traffic injuries
  - Burns and scalds
  - Drowning and non-fatal drowning
  - Falls
  - Poisoning

http://www.who.int/violence_injury_prevention/child/injury/world_report/en/

Injury Prevention as a Public Health Problem

- More than 100 experts from all over the world are currently collaborating with WHO and UNICEF on this Report which is scheduled for release in 2008. Advisors to the Report are drawn from the following organizations:

- WHO & UNICEF
- Safekids Worldwide
- The Alliance for Safe Children
- The Child Accident Prevention Foundation of Southern Africa
- The European Child Safety Alliance
- US Centers for Disease Control and Prevention
- The China Centers for Disease Control and Prevention
- International Society for Burn Injuries
- International Life Saving Federation

http://www.who.int/violence_injury_prevention/child/injury/world_report/en/

Violence as a Public Health Problem

- Violence destroys the social fabric of communities and has a disruptive impact on community and intra-familial relationships.
  - Fatalities from homicide and suicide,
  - Physical consequences
    - Such as brain injuries, bruises and scalds, chronic pain syndromes, irritable bowel syndrome
  - Psychological consequences
    - Such as cognitive impairment, depression and anxiety, phobias and panic disorders, psychosomatic disorders
  - Behavioral consequences
    - Such as alcohol, tobacco and drug use, physical inactivity
- During 2005, the following publications were released by WHO:
  - *Violence Prevention Alliance. Building global commitment to violence prevention,*
  - *Manual on pre-hospital trauma care systems for victims of trauma*,
  - *The solid facts on unintentional injuries and violence in the WHO European Region.*

http://whqlibdoc.who.int/publications/2007/9789241595476_eng.pdf

Shared Dilemma

Lessons learned

- **Plenty of activity, not enough evaluation**
- **Outcome evaluation studies show that prevention works**

Scope of the Problem

Scope of the Problem

- In US:
  - 900,000 cases of child maltreatment
    - 60 % Neglect
    - 20 % Physical Abuse
    - Approximately, 1,400 fatalities
  - 27,707,000 injuries
    - 93 % unintentional
    - 156,000 injury deaths
      - 106,700 unintentional
  - Violence related injuries
    - 31,000 suicide deaths
    - 17,600 homicide deaths
    - 1,800,000 non-fatal assaults

Rounded 2001 data

Child Maltreatment Iceberg

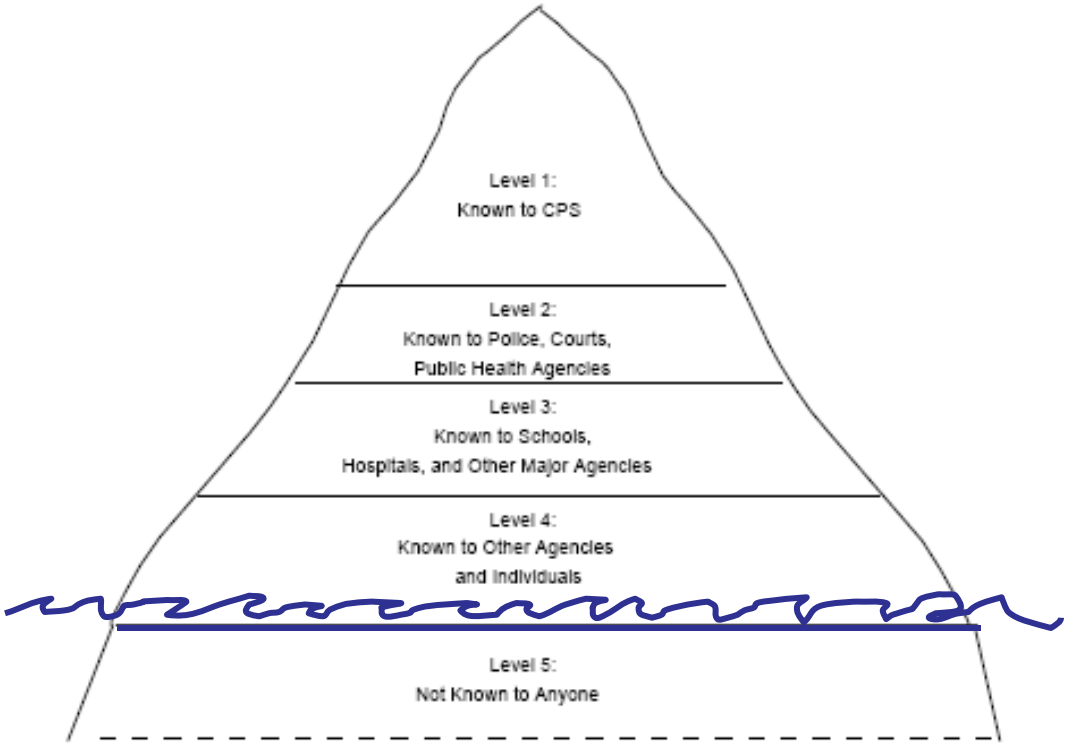
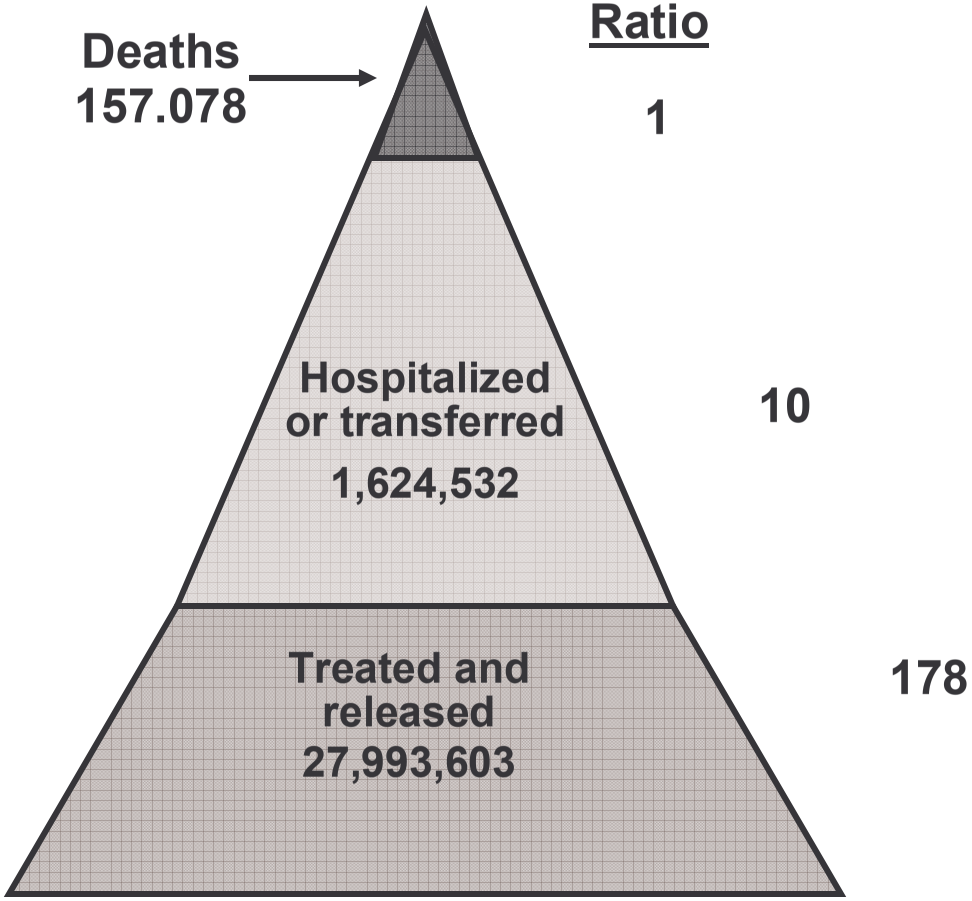


Figure 2-2. Levels of Recognition of Child Abuse and Neglect

Pyramid of All Causes of Injury – United States, 2001



Vyrostek SB, Annest JL, Ryan GW. Surveillance for Fatal and Nonfatal Injuries-United States, 2001. MMWR 53(ss07);1-57(September 3, 2004).

TABLE 1: LEADING CAUSES OF DEATH, BOTH SEXES, 2002

Rank	0–4 years	5–14 years	15–29 years	30–44 years
1	Perinatal Conditions 2 461 976	Lower Respiratory Infections 278 291	HIV/AIDS 604 943	HIV/AIDS 1 326 345
2	Lower Respiratory Infections 1 804 282	Road Traffic Injuries 132 695	Road Traffic Injuries 304 994	Tuberculosis 379 755
3	Diarrhoeal Diseases 1 681 060	HIV/AIDS 126 424	Maternal Conditions 258 128	Road Traffic Injuries 287 730
4	Childhood Diseases 1 033 321	Drowning 86 953	Self-inflicted Injuries 251 446	Maternal Conditions 233 640
5	Malaria 821 718	Childhood Diseases 72 078	Tuberculosis 241 246	Ischaemic Heart Disease 232 746
6	Congenital Anomalies 425 431	Fires 34 180	Interpersonal Violence 216 648	Self-inflicted Injuries 230 997
7	HIV/AIDS 340 219	Tuberculosis 33 182	Lower Respiratory Infections 143 320	Interpersonal Violence 166 661
8	Protein-energy Malnutrition 147 865	Protein-energy Malnutrition 31 630	Drowning 89 196	Cerebrovascular Disease 124 858
9	Syphilis 67 068	Meningitis 31 165	Fires 89 130	Lower Respiratory Infections, 117 663
10	Meningitis 64 495	Leukaemia 21 146	War Injuries 69 707	Cirrhosis Of The Liver 100 617
11	Drowning 57 973	Congenital Anomalies 21 099	Ischaemic Heart Disease 54 125	Poisonings 81 678
12	Road Traffic Injuries 50 139	Falls 20 580	Poisonings 51 494	Fires 64 494
13	Tuberculosis 43 241	Poisonings 19 982	Falls 37 874	War Injuries 59 359
14	Endocrine Disorders 42 444	Interpersonal Violence 18 340	Leukaemia 37 208	Drowning 58 725
15	Fires 39 669	Leishmaniasis 18 260	Rheumatic Heart Disease 36 985	Liver Cancer 55 519

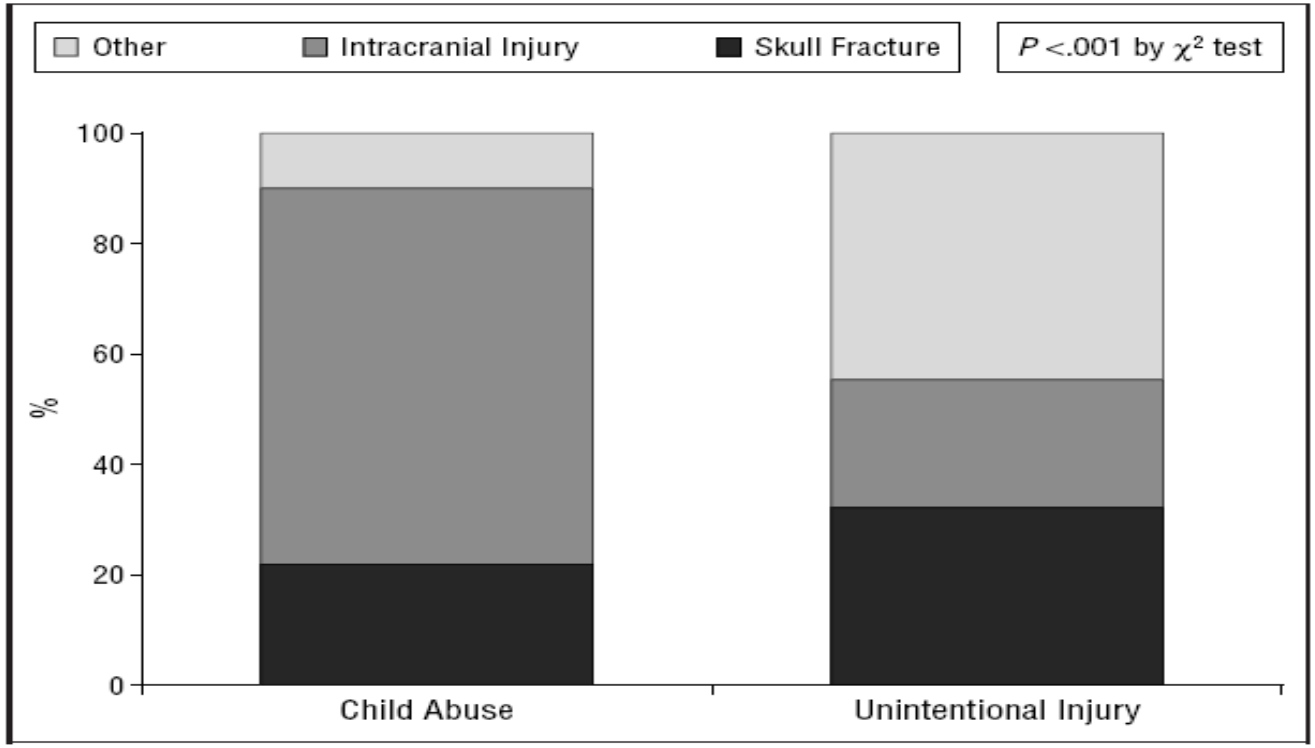
Source: Injury: a leading cause of burden of disease, 2002. Geneva, World Health Organization, (in press).

Child Abuse and Unintentional Injuries

- 10 year retrospective looking at hospitalization (Jan. 1, 1988 – Dec. 31, 1997)
- National Pediatric Trauma Registry
- Child Abuse and Neglect
  - Younger (12.8 vs. 25.5 months)
  - Pre-injury history (53% vs 14.1%)
  - Retinal hemorrhage (27.89% v s 0.06%)
  - Admitted to ICU (42.5% vs 26.9%)

DiScala, C, Sege, R Guohua, L, Reece, RM. Child Abuse and Unintentional Injuries. Pediatric Adolescent Medicine. (154) Jan 2000 pp 16-22.

Head Injury



Type of head injury by group according to the National Pediatric Trauma Registry, 1988 to 1999.

DiScala, C, Sege, R Guohua, L, Reece, RM. Child Abuse and Unintentional Injuries. Pediatric Adolescent Medicine. (154) Jan 2000 p 19.

Outcomes by Group

Table 5. Outcomes by Group, NPTR, 1988 to 1997*

	Unintentional Injury, No. (%)	Child Abuse, No. (%)
Total	**16 831 (100)**	**1997 (100)**
Length of stay, d,† mean (SD) [median]	3.8 (8.0) [2.0]	9.3 (14.1) [5.0]
Survival‡		
Alive	16 393 (97.4)	1744 (87.3)
Dead	438 (2.6)	253 (12.7)
Functional limitations‡		
0	11 295 (68.9)	1063 (60.9)
1-3	4388 (26.8)	418 (24.0)
4 or more	448 (2.7)	152 (8.7)
NA	261 (1.6)	111 (6.4)
Disposition‡		
Home	15 761 (96.1)	624 (35.8)
Foster/custodial care/CPS	205 (1.2)	988 (56.6)
Other medical	348 (2.1)	101 (5.8)
Other	79 (0.5)	31 (1.8)

**NPTR indicates National Pediatric Trauma Registry; CPS, Child Protective Services; NA, not applicable/not available.*
†P<.001 by t test.
‡P<.001 by χ^2 test.

DiScala, C, Sege, R Guohua, L, Reece, RM. Child Abuse and Unintentional Injuries. Pediatric Adolescent Medicine. (154) Jan 2000 p 20.

Overview

- Overlapping Missions in Public Health
  - Intersecting circles of activity
  - Multidisciplinary and community-based
- **Conceptual Models**
- Examples
  - Work of Lizette Peterson, PhD
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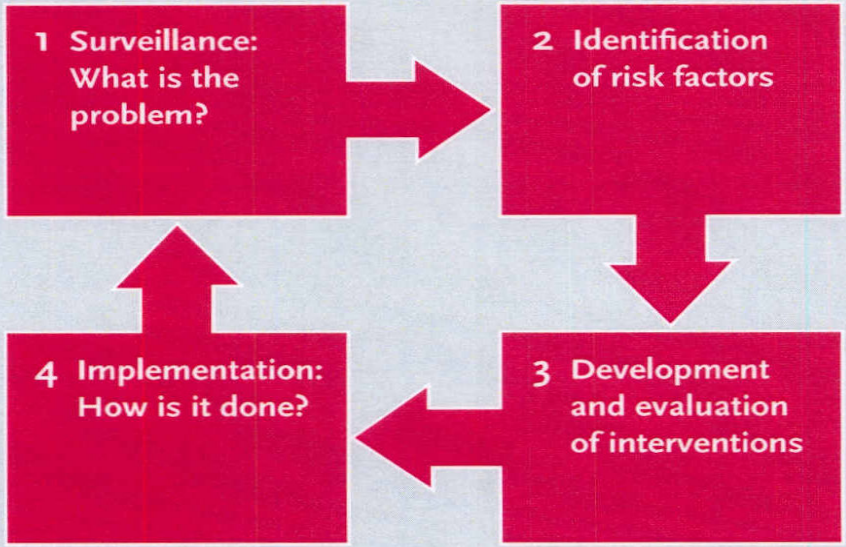
Public Health Approach

FIGURE 1: THE PUBLIC HEALTH APPROACH



Step 1: Collecting data on the magnitude, characteristics, extent and consequences of the problem at the local, national and international levels.

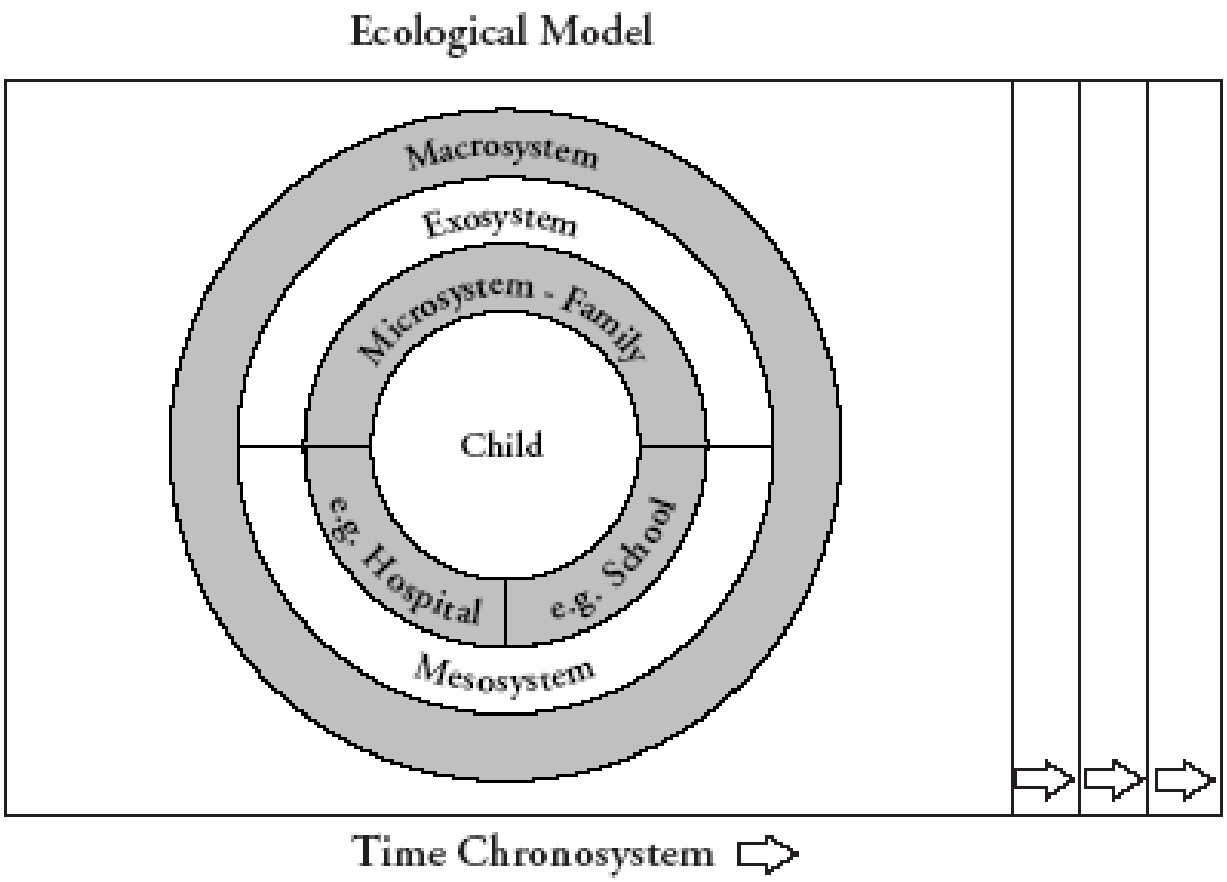
Step 2: Identifying causes of the problem, as well as factors increasing or decreasing individual susceptibility to the problem, and examining how these factors might be modified.

Step 3: Designing, implementing, monitoring and evaluating interventions aimed at preventing the problem, based on the information gathered in steps 1 and 2.

Step 4: Disseminating information on the effectiveness of interventions; implementing effective interventions on a larger scale; and evaluating the cost-effectiveness of larger-scale implementation.

Butchart A. et al. Preventing Injuries and Violence: A Guide for Ministries of Health. World Health Organization. pp 23.

Child Maltreatment



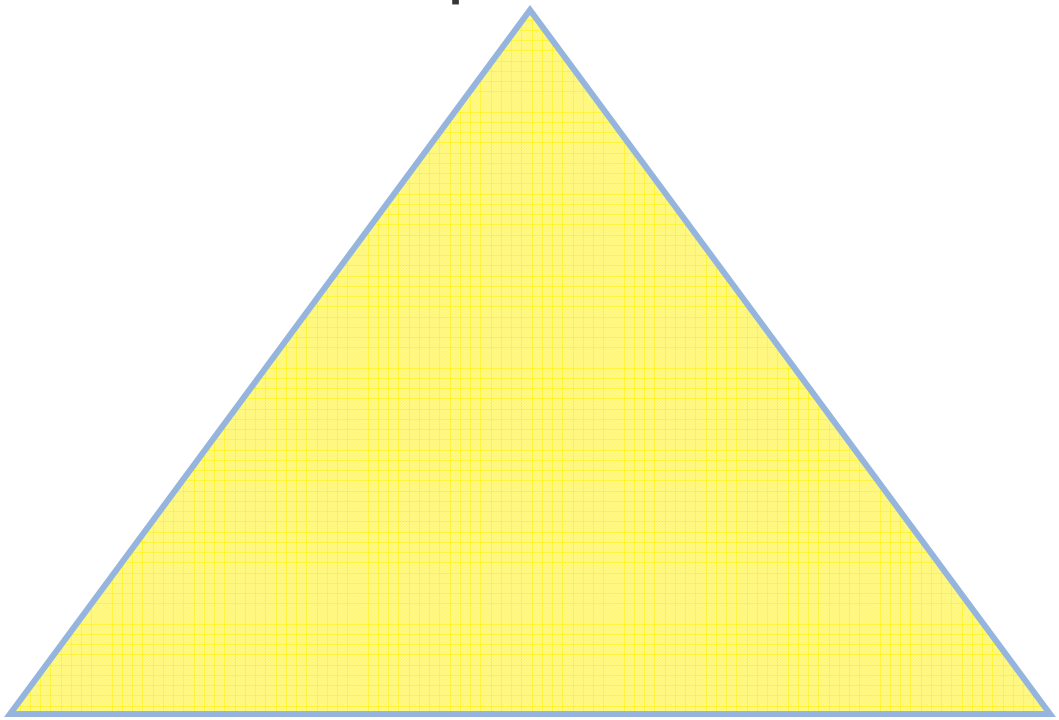
Child Maltreatment

- Parent/Caregiver factors
  - Coping, parenting skills, stress management
- Child factors
  - Behavior
  - Special needs
- Environment
  - Stress, isolation/connection, resources

Unintentional Injury

Host

Child's developmental characteristics



Agent

Bleach

Environment

Container/Storage

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p 53.

The Haddon Matrix

Factors / Phases	Human Factors	Agent or Vehicle	Physical Environment	Sociocultural Environment
Pre-event				
Event				
Post-event				

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p 32.

Violence

- “Regarding violence in our society as a purely sociologic matter, or one of law enforcement, has led to unmitigated failure”
  - C. Everett Koop & George Lundberg, Violence in America: a public health emergency. JAMA. 1992; 267: 3075-6.

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Peterson & Brown (1994)

- Unintentional injury and Child Maltreatment
  - Similar histories, definitions, etiologies, influenced by similar preventive efforts
  - Currently face similar challenges, address a similar multidimensional phenomenon

Peterson L., Brown D. Integrating Child Injury and Abuse – Neglect Research: Common Histories, Etiologies, and Solutions. Psychological Bulletin (1994) 116. No2. pp 293-315

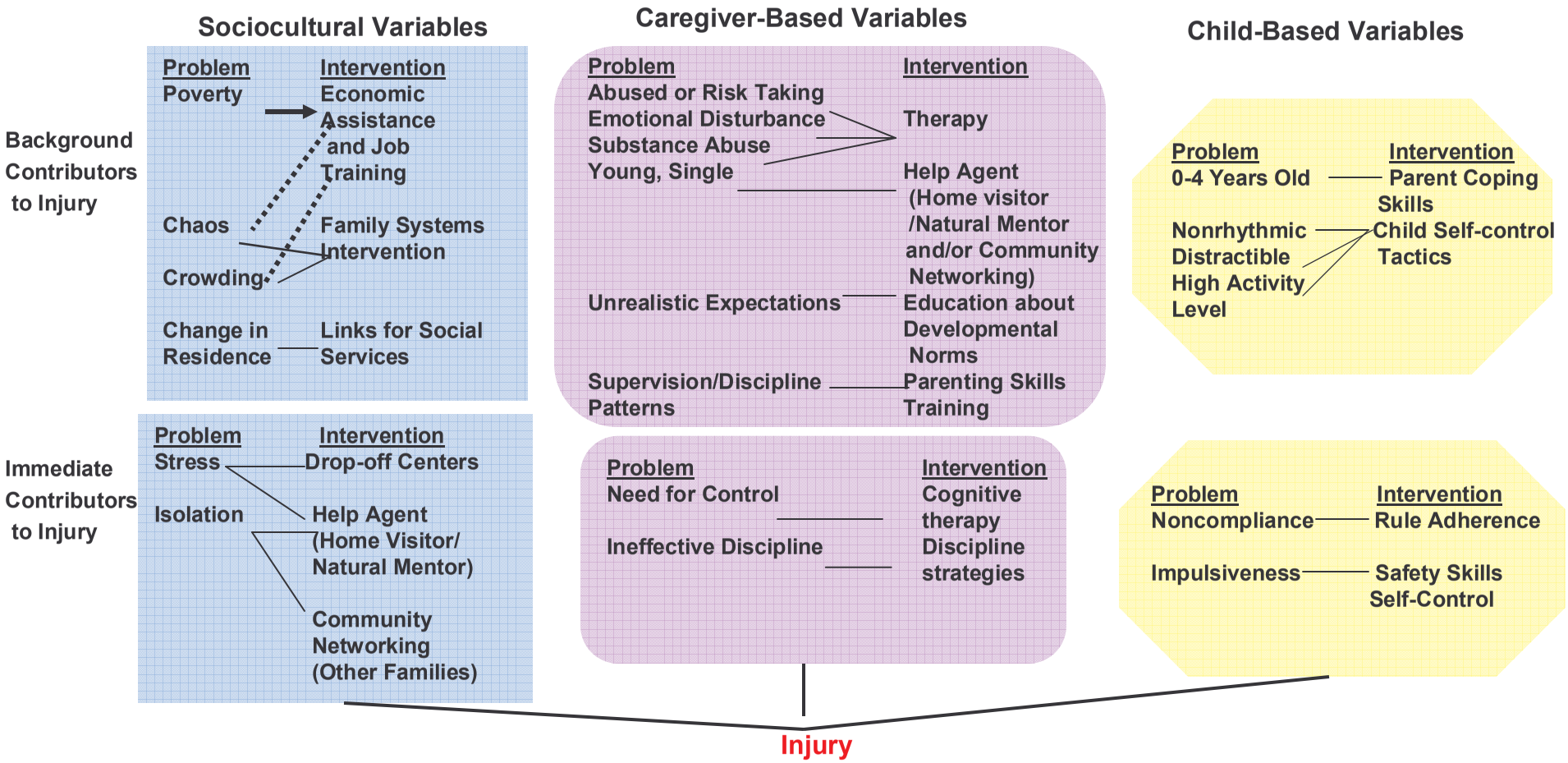
Peterson and Brown (1994) Model

	Sociocultural Variables	Caregiver-Based Variables	Child-Based Variables
Background Contributors to Injury	1) Poverty 2) Chaos 3) Crowding 4) Change in Residence	1) Abused or Risk-Taking 2) Emotional disturbance 3) Substance Abuse 4) Young, Single 5) Unrealistic Expectations 6) Supervision/Discipline Patterns	1) 0 – 4 Years Old 2) Non-rhythmic 3) Distractible 4) High Activity Level
Immediate Contributors to Injury	1) Stress 2) Isolation	1) Need for control 2) Ineffective Discipline	1) Non compliance 2) Impulsiveness

Injury

Peterson L., Brown D. Integrating Child Injury and Abuse – Neglect Research: Common Histories, Etiologies, and Solutions. Psychological Bulletin. (1994) 116. No2. p. 298

Peterson and Brown (1994) Model



Peterson L., Brown D. Integrating Child Injury and Abuse – Neglect Research: Common Histories, Etiologies, and Solutions. Psychological Bulletin (1994) 116. No2. p. 395.

Christoffel & Gallagher (2006)

Intentional and unintentional injury prevention efforts have traditionally operated independently

- Failed to take advantage of commonalities
  - Reinforced by funding streams, disciplinary perspectives and “turf wars”
- Similarities in interventions, community-based programs and surveillance data

Categorical Framework for Injury Prevention Interventions

	Method					
	Legislated/mandated			Educational/skill building		
Target	Populationwide	Milestone	High risk	Populationwide	Milestone	High risk
Environment	Poison Prevention Packaging Act (Walton, 1982)	Safety requirements for crib manufacturers (Consumer Product Safety Commission, 1979)	Window barriers for low-income apartment dwellers (Spiegel & Lindaman, 1977)	Community bicycle paths (Organization for Economic Co-operation and Development, 1983)	Safe day care, safety inspection for day-care sites (Gallagher, Messenger, & Guyer, 1987)	Community efforts to reduce child exposure to asbestos (Butler & Metrovich, 1987)
Parent	Bicycle helmet use laws (Rivara, 1985)	Safety seats for children who weigh less than 18 kg (40 lb) or who are less than 4 years old (Roberts & Turner 1986)	In-home safety screen for neglectful families (Tertinger, Greene, & Lutzker, 1984)	Burn prevention (Mackay & Rothman, 1982)	Physician anticipatory guidance regarding falls (Bass, Mehta, Ostrovsky, & Halperin, 1985)	Parent feedback (Gallagher, Hunter, & Guyer, 1985)
Child				Helmet use advertisements (Peterson & Roberts, 1992)	Street-crossing skills as children enter school (Yeaton & Bailey, 1978)	Latchkey home safety training (Peterson, 1984a, 1984b)

Peterson L., Brown D. Integrating Child Injury and Abuse – Neglect Research: Common Histories, Etiologies, and Solutions. Psychological Bulletin (1994) 116. No2. p. 302.

Points of Natural Intersection-I

- Linkage of different data sets
- Mapping of injuries for high risk areas
- Good parenting interventions
- Youth connections with adult role models
- School-based youth mentorship programs
  - Peer pressure, aggressive behavior, alcohol use and anger management related to road rage and violence

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p 36.

Points of Natural Intersection-II

- Teen pregnancy programs
  - Parenting, dating violence, lack of child passenger safety seats and child neglect
- Teen worker safety programs
  - Enforcement of child labor laws, violence and sexual harassment avoidance/reduction
- Safe streets
  - Pedestrian protection, lighting, parks, playground and violence protection
- Safe Routes to School Initiatives

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p 36.

Points of Natural Intersection-III

- Health communities movement
  - Exercise, walking and physical fitness
- Safe rides home at night
  - Reduce drinking and driving
  - Reduce dating violence
- Home visiting programs for first time moms
- Product designs to make guns less accessible
- Programs aimed at reducing binge drinking

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Multidisciplinary Team (MDT)

"group of professionals that agrees to work in a coordinated and collaborative way to address the problem of _____"

(Wilson, 1992)

Injury Prevention Science

- Lack of affordable, ongoing surveillance
- Gaps in epidemiologic data
- Gaps in information regarding the efficacy of interventions
- Lack of access to current research
- Lack of data dissemination in targeted formats useful and meaningful to policymakers

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p. 418.

Injury Prevention Policy Analysis

- Lack of policy analysis studies
- Lack of agreement on which analytic tools are most appropriate (e.g., decision analysis, cost-benefit analysis, cost effectiveness analysis, qualitative research)
- Lack of evaluation, both during implementation and of impact
- Lack of understanding of the scientific process and the ambiguities of science
- Lack of timely dissemination of information

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p. 418.

Myths That Impede Injury Prevention Programs

Myth #1: Injury/child maltreatment/violence interventions don't work; they aren't feasible.

Myth #2: Injury/child maltreatment/violence interventions cost too much; they aren't economically efficient

Myth #3: Individual behavior and uncontrollable, random events lie at the heart of most injuries.

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p. 418.

Benefits of Teamwork

- Improved information sharing
- Joint decision making
- Joint planning
- Collaborative educational opportunities
- Mutual support for team members

What About Conflict on the MDT?

- Conflict is inevitable
- Resolution must occur w/o compromising mission of team nor goal of serving child and family
- Commonly: tension around decision making, interpersonal issues, competition, turf, lack of cooperation

Ells (1998) Approach to Handling Conflict on MDT

- Don’t lose sight of team’s purpose
- Look forward to opportunity,

  NOT backward to blame
- Respect! (consider, listen, restate)
- Voice opposing view
- State your position clearly and firmly
- Don’t keep repeating your position…..

Ells, M. (1998). Forming a multidisciplinary team to investigate child abuse: A portable guide to investigating child abuse. Washington, DC: US Department of Justice

Ells (1998) Approach to Handling Conflict on MDT

- Avoid personalizing position
- Offer suggestions not just criticisms
- Resolve on consensus, **NOT** abdication of responsibility
- In the end, refer to written protocol for guidance
  - Set's stage for agreed upon standards of completeness
  - Defines roles and responsibilities
  - Steps that must be accomplished at each stage w/time frames
  - How routine and special circumstances are handled

Ells, M. (1998). Forming a multidisciplinary team to investigate child abuse: A portable guide to investigating child abuse. Washington, DC: US Department of Justice.

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Measurements Indicating Key Implementation Activities are Taking Place - I

Collaboration

- Community, grassroots coalition in place
- Activities planned or ongoing
- Working relationships among various agencies and groups established

Staff Training

- Workshops, professional education, materials available to staff
- Staff with previous experience in injury control, public health education
- Technical assistance provided to local programs

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. pp. 306-307.

Measurements Indicating Key Implementation Activities are Taking Place - II

Integration

- Existing health department programs with an injury control component
- Injury prevention identified in the State Health Plan
- Protocols exist for information sharing across program areas
- Injury prevention included in the training of other health professionals in health agencies

Use of appropriate strategies

- Formative evaluation carried out in the community
- Materials checked for reading level and cultural appropriateness

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. pp. 306-307.

TABLE 2: SELECTED VIOLENCE AND INJURY PREVENTION INTERVENTIONS, BY CAUSE, EFFECTIVENESS AND HEALTH SECTOR ROLE

	Intervention	Effectiveness	Health role
INTENTIONAL AND UNINTENTIONAL INJURIES			
	Reducing the availability of alcohol during high-risk periods	Promising	Lead
	Reducing economic inequalities	Promising	Advocate, collaborate, evaluate
	Strengthening social security systems	Unclear	Advocate, collaborate, evaluate
	Stand-alone education programmes focusing only on changing risky behaviour	Ineffective	Discourage
INTENTIONAL INJURIES			
Child maltreatment	Improving the quality of and access to prenatal and postnatal care	Promising	Lead
	Training health-care providers to detect child maltreatment	Unclear	Lead
	Home visitation programmes	Effective	Lead
	Training programmes for parents	Effective	Lead
	Preventing unintended pregnancies	Promising	Lead
Youth violence	Life skills training programmes	Effective	Advocate, collaborate, evaluate
	Preschool enrichment, to strengthen bonds to school, raise achievement and improve self-esteem	Effective	Advocate, collaborate, evaluate
	Family therapy for children and adolescents at high risk	Effective	Lead
	Home–school partnership programmes promoting the involvement of parents	Promising	Advocate, collaborate, evaluate
	Educational incentives for at-risk high-school students	Effective	Advocate, collaborate, evaluate
	Peer mediation and counselling	Ineffective	Discourage
	Education on the dangers of drug use	Ineffective	Discourage
Intimate partner & sexual violence	School-based programmes to prevent violence in dating relationships	Effective	Advocate, collaborate, evaluate
	Training health-care providers to detect intimate partner violence and to refer cases	Unclear	Lead
Elder abuse	Building social networks of older people	Promising	Lead
	Training older people to serve as visitors and companions to individuals at high risk of victimization	Promising	Lead
	Developing policies and programmes to improve the organizational, social and physical environment of residential institutions for the elderly	Promising	Lead
Self-inflicted violence	Restricting access to the means of self-inflicting violence – such as to pesticides, medications and unprotected heights	Effective	Lead
	Preventing and treating depression, alcohol and substance abuse	Effective	Lead
	School-based interventions focusing on crisis management, the enhancement of self-esteem, and coping skills	Promising	Advocate, collaborate, evaluate
All types of violence	Reducing demand for and the availability of firearms	Promising	Advocate, collaborate, evaluate
	Sustained, multimedia prevention campaigns aimed at changing cultural norms	Promising	Lead

Butchart A. et al. Preventing Injuries and Violence: A Guide for Ministries of Health. World Health Organization. P. 24-26.

	Intervention	Effectiveness	Health role
UNINTENTIONAL INJURIES			
Road traffic injuries	Increasing the legal age of motorcyclists and drivers from 16 to 18 years	Effective	Advocate, collaborate, evaluate
	Introducing and enforcing laws on blood alcohol concentration limits	Effective	Advocate, collaborate, evaluate
	Graduated driver licensing systems	Effective	Advocate, collaborate, evaluate
	Traffic-calming measures	Effective	Advocate, collaborate, evaluate
	Daytime running lights on motorcycles	Effective	Advocate, collaborate, evaluate
	Introducing and enforcing seat-belt laws	Effective	Advocate, collaborate, evaluate
	Child-passenger restraints	Effective	Advocate, collaborate, evaluate
	Introducing and enforcing motorcycle helmet laws	Effective	Advocate, collaborate, evaluate
	Speed-reduction measures	Effective	Advocate, collaborate, evaluate
Fires	Electrification of housing	Promising	Advocate, collaborate, evaluate
	Banning the manufacture and sale of fireworks	Promising	Lead
	Reducing storage of flammable substances in households	Promising	Lead
	Smoke alarms and detectors	Promising	Advocate, collaborate, evaluate
	Improving building standards	Promising	Advocate, collaborate, evaluate
	Modifying products – for example, kerosene stoves, cooking vessels and candle holders	Promising	Advocate, collaborate, evaluate
Poisoning	Child-resistant containers	Effective	Lead
	Poison-control centres	Effective	Lead
	Better methods of storage, relating both to the nature of storage vessels and where they are placed	Effective	Lead
	The use of warning labels	Promising	Lead
Drowning	Use of personal floatation devices	Effective	Lead
	Introducing and enforcing laws on pool fencing	Effective	Lead
	Teaching how to swim	Effective	Lead
	Covering bodies of water, such as wells	Effective	Lead
	Safety standards for swimming pools	Promising	Lead
	Clear and simple signage	Promising	Lead
	Properly trained and equipped lifeguards	Promising	Lead

continued overleaf

Butchart A. et al. Preventing Injuries and Violence: A Guide for Ministries of Health. World Health Organization. pp 24-26.

Potential Collaborators in Building Support for Injury Prevention Programs

- Elected/appointed officials(and their staffs)
- Physicians organizations (e.g., state medical society or AAP chapter)
- Dental organizations
- Nursing organizations (e.g. Emergency Nurses Care)
- Other health professional organizations
- Business organizations

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p. 313.

Potential Collaborators in Building Support for Injury Prevention Programs

- Labor organizations
- Religious organizations
- Law enforcement departments
- Fire departments
- Hospitals/hospital associations
- Foundations
- Managed care groups and organizations
- Insurance companies

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p. 313.

Potential Collaborators in Building Support for Injury Prevention Programs

- Health professional schools
- Departments of transportation/motor vehicles
- Departments/boards of health
- Mental health departments and agencies
- Senior centers
- Social service departments and agencies
- Substance abuse departments and agencies
- Schools/school boards/education departments

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p. 313.

Potential Collaborators in Building Support for Injury Prevention Programs

- Other government agencies
- Teacher organizations
- Youth groups
- Parent groups
- Volunteer agencies
- Advocacy groups
- SAFE KIDS coalitions
- Metropolitan planning organizations
- Architects

Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p. 313.

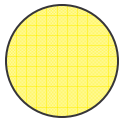
Potential Collaborators in Building Support for Injury Prevention Programs

- Poison control centers
- Newspaper reporters and editorial boards
- Broadcast journalist
- Universities, colleges, think tanks
- Alcohol servers
- State, county, and local highway engineering offices
- Survivor organizations

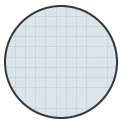
Christoffel T., Gallagher SS. Injury and Public Health: Practical Knowledge, Skills and Strategies. Second Edition. Sudbury, MA. Jones and Bartlette Publishers, Inc. 2006. p. 313.

Intersecting Circles

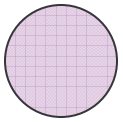
Child Maltreatment

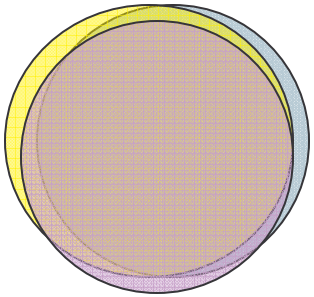


Injury Prevention



Violence





Conclusion

"Children who have a lifetime before them have the most to lose by injury, and yet as a population, they are the most at risk and the most underserved. It is hard to imagine a more compelling research initiative than this."

Peterson L., Roberts MC. Amer Psychol. 1994. Aug; 47(8). pp. 1040-4.

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