

# Preventing Injuries and Violence: Infants and Young Children

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## Secretary's Advisory Committee on Infant Mortality

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# HP 2010 Objectives: Injury Prevention

Objective Number	Objective	1998 Baseline	2010 Target
15-15	Reduce deaths caused by MV: Children aged 14 years and under	4.4*	Data Not Analyzed
15-25.	Reduce residential fire deaths: Persons aged 4 years and under	1.6*	0.2*

\*Rate per 100,000 population

Source: <http://www.healthypeople.gov>

# HP 2010 Objectives: Injury Prevention

Objective Number	Objective	1998 Baseline	2010 Target
15-29	<b>Reduce drownings:</b> Children aged 4 years and younger	2.9*	0.9*
15-6	Extend State-level child fatality review of deaths due to external causes for children aged 14 years and under	Developmental: no baseline data available	

\* Rate per 100,000 population

Source: <http://www.healthypeople.gov>

# HP 2010 Objectives: Violence and Abuse Prevention

Objective Number	Objective	1998 Baseline	2010 Target
15-32	Reduce homicides Children under 1 year	8.1*	3.0*
	Children aged 1-4 years	2.6*	
15-33a	Reduce maltreatment of children Persons aged 18 years and under	12.9**	10.3**

# HP 2010 Objectives: Violence and Abuse Prevention

Objective Number	Objective	1998 Baseline	2010 Target
15-33b	Reduce child maltreatment fatalities Persons aged 18 years and under	1.6**	1.4**

# HP 2010 Objectives: Infant Mortality

Objective	Reduction in Infant Deaths	1998 Baseline	2010 Target *
16-13	Increase the percentage of healthy full-term infants who are put down to sleep on their backs.	35 percent (in 1996)	70 percent

# MCH Core Performance Measures:

- **Mandated:**
  - “The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children.”

# MCH State Selected Performance Measures

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- 7 States address child deaths due to injuries
- 13 States specifically address child abuse
- 10 States address morbidity due to injuries



# MCH State Selected Performance Measures

## More specific examples:

- CA – “The rate of deaths per 100,000 children aged 1-4 years caused by drowning in swimming pools.”
- MT – “Percent of state fetal/infant/child deaths reviewed for preventability by local review teams.”
- KS – “Percent of children under age 4 in motor vehicle crashes using proper child safety equipment.”

# Breadth of Injuries

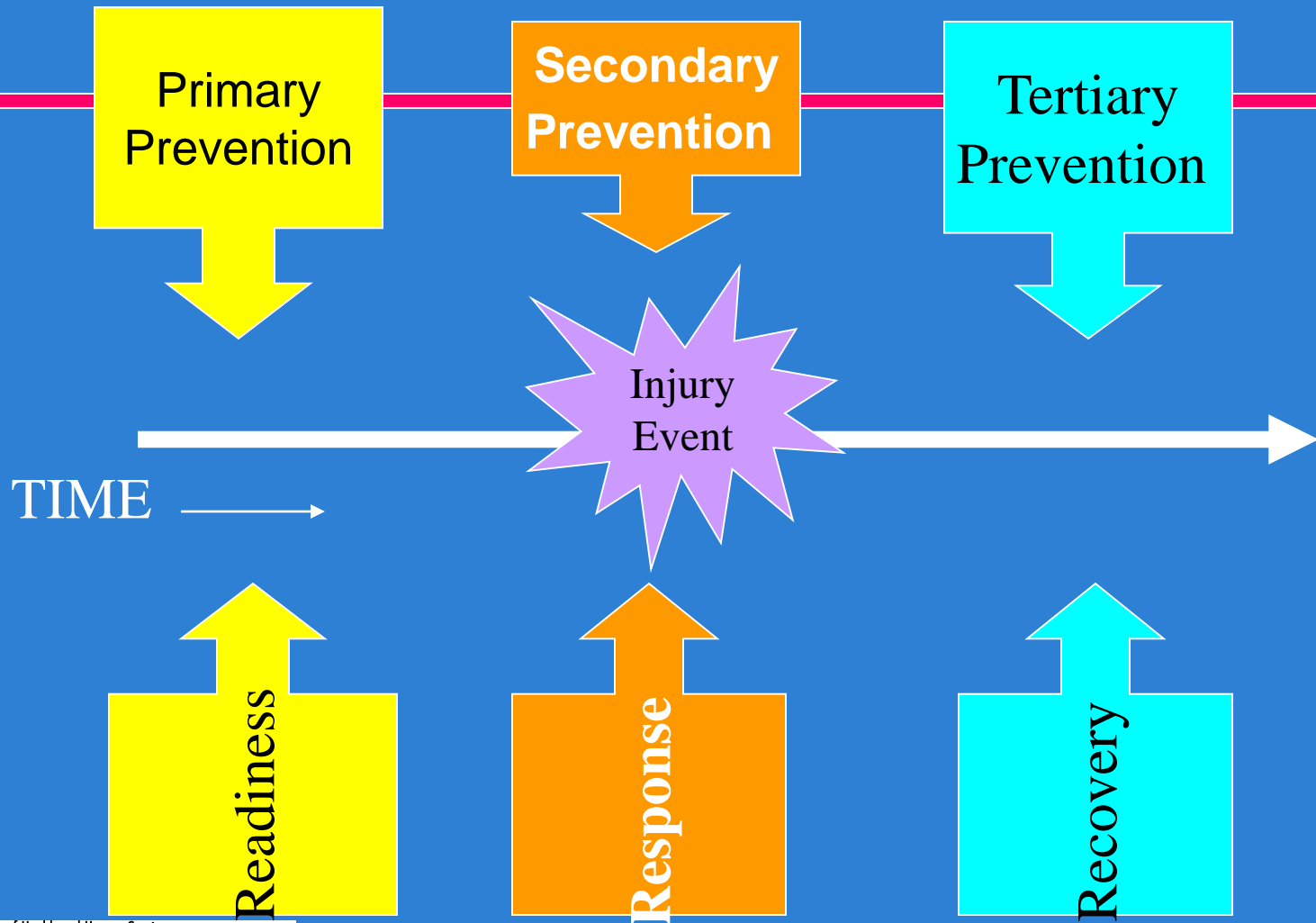
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- **Unintentional Injuries (Accidents):**
  - **Transportation related crashes**
  - **Falls**
  - **Drowning**
  - **Fire/Burn**
  - **Suffocation**

# Breadth of Injuries

- **Intentional Injuries:**
  - **Homicide**
  - **Child Abuse**
  - **Assault**

# Spectrum of Prevention



# Three Approaches to Injury Prevention

1. *Educate* and persuade to promote behavior changes.
2. Make *environmental/engineering* modifications to create safer surroundings.
3. *Enforce* legal requirements and prohibitions to reduce risk.

# Community Injury Control Grid

No Local Activity					Maximum Community Effort
<b>Education</b> Public information, counseling, teaching, training	No Community awareness or activity dealing with this injury issue	Awareness	Attitude	Action	Community is knowledgeable about problem and has implemented control measures
<b>Engineering/Environment</b> Modify the hazard, people at risk and/or the environment to prevent harm	No steps have been taken to separate the hazard and people at risk	Assess	Adapt	Adopt	Community believes strongly in separating the agent of injury from the host and 'engineered away' a hazard
<b>Enforcement</b> Suggested practices, economic incentives, policies, laws, and penalties	Not an issue up for discussion in policy circles	Practices	Policies	Penalties	Laws or standards in place, consistently enforced, and the community strongly believes in their enforcement

U.S. Department of Health and Human Services



# Education

- Suffocation -**
  - Foods that may cause choking
  - Objects that may cause choking
  - Cribs – slats, mattress and bedding
  - Layovers/Smothering
- Drowning -**
  - Supervision
  - Bathtub seats/rings
  - Pool covers – may increase risk
  - CPR
- Motor Vehicle -** Appropriate safety seats and seating

# Education

- Motor Vehicle** - Appropriate safety seats and seating
- Fire/Burn** - Smoke alarm use and battery checks
  - Flame retardant clothing
- Child Abuse** - Home visiting services
  - Don't Shake the Baby Campaign
- Falls** - Supervision
  - Child Development
  - Dropped
- Poisoning** - Storage
  - Supervision
  - Packaging



# Environment/Engineering

- Suffocation -** Removing drawstrings from clothing  
Designing blind cords without loop ends/cut  
Cribs – slats, mattress and bedding  
Railings  
Small parts in toys
- Drowning -** Perimeter pool fencing  
Pool alarms and pool covers
- Fire/Burn -** Smoke alarm installations  
120 degree water temperature  
Child resistant lighters

# Environment/Engineering

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**Falls -**

- Modify playground surfaces
- Baby walkers
- Window guards
- Safety gates
- Hand rails/railings

**Poisoning -**

- Child Resistant Packaging
- Storage

# Enforcement

**Motor Vehicle – Requiring and enforcing use of passenger safety equipment**

**Rear seating requirement**

**Bicycle helmet use laws**

**Native American passenger safety law**

**Suffocation - Requiring 4” width between crib bars**

**Drowning - Requiring perimeter fencing for pools**

**Fire/Burn - Smoke alarm and sprinkler system laws**

**Flammable Fabrics Act - CPSC**

**Child Abuse - Reporting laws**

**Poisoning - Poison Prevention Packaging Act - CPSC**

# Injury and Violence Prevention is Interdisciplinary

- maternal and child health and safety professionals
- mental health
- safety engineers
- psychologists
- educators
- law enforcement and criminal justice
- epidemiologists
- biostatisticians
- policy analysts
- community officials
- families

# Education of Health and Safety Professionals

- Instruct health professional and students in methods to incorporate injury and violence prevention into patient assessment, treatment, and disposition.
- Utilize injury and violence prevention intervention case studies to demonstrate what works.

# Application to Home and Community Settings

- Identify potential injury hazards through the use of environmental assessments.
- Develop safety and awareness resources/tools to educate the individual, family, caregiver, and professionals.
- Instruct parents/caregivers on home hazards and protective behaviors and devices.

# Conclusions

- **Primary prevention - begin early**
- **Combining 3 E's - most effective**
- **Education alone - ineffective**
- **Involve variety of players in community**
- **Evaluate and disseminate findings**
- **Information needed on circumstances of death from Child Death Review Team or Fetal and Infant Mortality Review Team**

# Resources

- **Children's Safety Network**
- **CDC National Center for Injury Prevention and Control**
- **Consumer Product Safety Commission (Regulations/All-Trauma NEISS)**
- **American Academy of Pediatrics**
  - **Injury, Violence and Poison Prevention Committee**
  - **Child Abuse and Neglect Committee**