Preventable Child Mortality in Massachusetts

State Child Fatality Review Team
Legislative Briefing
March 2012
State Child Fatality Review Team

- Co-chaired by Chief Medical Examiner and Department of Public Health Medical Director
- Interagency and interdisciplinary representatives
  - Local Child Fatality Review Teams
  - Attorney General
  - MA District Attorney Association
  - State Police
  - MA Chiefs of Police Association
  - Executive Office of Public Safety and Security
  - Department of Children and Families
  - Department of Mental Health
  - Department of Public Health
  - Department of Elementary and Secondary Education
  - Department of Developmental Services
  - Department of Youth Services
  - Office of the Child Advocate
  - MA Chapter of the American Academy of Pediatrics
  - MA Center for Sudden Infant Death Syndrome
The MA child death rate declined from 42.0 to 37.9 per 100,000*.

2006-2008 Average Annual Death Rate per 100,000 US vs. MA: 61.2 vs. 40.6

Source: Registry of Vital Records and Statistics, MA Department of Public Health

*not statistically significant
MA Child Fatality Rates by Age Group, 2009
(N=543 Deaths)

Source: Registry of Vital Records and Statistics, MA Department of Public Health
Child Fatality Rates by MA District of Residence, Ages 0-17 Years, 2009 (N=543)

Source: Registry of Vital Records and Statistics, MDPH

* indicates rates based on number <20 and is considered unstable.
Leading Causes of Death Among MA Children 0-17 Years, by Age Group, 2009

<table>
<thead>
<tr>
<th>Rank</th>
<th>&lt;1 year</th>
<th>1-4 years</th>
<th>5-9 years</th>
<th>10-14 years</th>
<th>15-17 years</th>
<th>All Children 0-17 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Short gestation/LBW (83)</td>
<td>Unintentional Injury (9)</td>
<td>Cancer/InSitu Neoplasms (8)</td>
<td>Cancer (8)</td>
<td>Unintentional Injury (21)</td>
<td>Perinatal conditions (219)</td>
</tr>
<tr>
<td>3</td>
<td>SIDS/Signs and Symptoms (57)</td>
<td>SIDS/Signs and Symptoms (4)</td>
<td>Homicide (4)</td>
<td>Influenza and Pneumonia (4)</td>
<td>Heart Disease (5)</td>
<td>SIDS/Signs and Symptoms (64)</td>
</tr>
<tr>
<td>4</td>
<td>Maternal Pregnancy Complications (26)</td>
<td>Congenital Malformations (3)</td>
<td>Unintentional Injury (3)</td>
<td>Congenital Malformations (3)</td>
<td>Suicide (5)</td>
<td>Unintentional Injuries (42)</td>
</tr>
<tr>
<td>5</td>
<td>Complications of placenta, cord/membranes (15)</td>
<td>Heart Disease (2)</td>
<td>Anemias (2)</td>
<td>Heart Disease (3)</td>
<td>Cancer (3)</td>
<td>Cancer/In S itu Neoplasms (27)</td>
</tr>
<tr>
<td>6</td>
<td>Respiratory Distress (12)</td>
<td>Injuries of Undetermined Intent (2)</td>
<td>Heart Disease (1)</td>
<td>Signs and Symptoms (2)</td>
<td>Congenital Malformations (3)</td>
<td>Homicide (17)</td>
</tr>
<tr>
<td>7</td>
<td>Bacterial Sepsis of Newborn (10)</td>
<td>Other Infections (2)</td>
<td>Perinatal Conditions (1)</td>
<td>Suicide (2)</td>
<td>Injuries of Undetermined Intent (2)</td>
<td>Heart Disease (13)</td>
</tr>
<tr>
<td>8</td>
<td>Neonatal Hemorrhage (9)</td>
<td>Homicide (1)</td>
<td>Injuries of Undetermined Intent (1)</td>
<td>Appendix Disease (1)</td>
<td>Injuries of Undetermined Intent (8)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Necrotizing Enterocolitis (5)</td>
<td>Influenza and Pneumonia (1)</td>
<td>Medical Complication (1)</td>
<td>Signs and Symptoms (1)</td>
<td>Suicide (7)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Hematologic Disorders (5)</td>
<td>Septicemia (1)</td>
<td>Nephritis (1)</td>
<td></td>
<td>Influenza and Pneumonia (5)</td>
<td></td>
</tr>
</tbody>
</table>

Total Deaths All Causes: 366, 43, 31, 44, 59, 543

Data Source: Registry of Vital Records and Statistics, MA Department of Public Health
State Child Fatality Team Accomplishments

- Annual statewide conference
- Sudden unexplained infant death (SUID) investigation standardization – improved data collection
- Standardized review guidelines
- Recent focus on key issues
  - Safe sleep – DPH revising its safe sleep policy for dissemination through all DPH programs and with sister agencies
  - Drowning
  - Window falls
- Coordination with DPH Infant Mortality Review Initiative
Average Annual Unintentional Drowning Rates by Age Group, MA Residents 0-17 Years, 2004-2009 (N= 51)

Source: Registry of Vital Records and Statistics, MDPH

Rates based on numbers less than 20 are unstable. Rates not presented on counts <5.
Source of Water, Unintentional Drowning, MA Children 0-17 Years, 2004-2009 (N=51)

- Natural Water: 21, 41%
- Swimming Pool: 13, 25%
- Bath Tub: 6, 12%
- Unspecified: 7, 14%
- Other Specified: 4, 8%

Source: Registry of Vital Records and Statistics, MA Department of Public Health
Unintentional Drowning by Water Source and Age Group, MA Children 0-17 Years, 2004-2009 (N= 51)

Source: Registry of Vital Records, MDPH
Our Goal - Reducing Preventable Child Deaths
Fatal and Nonfatal Injuries in Massachusetts Children and Youth
Annual Injury Deaths and Hospital Events for Nonfatal Injury, MA Residents 0-17 Years

- **76** Deaths (2009)
- **5,140** Hospital Stays (FY2010)
- **164,233** Emergency Department Discharges (FY2010)

Sources: Registry of Vital Records and Statistics, MA Department of Public Health; MA Inpatient Hospital, Observation Stay and Emergency Department Discharge Databases, MA Division of Health Care Finance and Policy. All counts based on calendar year.
Percent of High School Students Reporting Never or Rarely Wearing a Seat Belt, MA vs. US, 2009