Injury is a Leading Cause of Death in Children

- Unintentional injury was the leading cause of death for children age 1-5 years in 2010 in Oklahoma, followed by homicides.
- In 2010, 15 infants and 32 children age 1-5 years died of an injury in Oklahoma.
- In 2010, 144 infants and 548 children age 1-5 years were hospitalized due to an injury in Oklahoma.
- For every child that died, 15 children were hospitalized and 562 were treated and released from an emergency department (ED)*. Not included were children who received treatment in physician offices or at home.

*All ED data reported in this document only represent Medicaid-paid visits; Oklahoma does not currently have a statewide ED discharge database.

**Figure 1:** Annual Injuries among Children Ages 0-5 Years, Oklahoma, 2010

(*Visits paid by Medicaid; statewide emergency department data unavailable in OK)

**Childhood Injury by Sex**

- Males accounted for more injury-related deaths, hospitalizations, and ED visits than females.
- One-year-old males had the highest rate of hospitalization (350.4 per 100,000 population).
- Hospitalization rates dropped sharply for males from age two to three (338.2 and 156.8, respectively).
- Female infants had a higher injury-related mortality rate compared to males (31.4 and 26.4, respectively), and males age 1-5 had a mortality rate more than twice that of females the same age (16.3 and 7.7, respectively).

**Figure 2:** Percent of Injury Deaths, Hospitalizations and Emergency Department Visits among Children Ages 0-5 Years, by Sex, Oklahoma, 2010

- Male
- Female
**Injury Deaths in Infants**

- Suffocation and drowning were the leading causes of unintentional injury death for infants (<1 year of age).
- The majority of suffocation deaths occurred in bed.
- There were no transportation-related deaths to infants in 2010.
- Five infants died due to homicide in 2010 in Oklahoma.
- One infant died of an undetermined manner death.

**Figure 3: Injury Deaths among Infants Less than 1 Year, Oklahoma, 2010**

**Injury Deaths in Young Children**

- Drowning and transportation-related injuries were the leading causes of unintentional injury death for children age 1-5 years.
- Nine children age 1-5 years died due to homicide in 2010 in Oklahoma.
- One child age 1-5 years died of an undetermined manner death.
- One child died of an unintentional poisoning.

*There were nine transportation-related deaths, but only four had specific codes for the type of incident. The other five deaths were included in All Other Unintentional Causes.*

**Figure 4: Injury Deaths* in Children Ages 1 – 5 Years, Oklahoma, 2010**
Unintentional poisoning and unintentional falls were the leading causes of injury-related hospitalizations for young children.

Thirteen percent of injury-related hospitalizations were a result of abuse, compared to 30% of deaths.

More than one-third (39%) of hospitalizations of infants were a result of abuse, compared to 6% of children age 1-5.

Children age 1-5 were much more likely to be hospitalized for an unintentional poisoning compared to infants (24% and 6%, respectively). For unintentional falls from furniture injuries, a larger proportion of hospitalizations were to infants compared to young children (12% and 3%, respectively).

*18 hospitalizations did not have a listed external cause of injury code. Suffocation, foreign body, and cut/pierce were included in “All Other Unintentional Causes” in the graph above due to small numbers.
Injury-Related Emergency Department Visits

- At this time, Oklahoma does not have statewide electronic emergency department (ED) data. The data presented are for all Oklahoma Medicaid ED visits.¹
- More than one-third (36%) of injury-related ED visits were due to falls.
- The second leading cause of injury-related ED visits was struck-by/against an object.

*Assault/abuse and undetermined intent injuries were not included in the graph below due to small numbers.
¹Data obtained from the Oklahoma Health Care Authority, the state Medicaid agency.

Figure 6: Unintentional Injury-Related Emergency Department Visits* among Children Ages 0 – 5 Years, Oklahoma Medicaid Patients, 2010
Table 1: Injury-Related Hospital Discharges and Emergency Department (ED) Visits among Children Ages 0-5 Years, by Age Group, Oklahoma, 2010

<table>
<thead>
<tr>
<th>Unintentional Injuries</th>
<th>Infants less than 1 Year</th>
<th>Children Ages 1-5 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital Discharges</td>
<td>ED Visits</td>
</tr>
<tr>
<td>Unintentional Injuries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cut/pierce</td>
<td>82</td>
<td>2,662</td>
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<tr>
<td>Drowning/submersion</td>
<td>3</td>
<td>5</td>
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<tr>
<td>Falls (off/from):</td>
<td>35</td>
<td>1,190</td>
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<tr>
<td>Furniture</td>
<td>17</td>
<td>535</td>
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<tr>
<td>Steps/stairs</td>
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<td>26</td>
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<tr>
<td>With strike against object</td>
<td>2</td>
<td>117</td>
</tr>
<tr>
<td>Slipping/tripping/stumbling</td>
<td>0</td>
<td>5</td>
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<tr>
<td>Playground equipment</td>
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<tr>
<td>Building</td>
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<tr>
<td>Other fall from one level to another</td>
<td>13</td>
<td>255</td>
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<tr>
<td>Other/unspecified</td>
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<tr>
<td>Fire/Burn</td>
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<tr>
<td>Foreign Body</td>
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<tr>
<td>Natural and Environmental</td>
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<td>250</td>
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<tr>
<td>Excessive heat</td>
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<td>All other natural/environmental</td>
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<td>6</td>
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<td>Poisoning</td>
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<td>Struck-by/against object</td>
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<td>Suffocation</td>
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<td>Transport-related</td>
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<td>Motor vehicle (MV)-occupant</td>
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<tr>
<td>Bicycle/tricycle (MV &amp; non-MV)</td>
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<tr>
<td>Pedestrian (MV &amp; non-MV)</td>
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<tr>
<td>Other transport</td>
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<td>All other unintentional causes</td>
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<td>Assault/Abuse</td>
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<td>Undetermined/Other Intent</td>
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<tr>
<td>No external cause of injury code</td>
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<td>110</td>
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<tr>
<td>Total Injury-Related Cases</td>
<td>144</td>
<td>2,823</td>
</tr>
</tbody>
</table>
Oklahoma Child Injury Prevention Activities

The OSDH Injury Prevention Service currently:

- Collects data on all young people under age 25 who were hospitalized with a traumatic brain injury (TBI) in order to support prevention programs and educational efforts.
  - Special emphasis on sports-related TBI and abusive head trauma.
- Works to expand the Period of PURPLE Crying® program to additional Oklahoma birthing hospitals to prevent abusive head trauma.
- Collaborates with Oklahoma’s home visiting programs to provide basic child safety seat education and injury prevention technical assistance.
- Provides child safety seat checks and installations by appointment.

Oklahoma Home Visiting Program

Oklahoma has a continuum of home visitation services available to pregnant women and families with infants and young children. Coordinated by the OSDH Family Support and Prevention Service, implemented evidence-based home visiting models include: Nurse-Family Partnership, Healthy Families America, Parents as Teachers, and SafeCare.

Benmarks for the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Grant include:
- Improvements in maternal, prenatal, infant, and child health;
- Increase in school readiness;
- Reductions in the incidence of child maltreatment;
- Improved parenting related to child development outcomes;
- Improved family socio-economic status;
- Reductions in crime and domestic violence; and
- Improved coordination of referrals to community resources and supports.

Every county in Oklahoma is offered some type of home visiting service; however, Oklahoma, Tulsa, Kay, Garfield, Comanche, and Muskogee Counties were selected to receive MIECHV services based on a needs assessment. Each of these counties has a Community Connector who provides outreach, triage, and referrals, and facilitates program coordination and collaboration to assure a continuum of services is available for expectant families and families of young children.

Notes:
Data sources include: OSDH Vital Statistics death data, OSDH Health Care Information Inpatient Hospital Discharge Data, Oklahoma Health Care Authority Medicaid Claims Data
All injuries are considered unintentional unless specified otherwise. Reference to any commercial entity or product or service on this page should not be construed as an endorsement by the Government of the company or its products or services.

Oklahoma State Department of Health, Injury Prevention Service
http://ips.health.ok.gov
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