This factsheet is a quick reference on demographics, length of hospital stay, and the health and well-being of children with burn injury.

The data in this factsheet are from the Burn Injury Model Systems National Database, a prospective longitudinal multicenter research study that examines the functional and psychosocial outcomes of children following burns. Researchers collect data at 6 months, 12 months, 24 months, and every 5 years after injury.

As of Dec. 2018, the database included information on 2,294 children (<18) with burn injury. For more information, visit http://www.msktc.org/burn.

Demographics at Time of Injury

**Gender**

- Girls 34%
- Boys 66%

**Average Age**

- 7 years

**Average Age by Gender**

- Girls 6.1 Years
- Boys 8.2 Years

**Race/Ethnicity**

- Black or African American
- Asian
- Caucasian (White)
- American Indian/Alaska Native
- Native Hawaiian or Other Pacific Islander
- More than one race
- Other

- Hispanic or Latino
- Not Hispanic or Latino
The majority of children in the database are boys and Hispanic. Children are most often burned by fire or flame.

For children who return to school within 2 years post-injury, the average number of days to return to school was 124 days.

The yearly average total body surface area burned for children varies, and has ranged from 16% to 47% since 1994.

The yearly average length of stay in the hospital has ranged from 16 to 44 days since 1994.

### Cause of Burn Injury

<table>
<thead>
<tr>
<th>Cause of Injury</th>
<th>Number of participants</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire/flame</td>
<td>1,321</td>
<td>58%</td>
</tr>
<tr>
<td>Scald</td>
<td>608</td>
<td>27%</td>
</tr>
<tr>
<td>Hot object</td>
<td>71</td>
<td>3%</td>
</tr>
<tr>
<td>Grease</td>
<td>93</td>
<td>4%</td>
</tr>
<tr>
<td>Chemical</td>
<td>6</td>
<td>0%</td>
</tr>
<tr>
<td>Electricity</td>
<td>140</td>
<td>6%</td>
</tr>
<tr>
<td>Other burn</td>
<td>28</td>
<td>1%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2267</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

### Extent of Injury

#### Total Percentage of Body Area Burned

![Graph showing the total percentage of body area burned for children between 1994 and 2018. The percentage varies from 16% to 47%, with fluctuations over the years.]

### Average Length of Stay in the Hospital

![Graph showing the average length of stay in the hospital for children between 1994 and 2018. The length of stay ranges from 16 to 44 days, with fluctuations over the years.]

National Database: 2019 Profile of Children Included in the Burn Injury Model Systems
Pain does not seem to interfere with activities at any point. Peer relationships are an important indicator of social health in children and youth. Our sample reports peer relationships similar to the general population, indicating good relationships with friends and peers in spite of burn injury.

PROMIS-25 is a measure that assesses pediatric mental and physical health by measuring things like anxiety, depression, and physical function. The BMS began collecting new PROMIS-25 data in 2015.
The National BMS Data Center currently supports the four model system sites funded by NIDILRR shown below*:

- Boston-Harvard Burn Injury Model System, Boston, MA
- The North Texas Burn Rehabilitation Model System, Dallas, TX
- Pediatric Burn Injury Rehabilitation Model System, Galveston, TX
- Northwest Regional Burn Model System, Seattle, WA

*Johns Hopkins was funded from 1993–2012.

Source
This is a publication of the Burn Model Systems National Data and Statistical Center, University of Washington, Seattle, WA (Grant Number 90DP0053) and the Model Systems Knowledge Translation Center at American Institutes for Research, Washington, DC (Grant Number 90DP0082). Both are funded by the National Institute on Disability, Independent Living, and Rehabilitation Research, Administration of Community Living, U.S. Department of Health and Human Services, Washington, DC.