

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 multi-center 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. 2016, the database included information on 2,179 children (<18) with burn injury. For more information, visit <http://www.msktc.org/burn>

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 95 days.

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

Demographics at Time of Injury

Gender



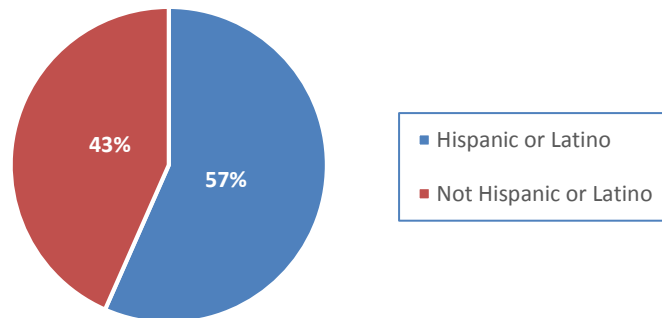
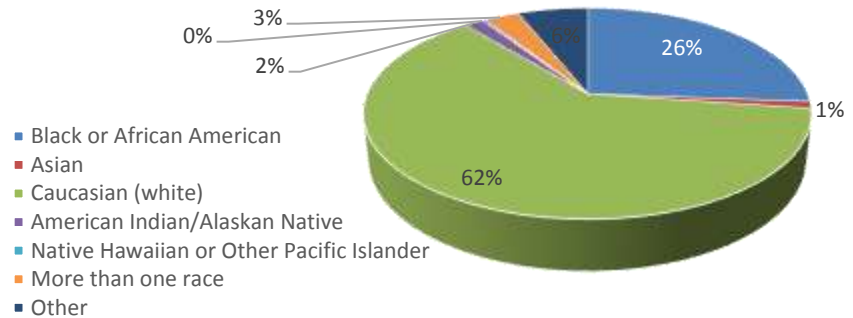
Average Age



Average Age by Gender



Race/Ethnicity

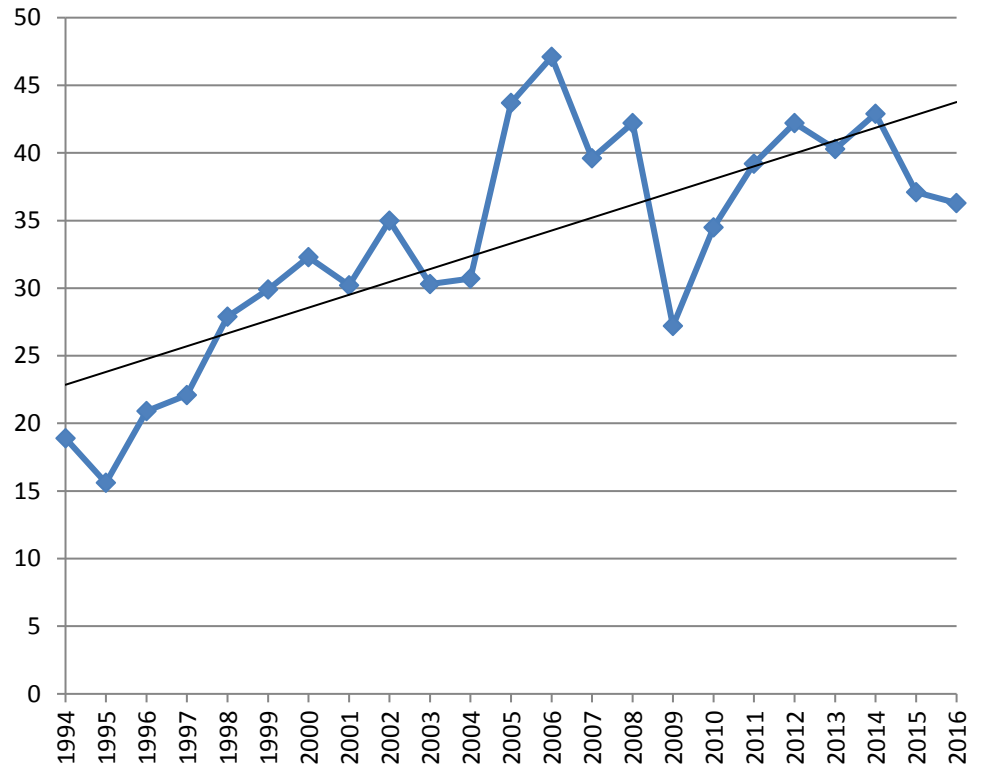


Cause of Burn Injury

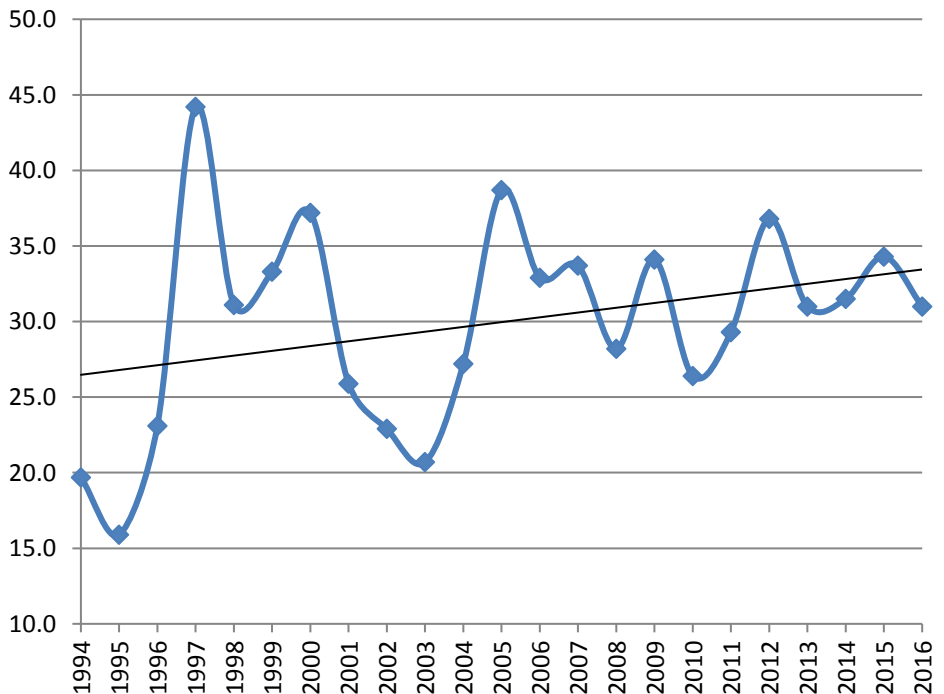
Cause of Injury	Number of participants	%
Fire/flame	1261	59%
Scald	574	27%
Hot object	68	3%
Grease	89	4%
Chemical	5	<1%
Electricity	132	6%
Other burn	25	1%

Extent of Injury

Total Percentage of Body Area Burned



Average Length of Stay in the Hospital



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

See next page for the mental and physical health conditions of children with burn injury.

Depressive symptoms in the BMS sample of kids with burn injuries are similar to the general population (higher scores mean more depression). Physical function is a little worse for kids with burn injuries at 6 months after the injury compared to the general population, but it improves and at 2 years post-injury it is similar to the general population.

PROMIS-25 is a measure that assesses pediatric mental and physical health 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

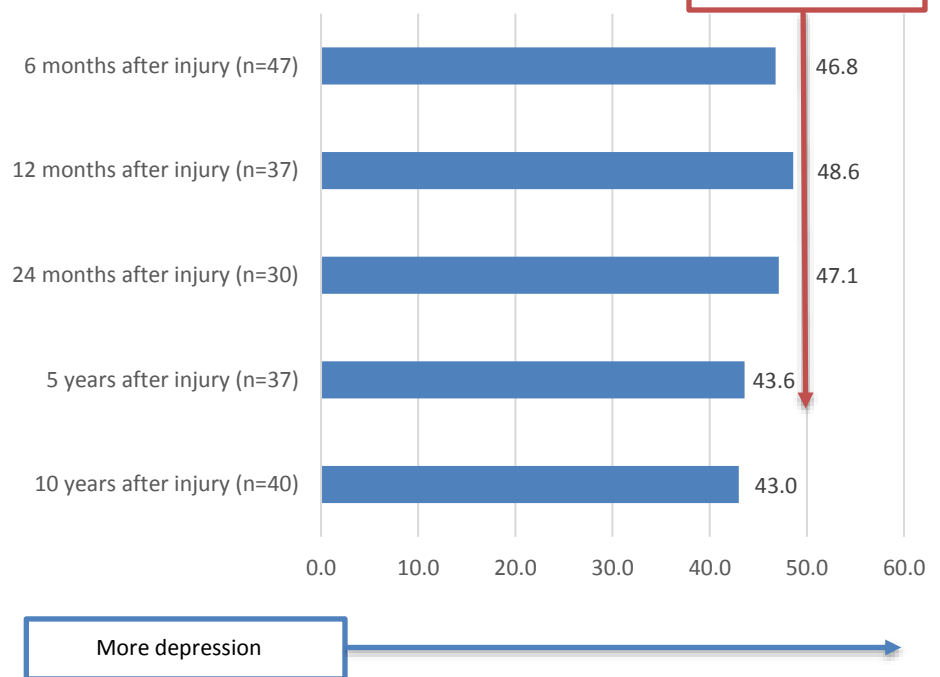
Pediatric Burn Injury Rehabilitation Model System, Galveston, TX

Northwest Regional Burn Model System, Seattle, WA

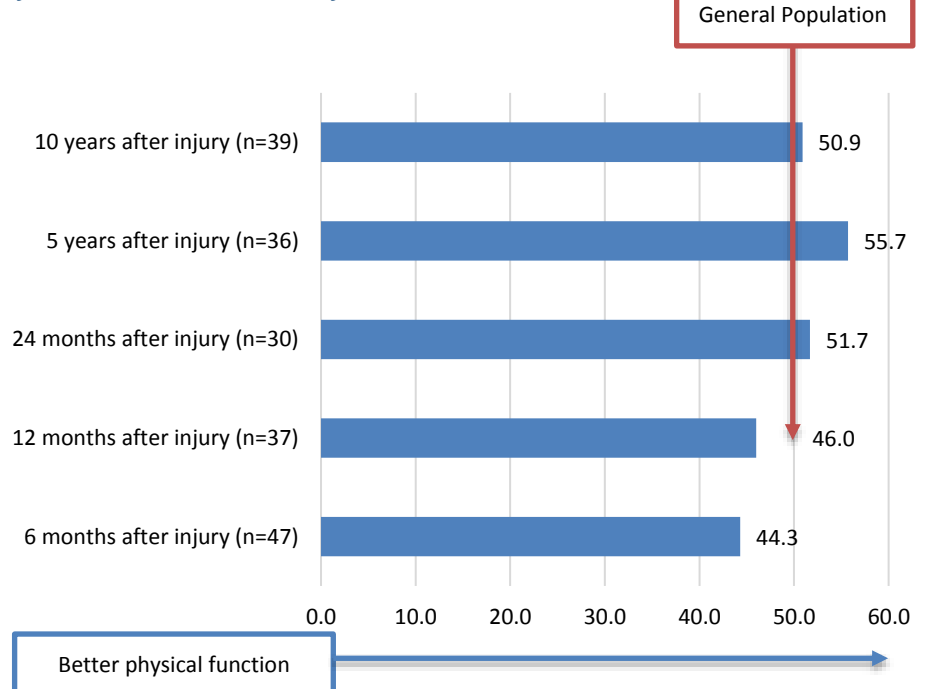
*Johns Hopkins was funded from 1993–2012.

Health and Well-Being of Children With Burn Injury

Depression Scores by Time-Point

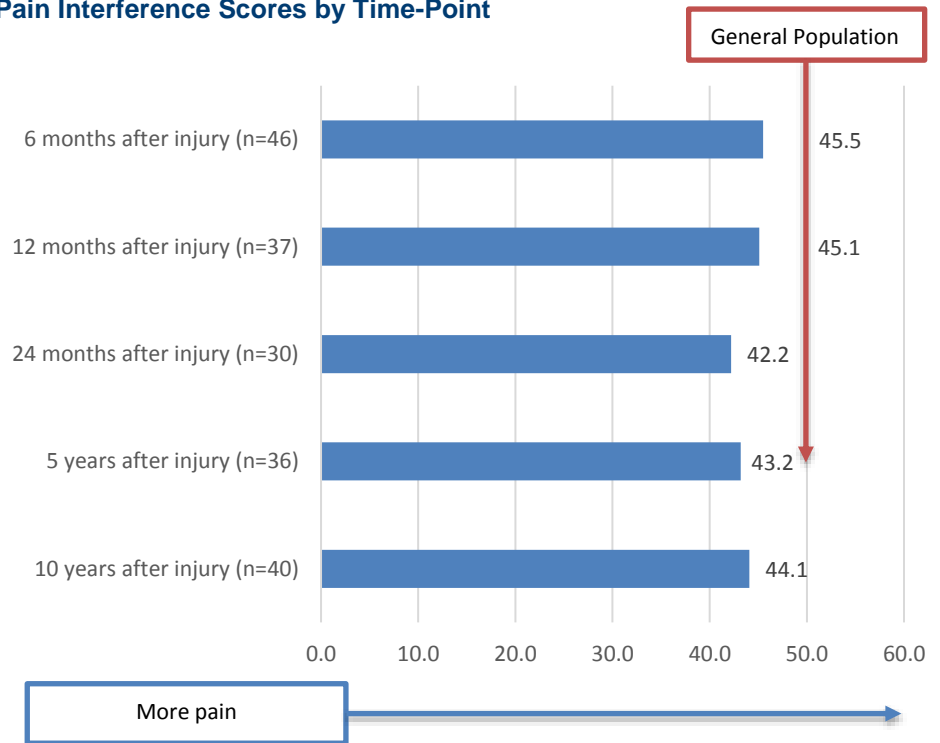


Physical Function Scores by Time-Point

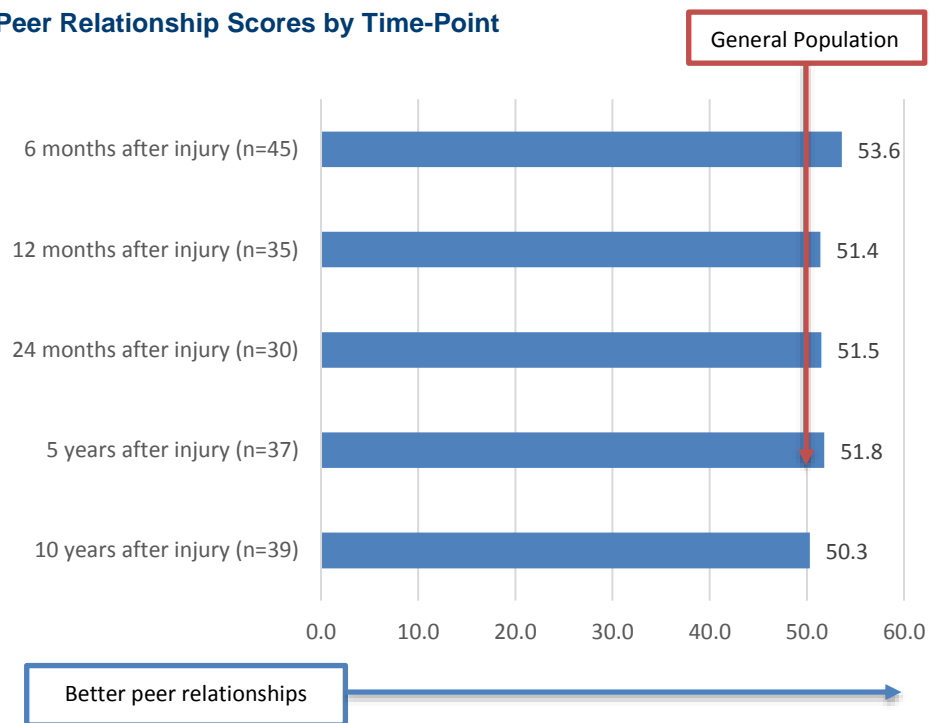


Pain does not seem to interfere with activities at any point. Peer relationships are an important indicator of social health in children and youth. Our sample reports peer relationships similar to the general population, indicating good relationships with friends and peers in spite of burn injury.

Pain Interference Scores by Time-Point



Peer Relationship Scores by Time-Point



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.

