



The Burn Program at Nationwide Children's Hospital



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When your child needs a hospital, everything matters.



Over one million pediatric burn injuries occur annually that require medical care. While hot liquids are the leading cause of burn injuries in children, fires, chemicals and electricity also frequently require the support of pediatric burn experts.

The Burn Program at Nationwide Children's Hospital cares for children with burn injuries and cutaneous conditions and provides comprehensive, family-focused care at every step of the healing process.

Our program is one of the select programs verified by the American Burn Association and American College of Surgeons. Burn patients and their families receive expert care and support from arrival to the hospital often into adulthood.

The Burn Program uses dedicated resources within the emergency department, intensive care unit, burn unit, operating room, clinical therapies, and burn clinic which are essential to achieve the best patient outcomes possible.

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The goal of Nationwide Children’s Hospital Burn Center is to provide current innovative care to children with thermal injuries. The burn center strives to validate this care delivery by its American Burn Association (ABA) burn center verification status. In the spring of 2018, the center received its 6th consecutive ABA re-verification. One of the noted strengths of the burn center was the “ample evidence of excellent interdisciplinary teamwork”. This teamwork consists of a truly immersed multidisciplinary team including occupational and physical therapists, psychologists, child life specialists, dietitians, social workers, therapeutic recreation therapists and massage therapists.

In 2018, the Burn Center broadened the care continuum with the addition of Dr. Amalia Cochran, an established and nationally regarded burn surgeon. This addition provided the opportunity to expand the outpatient burn clinic to five days a week further enhancing the timely care provided to the thermally injured children within the region.

Keeping with the mission to improve outcomes of children with thermal injury, the Burn Center instituted a multidisciplinary laser program in the fall of 2018. Laser treatment is a progressive approach to the treatment of severe, debilitating burn scars to improve the burn survivor’s functional outcomes.

While the laser procedure improves the physical and functional outcomes for the burn survivor, the burn programs annual Healthy Healing Burn Camp (HHBC) fosters emotional healing for the children and their family. HHBC provides the opportunity for burn survivors and their families to connect with others, who have had similar experiences, in a safe and healthy environment. The goals of burn camp are to:

- Focus on building a dynamic community that strengthens family bonds through support and discovery that generates additional ways to thrive and grow.
- Engage in recreation & leisure activities, socialization, and therapeutic interventions that enhance the healthy healing process.
- Provide a supportive environment for parents/caregivers to stimulate open and candid discussions that encompass the progress and challenges within their family system.
- Educate and facilitate social skills training to promote continued healthy re-integration into the community.

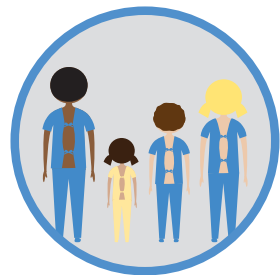


Burn camp 2018

The burn center’s multidisciplinary staff assures diverse and comprehensive programing to support a positive burn camp experience that will enhance burn survivor confidence and aid in healthy socialization skills. As one parent’s feedback stated “attending camp provided the opportunity for my child to see other children like her and to continue to show support and know she is not alone”.

In order to set the bar even higher the Burn Center at NCH along with four other pediatric burn centers in the country united to form the Pediatric Injury Quality Improvement Collaborative (PIQIC). The four other centers include Johns Hopkins Children’s Hospital, Children’s National, Kansas City Mercy Children’s Hospital, and Children’s Hospital of Michigan. PIQIC utilizes research and data to improve the quality of pediatric burn care and increase patient safety by decreasing variation in treatment protocols while establishing national standards for pediatric burn care. This is a first of its kind collaborative committed to improving the outcomes of children with thermal injury.

While the Burn Center thrives to improve the current care provided, there are developments taking place to advance care in the future. Dr. Thakkar’s laboratory, located at the Research Institute at Nationwide Children’s Hospital, was awarded two NIH grants this past year (1K08GM124499-01A1 and 5K12HD047349-14). The Thakkar lab is a translational research lab that has a special interest in the immune response to pediatric burn injury. This research aims to examine immune function at the systemic and tissue level in pediatric thermal injury using both whole blood and tissue specimens. These findings are then compared to the immunologic and clinical outcomes of critically ill children. The goal is to identify potential mechanisms associated with critical injury/illness induced immune suppression. Given this information, the Burn Center aims to use immunomodulatory therapy in order to alter the immune response in hopes of improving patient outcomes.



195

Inpatient Admissions



1428

Clinic Visits



125

Surgical Cases

Research/Publications

McCulloh C, Nordin A, Talbot LJ, Shi J, Fabia R, Thakkar RK. Accuracy of Prehospital Care Providers in Determining Total Body Surface Area Burned in Severe Pediatric Thermal Injury. *Journal of Burn Care and Research*. 2018 Jun 13;39(4):491-496. doi: 10.1093/jbcr/irx004. PMID: 29901794.

Thakkar RK, Diltz Z, Drews JD, Wheeler KK, Shi J, Devine R, Fabia R, Hall M. Abnormal Lymphocyte Response after Pediatric Thermal Injury is Associated with Adverse Outcomes. *Journal of Surgery Research*. 2018 Aug;228:221-227. doi: 10.1016/j.jss.2018.03.039. Epub 2018 Apr 11. PMID: 29907215.

Rumpf RW, Stewart WCL, Martinez SK, Gerrard CY, Adolphi NL, Thakkar RK, Coleman A, Rajab A, Ray WC, Fabia R. Comparison of the Lund and Browder Table to Computed Tomography Scan Three-Dimensional Surface Area Measurement for a Pediatric Cohort. *Journal of Surgical Research*. 2018 Jan;221:275-284. doi: 10.1016/j.jss.2017.08.019. Epub 2017 Oct 5. PMID: 29229139

Devine RA, Diltz Z, Hall MW, Thakkar RK. The Systemic Immune Response to Pediatric Thermal Injury. *International Journal of Burns and Trauma*. 2018 Feb 5; 8(1):6-16. eCollection 2018 *PubMed* PMID: 29531854 PMCID: PMC5840314.

Hodosevich Z, Wheeler KK, Shi J, Coffey R, Bailey JK, Jones LM, Thakkar RK, Fabia RB, Groner JI, Xiang H. Incidence of Unplanned 30-Day Readmissions in Adult Burn Patients in the United States. *Journal of Burn Care and Research*. 2018 Mar 9. doi: 10.1093/jbcr/iry008. [Epub ahead of print] PMID: 29534188





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