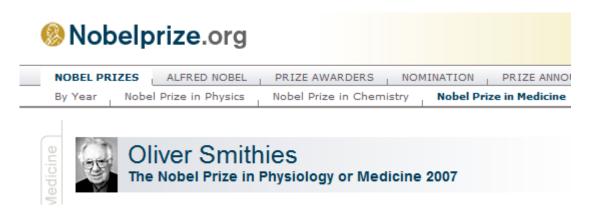


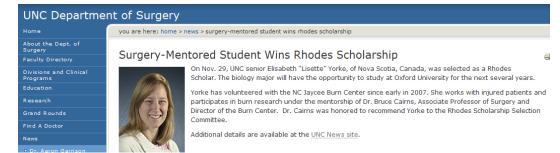


Bruce A. Cairns, MD John Stackhouse Distinguished Professor of Surgery Director North Carolina Jaycee Burn Center University of North Carolina- Chapel Hill

UNC- Chapel Hill - A Tradition of Excellence

- Oldest Public University in Nation (1796)
- Most Rhodes Scholarships for public university
- "Our goal is to reinvent the global, public research University"- Chancellor Carol L. Folt











Medical Find Schools

The Princeton Review's 2014 Best Value Colleges

77% four-year graduation rate trounces the 31% national average, and its 31% admission rate (the

percentage of applicants who are accepted out of those who apply) makes it one of the most competitive schools on our list. Non-Carolinians can also take advantage of a superior value -- UNC is number two in our



out-of-state rankings, behind SUNY Geneseo.



Fall 2012 through Fall 2013 via our institutional and student surveys. Broadly speaking, we weighted more than 30 data points covering academics, costs and We also considered the percentage of graduating seniors who borrowed from any loan program and the average debt those students had at graduation. For

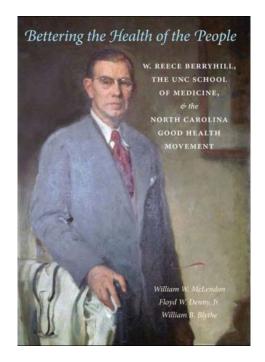
Top 10 Public Colleges





Esse Quam Videri- Service to the State of North Carolina

The University of North Carolina- "to make the campus coextensive with the boundaries of the State, while keeping the highest standards of university instruction and scholarly research on the highest plane, put the University-- as head of the State's educational system- in warm, sensitive touch with every problem in North Carolina life, small and great." Edward Kidder Graham- President University of North Carolina 1917-21









The North Carolina Jaycee Burn Center at UNC- Chapel Hill

- Opened in 1981 (Johnny Stackhouse, Duke Energy/ Progress Energy, Electrical Co-ops, Firefighters, NC Jaycees and others)
- Re-verified by ACS/ ABA in October 2012
- 21 bed dedicated ICU capable- 2008; 15 acute floor beds- 2012
- Verified to admit critically injured adults and pediatrics
- Over 1300 acute admissions, more than 250 ICU admits
- Burn team consists of surgeons, nurses, social work, PT/ OT, nutrition, chaplain, recreation therapy, psychology
- Acute care, prevention, education, research, rehabilitation



The North Carolina Jaycee Burn Center at UNC- Chapel Hill





Groundbreaking for North Carolina Jaycee Burn Center January 15, 1977

North Carolina Jaycee Burn Center Advisory Board made up of energy providers (Duke Energy, EMC); fire service; burn survivors; community leaders



Developed (and continue to develop) multi-million dollar endowment to support research and other programs

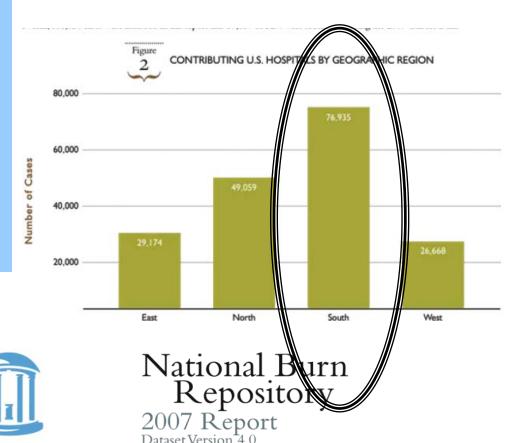
Why North Carolina? Southeast is Major Source of Burn Injury in U.S. ("Burn Belt")

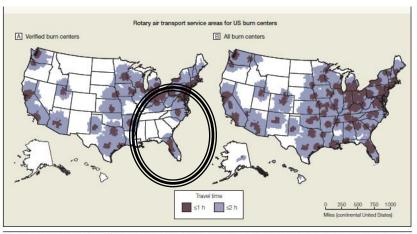


Geographic Access to Burn Center Hospitals

Matthew B. Klein; C. Bradley Kramer; Jason Nelson; et al. JAMA. 2009;302(16):1774-1781 (doi:10.1001/jama.2009.1548)

http://jama.ama-assn.org/cgi/content/full/302/16/1774



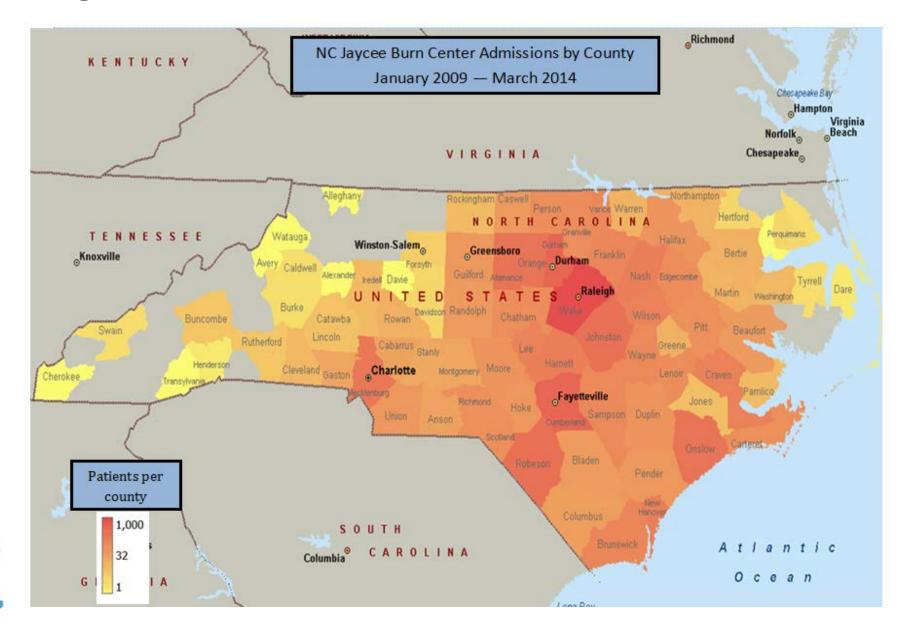


Census tracts with very low population density are geographically very large, inclusion of those tracts makes some of the service area polygons in our analysis highly irregula in shape. This irregularity represents an artifact of variation in census tracts and not misclassification in our analysis. Interactive maps are available at http://www.jama.com

©2009 American Medical Association. All rights reserved.

(Reprinted) JAMA, October 28, 2009-Vol 302, No. 16 1779

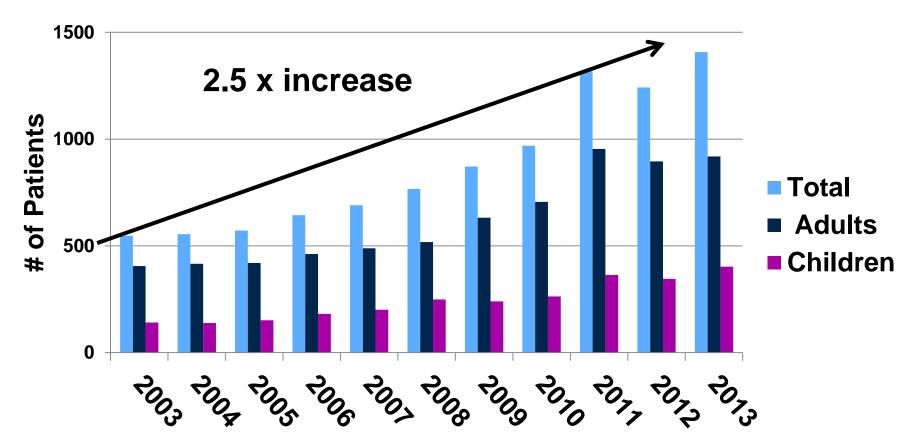
Serving the Needs of North Carolina





Serving the Needs of North Carolina

UNC Burn Center Volume 2003-2013



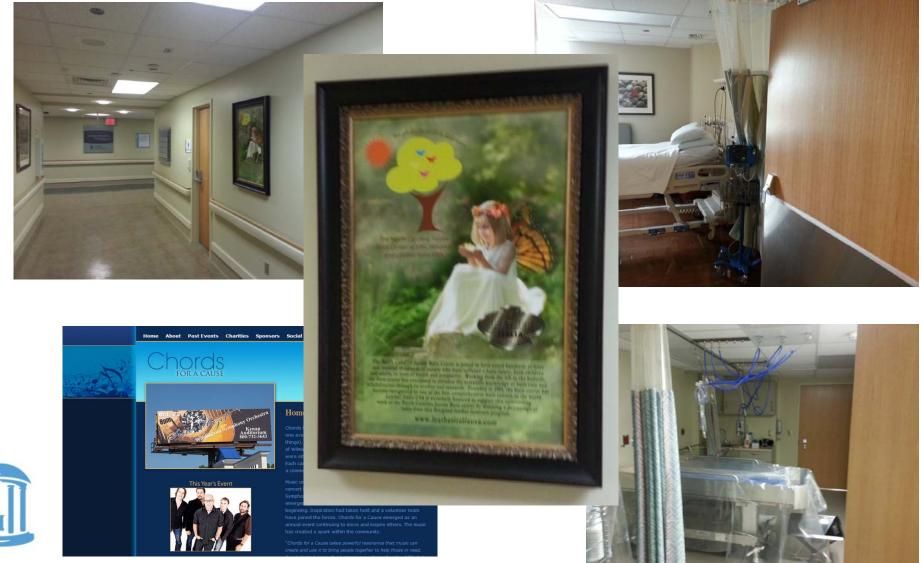


Source: ABA/ACS Verified Registry

Census 5-16-2014: 52 43 Adults 9 Children

North Carolina's Electric Cooperatives Your Touchstone Energy* Cooperatives

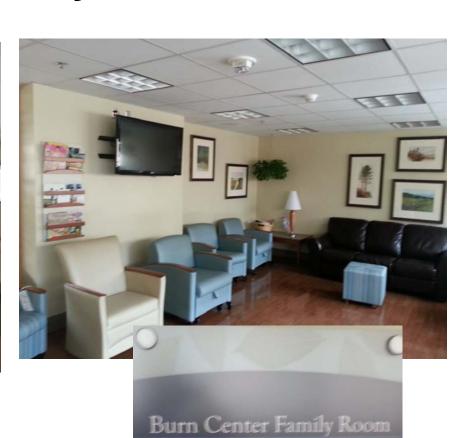
Acute Burn and Wound Unit 2012





Duke Energy Family Room 2013







Burn Center Clinical Faculty







Samuel W. Jones, MD



James Hwang, MD



Anthony G. Charles, MD



Felicia N. Williams, MD Arriving July 2014





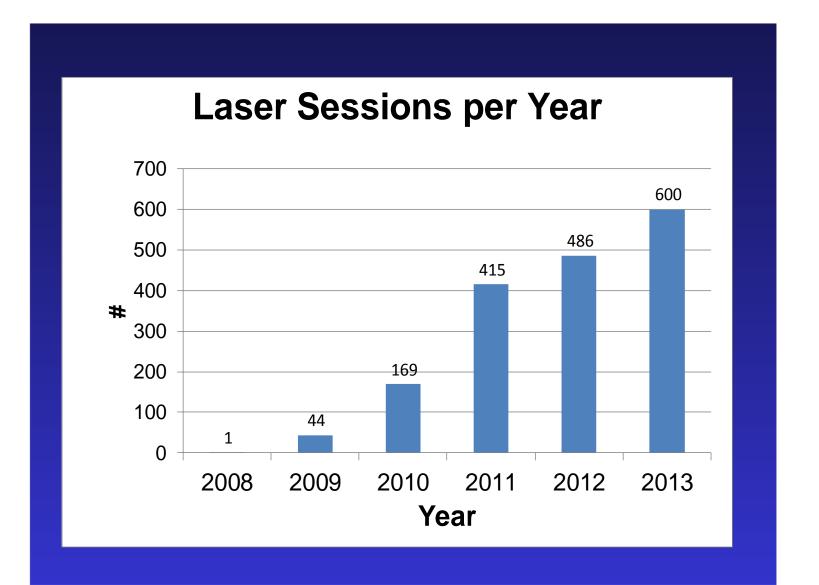




UNC Burn Reconstruction and Aesthetic Center: Opening October 3, 2012



UNC Burn Reconstruction and Aesthetic Center







American Surgical Association

The oldest surgical association in the United States
Established in 1880

Home

Annual Meeting

Council

Committees

History and Mission

The American Surgical Association was founded in 1880 and is the nation's oldest and most prestigious surgical organization. Its members include the nation's most prominent surgeons from the country's leading academic medical institutions, many of whom are Chairs of the Departments of Surgery at these institutions. Membership also includes leading surgeons from around the world, making it much more than an American association.

Laser Resurfacing and Remodeling of Hypertrophic Burn Scars: The Results of a Large, Prospective, Before-After Cohort Study, with Long Term Follow-Up Charles S Hultman, Jon S Friedstat*, Renee E Edkins*, Bruce A Cairns, Anthony A Meyer University of North Carolina, Chapel Hill, NC

Objectives: Hypertrophic burn scars produce significant morbidity (Itching, pain, stiffness, contracture), but best practices for management remain unclear, with unknown long-term benefit. We present the largest study to date that examines long-term impact of laser therapies, a potentially transformative technology, on hypertrophic burn scars. Methods: We conducted a prospective, before-after cohort study in burn patients with hypertrophic scars. Pulsed-dye laser was used for pruntis, erythema; fractional CO2 laser was used for stiffness, abnormal texture. Outcomes included: 1) Vancouver Scar Scale (VSS), which documents pigmentation, erythema, pilability, height, 2) 4P Scar Scale (4PSS), which facts pain, pruntis, paresthesias, pilability.

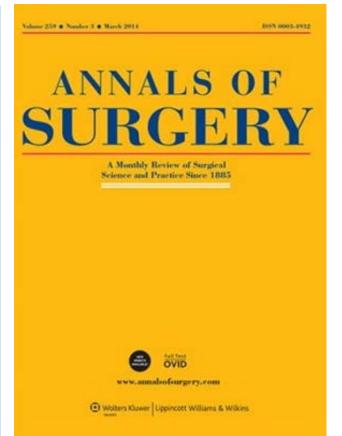
Results: 147 burn patients (mean age, 26.9 years; TBSA, 16.1%) received 415 laser sessions (2.8 sessions/patient), 16 months (median) after injury, including PDL (n=327) and CO2 (n=139), over a mean area of 83 cm2. Laser treatments produced rapid, significant, lasting improvements in hypertrophic scar (table/figure).

Conclusions: For the first time ever, in a large prospective study, laser therapies have been shown to dramatically improve both the signs and symptoms of hypertrophic burn scars, as measured by objective/subjective instruments. Laser treatment of burn scars represents a disruptive innovation that can yield results not previously possible and may displace traditional methods of operative intervention.

Impact of Laser Treatment on Hypertrophic Burn Scars

SCALE	PREOP Baseline	1 Session	All Sessions	FINAL Result (2 Year F/U)	p value
VSS, range 0-15		6.67, sd 2.11	5.16, sd 1.92	3.29, sd 1.24	<0.001
4PSS, range 0- 12	5.40, sd 2.54	2.89, sd 1.91	2.05, sd 1.67	1.74, sd 1.72	<0.001

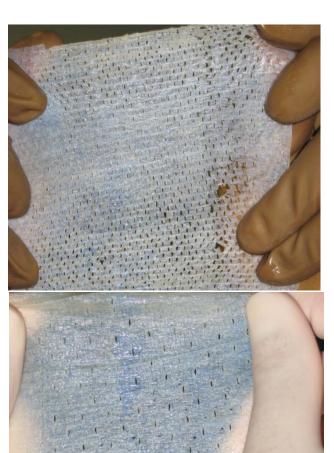






Innovation: Development of a Novel Minimal Perforation Skin Graft Mesher







Innovation: Development of a Novel Minimal Perforation Skin Graft Mesher









Innovation: Development of a Novel Minimal Perforation Skin Graft Mesher

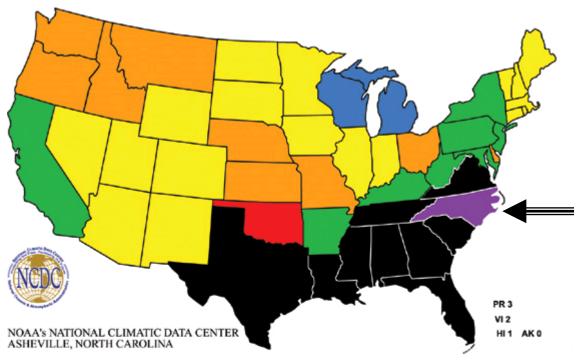






Why North Carolina? A Major Location for Disasters in U.S.





NUMBER OF EVENTS			
	1 - 3		
	4 - 6		
	7 - 9		
是必然的	10 - 12		
	13 - 15		
	16 - 20		
	21 - 25		

DISASTER TYPE	NUMBER OF EVENTS	PERCENT FREQUENCY			
Tropical Storms/Hurricanes	20	32.3%			
Non-Tropical Floods	12	19.4%			
Heatwaves/Droughts	10	16.2%			
Severe Weather	7	11.3%			
Fires	6	9.6%			
Freezes	2	3.2%			
Blizzards	2	3.2%			
Ice Storms	2	3.2%			
November	62				
lease note that the national man color-coded by the reflects a					

does not mean that each state shown suffered at least \$1 billion in

summation of billion dollar e-

losses for each event.

NORMALIZED DAMAGES (Billions of Dollars)	PERCENT DAMAGE
144	36.8%
55	14.1%
144	36.8%
13	3.3%
13	3.3%
6	1.6%
9	2.3%
5	1.3%
391	0.5%



National Burn Disaster Preparedness

165

Atla

USA

Mar



The United States Critical Illness and Injury Trials Group



Programs

= USCIITG - CIOS

Home
About USCIITG

2012 Joint Preparedness Conference

March 20 - Burn Bed Surge Strategy Meeting March 21, 22, 23 - Joint Preparedness Conference



The Center for Disease Control and Prevention (CDC), Office of Public Health Preparedness and Response (OPHPR), Division of State and Local Readiness (DSLR) and the Office of the Assistant Secretary for Preparedness and Response (ASPR), Office of Preparedness and Emergency Operations (OPEO) invite awardees from each directly funded jurisdiction, as well as representatives from ASTHO, NACCHO, and other national

partners to attend the **2012 Joint Preparedness Conference** on March 21 - March 23, 2012 in Atlanta, GA. A pre-conference **Burn Bed Surge Strategy Meeting** will occur on March 20, 2012 in the same location.

Click here to register for the conference

THE CENTER FOR DEVICES & RADIOLOGICAL HEALTH

PRESENTS AN FDA PUBLIC WORKSHOP:

MEDICAL COUNTERMEASURES

FOR A

BURN MASS CASUALTY INCIDENT

September 27-28, 2012

FDA Headquarters White Oak Campus Silver Spring, MD

An FDA Medical Countermeasures Initiative (MCMi) Funded Project





Translational Burn Immunology Lab

Cairns/Maile Lab

Bruce Cairns, MD, FAC
Rob Maile, PhD
Laurel Kartchner
Julia Malik
Steven Mouro
Tom Fischer, PhD
Amal Khoury, MD
April Mendoza, MD
CJ Neely, PhD
Rebecca Drapp
Sha'Leema Miller
Janice Lee
Karli Gast

Kelly Tackett

















Doerschuk Lab

Claire Doerschuk, MD

Richardson Lab

Lance Thurlow, PhD

Ting Lab

Jenny Ting, PhD June Brickey, PhD

Wolfgang Lab

Cindy Gode, PhD

Funding

- •NIH R01 GM076250-01A2
 - Cairns' R01
- •NIH U19 AI067798-09
 - RADCCore
- •NIH T32 Al007273-29 (Linz)
 - •Basic Immune Mechanisms
 Training
- •NSF DGE-1144081 (Kartchner)
 - •Graduate Research Fellowship Program
- •UNC-HHMI (Malik)
 - Med-Into-Grad Initiative





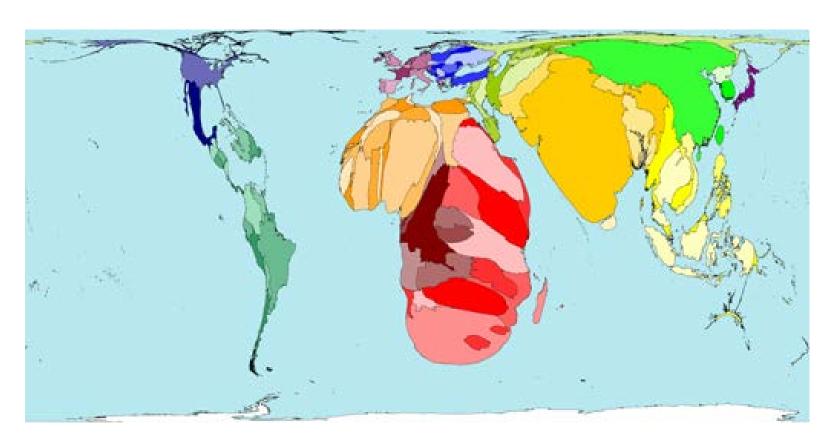


Advanced Medic Instructor Training "Pauci Cura Pro Plures"

UNC School of Medicine PA Program Request to Plan approved by University



All injury deaths 15-45 years









World J Surg (2011) 35:17-21 DOI 10.1007/s00268-010-0836-2



Surgery and Global Public Health: The UNC-Malawi Surgical Initiative as a Model for Sustainable Collaboration

Javeria S. Qureshi · Jonathan Samuel · Clara Lee · Bruce Cairns · Carol Shores · Anthony G. Charles



2011; 39: 873 – 879

The Epidemiology, Management, Outcomes and Areas for Improvement of Burn Care in Central Malawi: an Observational Study

JC Samuel^{1,2}, ELP Campbell³, S Mjuweni¹, AP Muyco¹, BA Cairns¹ and AG Charles¹

¹Department of Surgery, Kamuzu Central Hospital, Lilongwe, Malawi; ²Department of Surgery, University of North Carolina, Chapel Hill, North Carolina, USA; ³University of North Carolina Project, Lilongwe, Malawi





Dramatically Improved Survival Following Burn Injury in Malawi

Survival after burn in a sub-Saharan burn unit: Challenges and opportunities

Anna F. Tyson a, Laura P. Boschini , Michelle M. Kiser a. Ionathan C. Samuel a,b,c. Steven N. Mjuweni^b, Bruce A. Cairns^{b,c}, Anth

^a Department of Surgery, University of North Carolina, United States



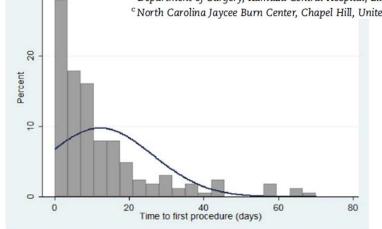
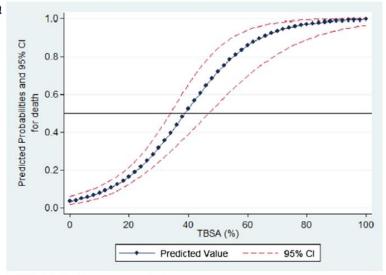


Fig. 2 - Distribution of time from admission to first procedure (n = 162).



*TBSA= total body surface area (%)

†Based on a logistic regression model, adjusted for age and mechanism of burn

Fig. 4 - Probability of death by TBSA*, adjusted for age and mechanism of burn .









Burn Center: Playroom Renovation 2014









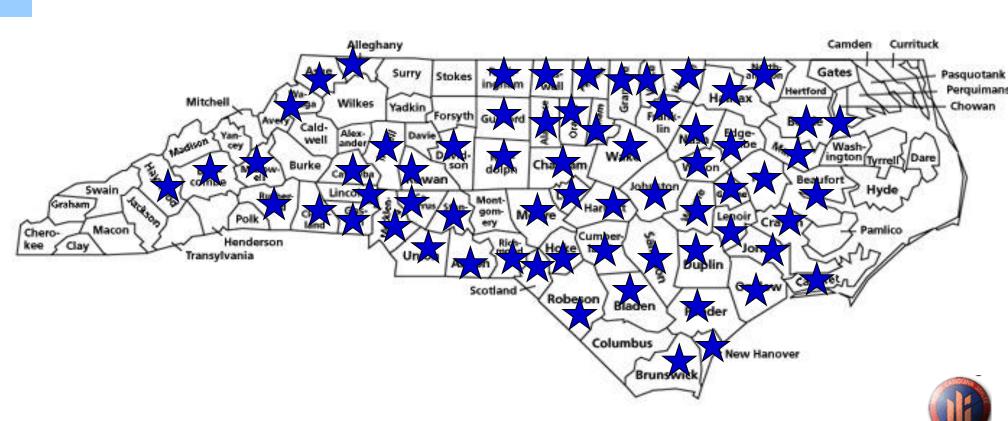
19.5"(49.5cm) w x 16.5"(41.9cm)h x 5"(21.5cm



Burn Center: Aftercare



Citizens in these NC Counties have participated In UNC Burn Center Aftercare (2005-2009)





UNC NORTH CAROLINA JAYCEE BURN CENTER

