



CAROLINAS POISON CENTER

BIENNIAL REPORT

2006 - 2007



Carolinas Poison Center

Uncompromising Excellence. Commitment to Care.



*"I am concerned about giving
medicine that might interact..."*

*A mother talked with Cheryl about safely giving her
child two medicines. "I am [concerned] about giving...
medicine that might interact, and I know that you can
and will answer [these] questions."*

CAROLINAS POISON CENTER

Who We Are

Carolinas Poison Center is a 24/7 operation dedicated to preventing poisonings and providing emergency medical assistance to North Carolinians. Our Specialists in Poison Information and Poison Information Providers assess and manage a variety of poisoning exposures and are backed by a team of board-certified toxicologists. Together they provide immediate, free assistance to the public and also to healthcare professionals managing poisoned patients. In 2006-2007 our specialists and providers handled over 233,000 calls, including 155,389 known or suspected poisoning exposures. Over 121,000 exposure calls were managed at the site of the caller, with no further medical care or expenditures required.

Who We Serve

Carolinas Poison Center serves every resident of North Carolina through our toll-free telephone number: **1-800-222-1222**. We make sure all people are helped, including our hearing impaired and non-English speaking callers. Access is available for the hearing impaired through TDD/TTY service, and non-English speaking callers are supported by interpreters who join the specialists by phone at a moment's notice.

The majority of calls received at Carolinas Poison Center are from individuals, but we also assist physicians, nurses, pharmacists, and other healthcare providers who need expert advice in the diagnosis and treatment of poisoned patients. In 2006 and 2007, about 15 percent of all inquiries came from healthcare professionals, and the Center assisted 146 medical facilities statewide. Community providers also benefit from our services. School nurses and principals, law enforcement officers, and emergency medical services personnel call Carolinas Poison Center for assistance.

Services We Provide

We are the source for poison prevention information/education and poison exposure management throughout the state. Our emergency assistance is provided free and confidentially. With instant access to computerized information resources containing over one million poisons, we are prepared for a variety of poisoning situations. As the exclusive provider of care to nearly 80 percent of the Center's callers, we work quickly and thoroughly to help resolve potential and actual poisonings. The majority of remaining callers are referred to appropriate healthcare facilities for more intensive treatment.

Preventive Education

Carolinas Poison Center distributed more than 219,000 educational materials in 2006 and 2007 to individuals, schools, daycare centers, businesses, and healthcare and community organizations. The education staff participated in 55 presentations and health fairs throughout North Carolina, teaching more than 10,000 people—4,935 adults and 5,624 children about the dangers of poisons.

Outreach To A Growing Constituency

The aging population continues to be a target audience of the Carolinas Poison Center. In 2006, the Center began distributing a brochure funded by the North Carolina Health & Wellness Trust Fund outlining the potential dangers of drug interactions. The brochure educates seniors about how to recognize and avoid adverse drug reactions. It also provides a list of common drugs that should not be taken together before first talking to a primary healthcare provider or pharmacist.



Protecting Public Health

The Center participates in emergency preparedness activities 24/7 sending real-time data to the North Carolina Department of Health and Human Services and to the American Association of Poison Control Centers. Constant surveillance of bioterrorism exposure data places Carolinas Poison Center at the forefront of healthcare organizations that specialize in the detection and management of pandemics and all-hazards events.

Continuing Education

In 2006, Carolinas Poison Center created a self-study, online continuing education program for physicians and nurses. The program consists of eight separate courses, each developed by a Carolinas Poison Center toxicologist and presented as a streaming video lecture, followed by a post-test and course evaluation. The courses address chemical and biological agents including clinical presentation, laboratory testing, and management.

Improving Our Specialty

The physicians of the Carolinas Poison Center regularly contribute to scientific journals and medical textbooks and present lectures to healthcare professionals at regional healthcare facilities, national toxicology conferences, and emergency medicine symposia. In 2006-2007, the Center's toxicologists delivered multiple statewide lectures to health agencies including topics concerning pediatric poisoning, using medicines safely, carbon monoxide poisoning, and chemical terrorism.

Committed To Quality Customer Service

To maintain the highest level of customer satisfaction, Carolinas Poison Center conducted a survey in 2007, interviewing 100 non-healthcare callers about the quality of service the Center provided them. Among its findings, the survey reported that 99% of respondents believed their call was answered quickly and courteously, that the Specialist listened to and understood their problem, and that the Specialist answered any remaining questions after instructions were given. Carolinas Poison Center will remain customer focused by being ready with up-to-date poisoning information and by caring for callers in a friendly, professional manner.

Striving For Excellence

The Specialists in Poison Information who provide emergency medical assistance to callers must pass a rigorous national certification examination, after meeting specific requirements. The Carolinas Poison Center team congratulates Deborah Coffey, Mary Ann McEachern, Marilyn Meyer, Denise Mills, CJ Murray, and Kristi Stout who passed the examination either in 2006 or 2007.

Medical Staff

Dr. Marsha Ford, Director

- Adjunct Professor of Emergency Medicine, School of Medicine, UNC-Chapel Hill
- Member, Financial Stabilization Work Group, Poison Control Centers, Health Resources and Services Administration (HRSA), 2007
- Member, AAPCC Toxic Exposure Surveillance System (TESS) Task Force, 2005-2007
- Primary Investigator, CDC Mock Chemical Terrorism Study, 2005-2006

Dr. Michael Beuhler, Medical Director

- Adjunct Assistant Professor of Emergency Medicine, School of Medicine, UNC-Chapel Hill
- AAPCC Fatality Review Team, lead reviewer
- Region 4 Director, American College of Medical Toxicology/Agency for Toxic Substances and Disease Registry

Dr. Mary Wittler, Assistant Medical Director

- Member, American College of Medical Toxicology
- Member, American College of Emergency Physicians

Dr. Russ Kerns, Toxicology Consultant

- Adjunct Associate Professor of Emergency Medicine, School of Medicine, UNC-Chapel Hill
- Director, Medical Toxicology Fellowship
- Reviewer, *Annals of Emergency Medicine; Journal of Toxicology Clinical Toxicology; Academic Emergency Medicine; Journal of Medical Toxicology*
- Member, Abstract Review Committee, North American Congress of Clinical Toxicology (NACCT) Scientific Assembly, 2003-2006

Dr. Eric Lavonas, Toxicology Consultant

- Adjunct Associate Professor of Emergency Medicine, School of Medicine, UNC-Chapel Hill
- Councillor, American College of Emergency Physicians (ACEP) 2005-2007
- Chair, ACEP Section of Toxicology, 2007-present
- Representative, American Board of Emergency Medicine (ABEM) Undersea and Hyperbaric Medicine and Examination Committee, 2006-2008
- Member, Disaster Preparedness subcommittee, Metrolina Trauma Advisory Committee, 2005-2007

Dr. Chris Tomaszewski, Toxicology Consultant

- Adjunct Associate Professor of Emergency Medicine, School of Medicine, UNC-Chapel Hill
- Editor in Chief, *The Journal of Medical Toxicology*, 2005-present
- Councillor, North Carolina College of Emergency Medicine, 2004-2006
- Member, Research Awards Committee, American Association of Poison Control Centers (AAPCC) and American Academy of Clinical Toxicologists (AACT), 1997-present
- Member, Educational Meetings Committee, American College of Emergency Medicine (ACEM), 1997-present

Dr. Anna Rouse, Assistant Director of Education

- Adjunct Associate Professor, Division of Pharmacotherapy and Experimental Therapeutics, School of Pharmacy, UNC-Chapel Hill
- Member, Credentialing Committee, American Board of Applied Toxicology (ABAT), 2005-present
- Member, Review Committee, *The Journal of Medical Toxicology*, 2006-present
- Program Manager, North Carolina Health and Wellness Trust Fund Medical Assistance Program, 2004-2007



*A dad received advice from Rita and Linda when his daughter ate a mushroom.
“You guys are great, and you save lives.”*

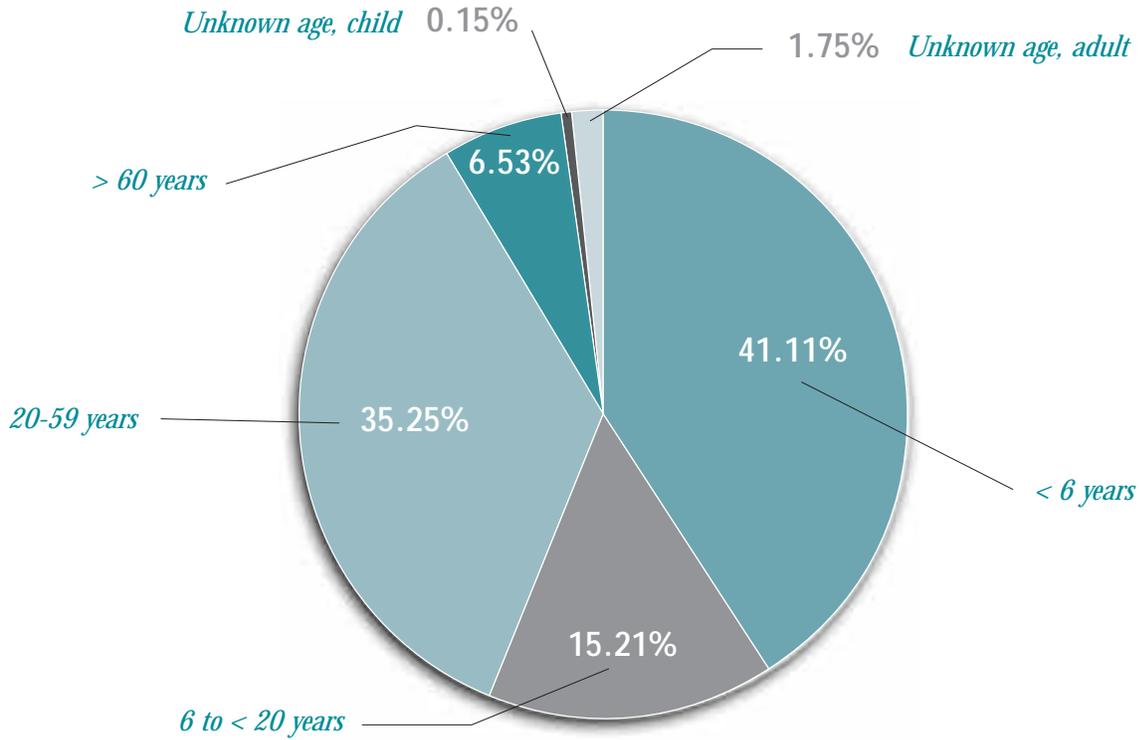
*“You guys are great,
and you save lives.”*

How was the patient poisoned?

HUMAN EXPOSURES - REASON

	2006	2007	TOTAL	%
Unintentional/Accidental				
General	44,733	45,630	90,363	57.92%
Environmental	1,530	1,919	3,449	2.21%
Occupational	983	923	1,906	1.22%
Therapeutic error	9,862	10,329	20,191	12.94%
Misuse	3,812	3,985	7,797	5.00%
Bite/Sting	2,241	1,957	4,198	2.69%
Food poisoning	928	1,820	2,748	1.76%
Unknown	187	131	318	0.20%
Total Unintentional	64,276	66,694	130,970	83.94%
Intentional				
Suspected suicide	5,451	5,924	11,375	7.29%
Misuse	1,636	1,426	3,062	1.96%
Abuse	1,099	1,005	2,104	1.35%
Unknown	578	716	1,294	0.83%
Total Intentional	8,764	9,071	17,835	11.43%
Other				
Tampering (Malicious)	409	392	801	0.51%
Unknown reason	845	871	1,716	1.10%
Withdrawal	14	38	52	0.03%
Total Other/Unknown	1,268	1,301	2,569	1.65%
Adverse Reaction				
Drug	1,536	1,628	3,164	2.03%
Food	229	261	490	0.31%
Other	476	520	996	0.64%
Total Adverse Reaction	2,241	2,409	4,650	2.98%
Totals	76,549	79,475	156,024	100.00%

What was the age of the patient?



How was the patient exposed to the poison?

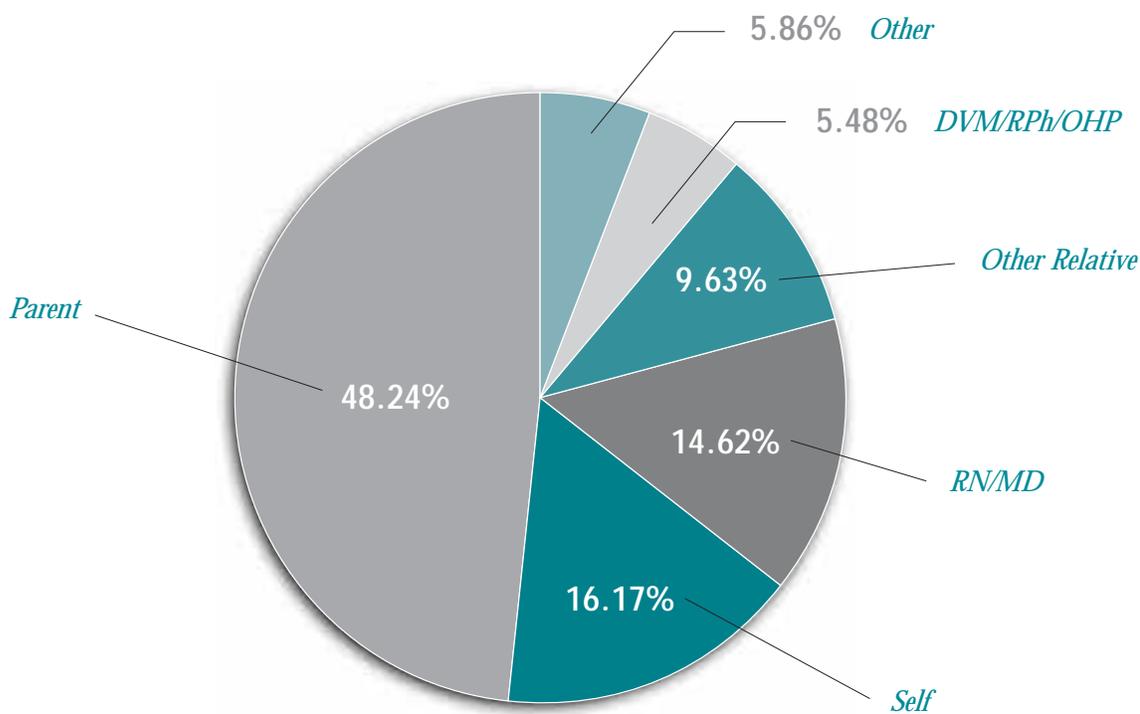
ROUTE OF EXPOSURE

	2006	2007	TOTAL	%
Ingestion	64,415	67,866	132,281	80.70%
Inhalation/Nasal	3,836	3,883	7,719	4.71%
Aspiration	33	30	63	0.04%
Ocular	3,571	3,381	6,952	4.24%
Dermal	5,405	5,308	10,713	6.54%
Bite/Sting	2,255	1,969	4,224	2.58%
Parenteral	360	428	788	0.48%
Rectal	31	26	57	0.03%
Otic	86	68	154	0.09%
Vaginal	35	21	56	0.03%
Other	161	112	273	0.17%
Unknown	352	282	634	0.39%
Totals	80,540	83,374	163,914	100.00%

“Thank you for checking in on me ...”

An elderly man accidentally took his morning medication at night. Bernice and other specialists monitored his case for development of symptoms. He was grateful: “Thank you for checking in on me in the night, because I live alone.”

Who called on behalf of the patient?



What effect did the poisoning have on the patient?

EFFECTS IN CASES FOLLOWED

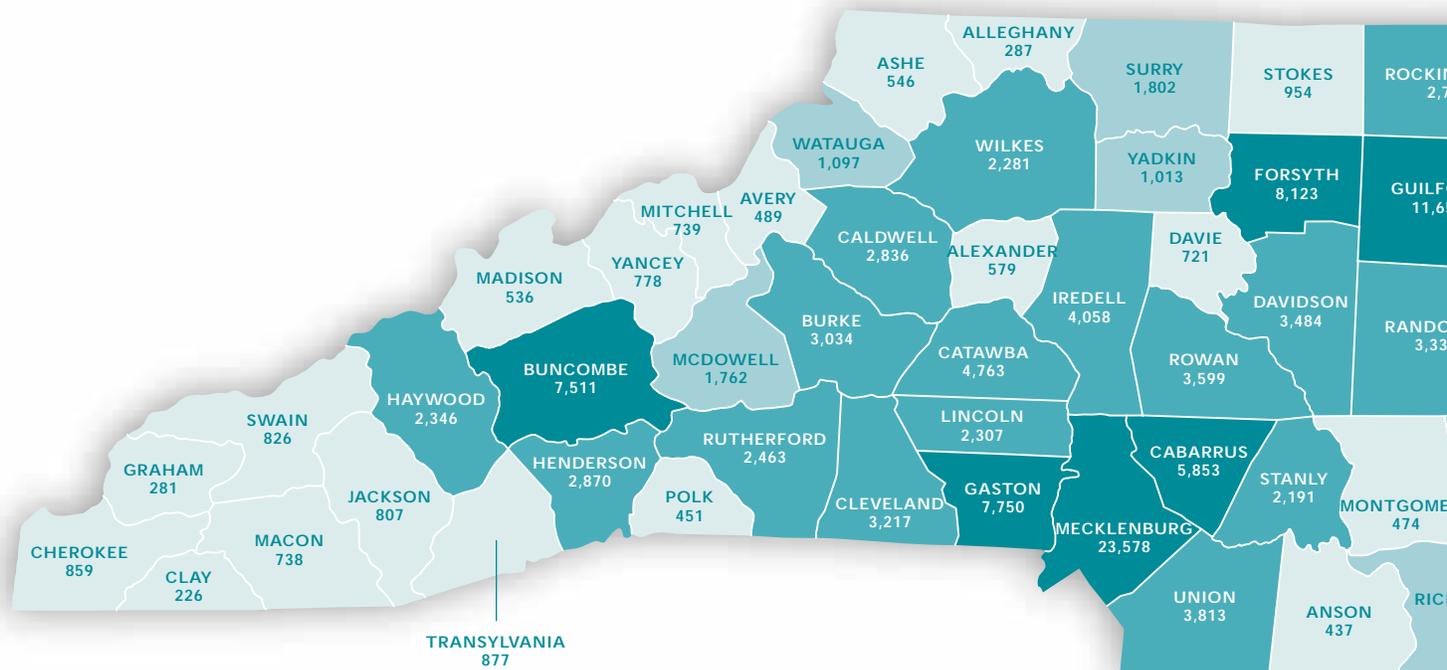
	2006	2007	TOTAL
<i>No Effect</i>	6,339	5,871	12,210
<i>Minor Effect</i>	8,888	8,272	17,160
<i>Moderate</i>	5,267	5,167	10,434
<i>Major</i>	698	653	1,351
<i>Death</i>	49	67	116

A mother found her son with a piece of carpet pad in his mouth. After determining the child was fine, Cheryl advised the mom of symptoms to watch for. "Thank you for providing some peace for [those of] us who have 20 month olds."

"Thank you for providing peace..."

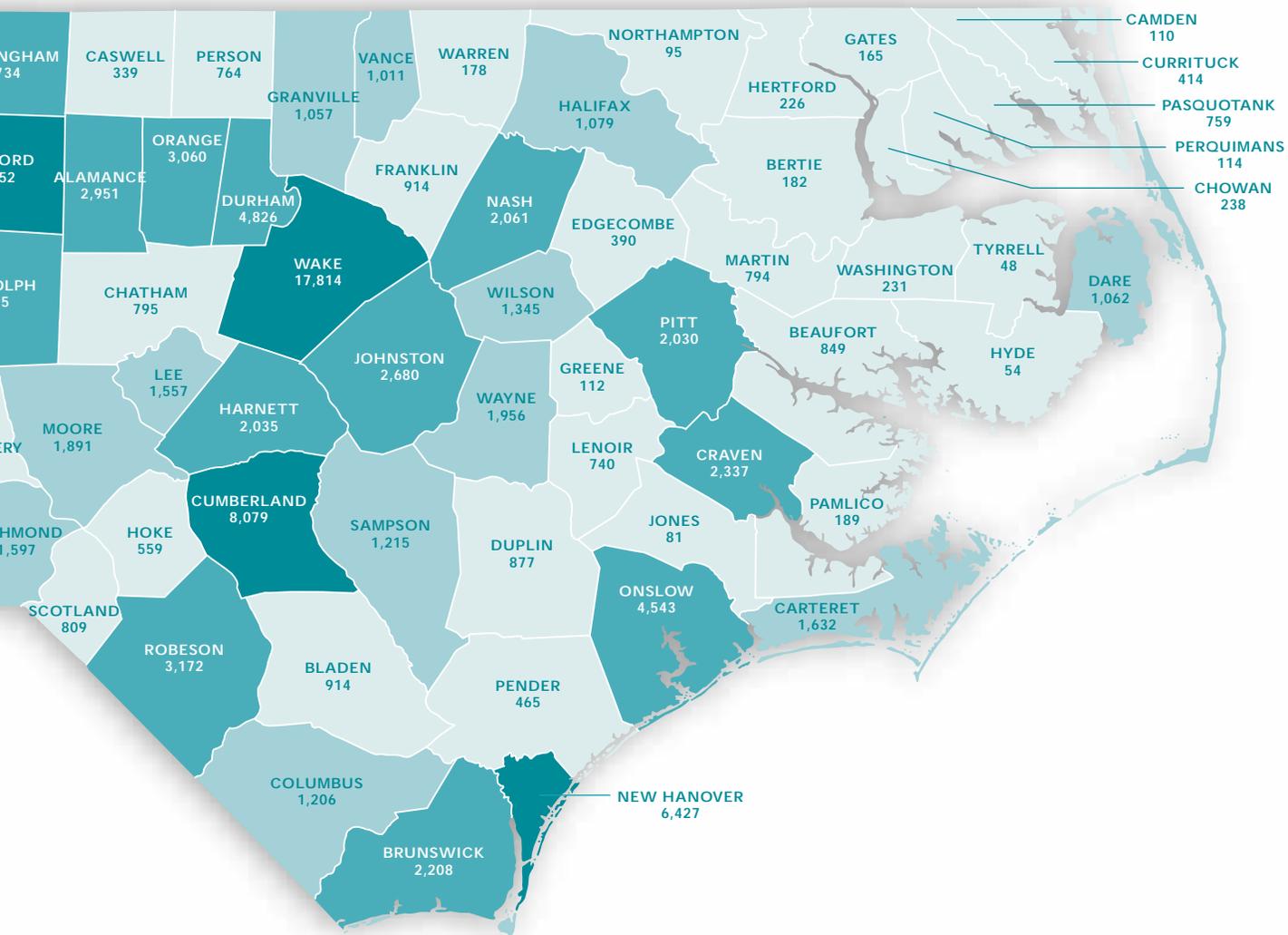
How many incoming calls were received from each county?

CALL VOLUME

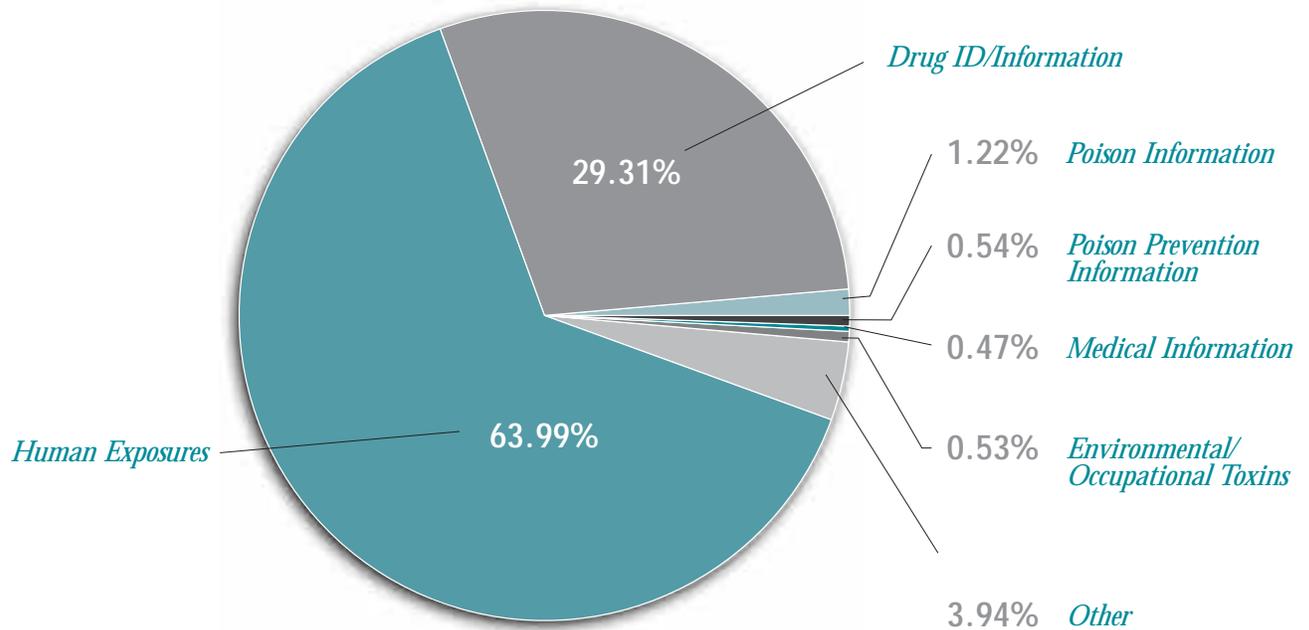


managed during 2006 & 2007?

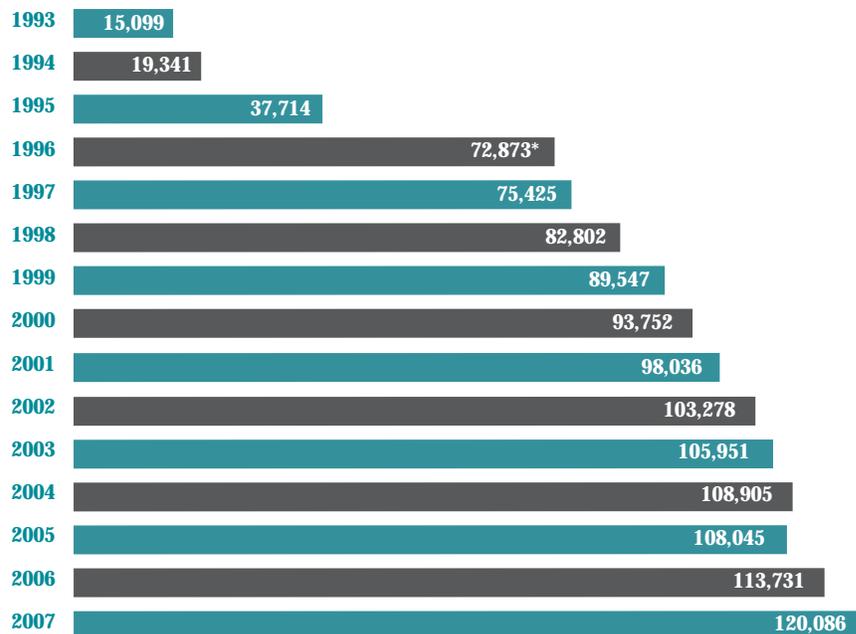
E BY COUNTY



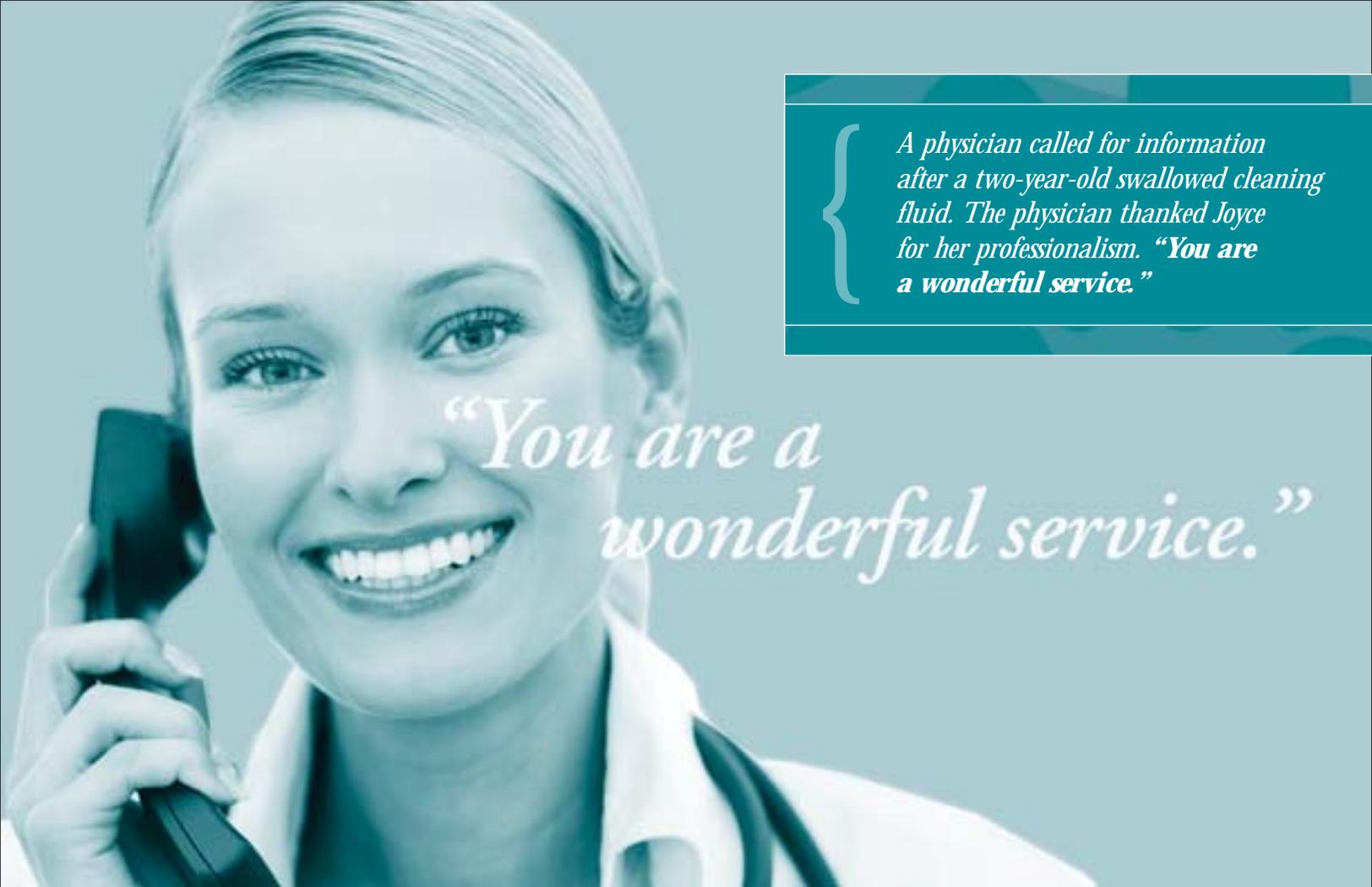
What were the reasons for the calls?



How has the call volume grown?



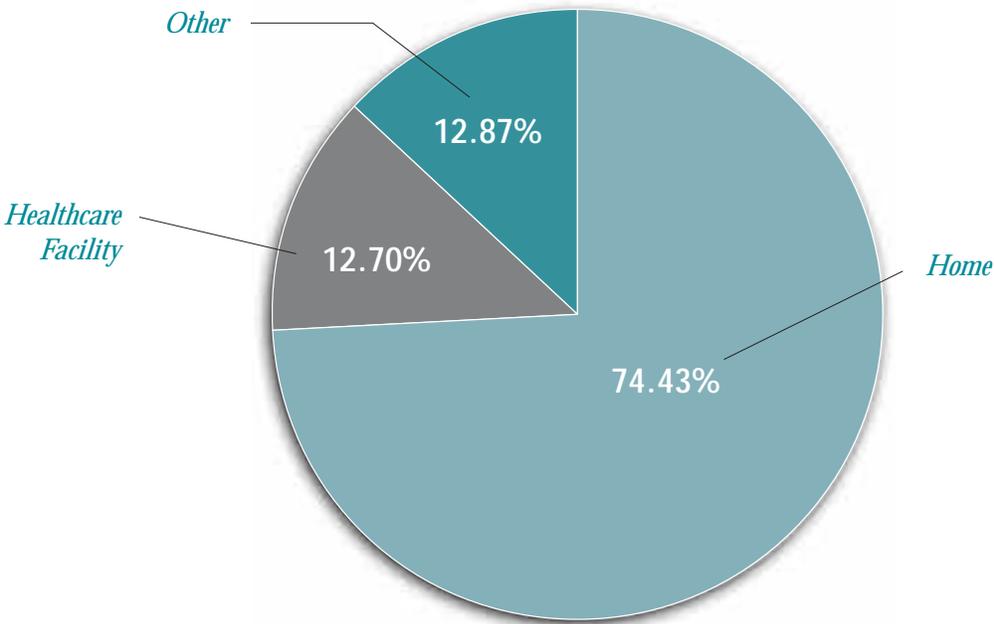
*First full year as State Poison Center



*A physician called for information after a two-year-old swallowed cleaning fluid. The physician thanked Joyce for her professionalism. **“You are a wonderful service.”***

“You are a wonderful service.”

From where did the calls originate?



How many poisonings were treated?

HEALTHCARE FACILITY	PRIMARY SITE	REFERRED BY CPC
Alamance Regional Medical Center	216	105
Albemarle Hospital	236	52
Alleghany Memorial Hospital	33	9
Angel Medical Center	60	28
Annie Penn Hospital	92	30
Anson Community Hospital	88	13
Ashe Memorial Hospital	53	14
Baptist Medical Center	1	1
Beaufort County Hospital	110	32
Bertie Memorial Hospital	34	4
Betsy Johnson Regional Hospital	261	63
Bladen County Hospital	143	13
Blowing Rock Hospital	7	0
Broughton Hospital	13	0
Brunswick Community Hospital	184	38
Brynn Marr Hospital	1	0
Caldwell Memorial Hospital	133	46
Camp LeJeune Naval Hospital	337	64
Cape Fear Hospital	109	35
Cape Fear Valley Medical Center	696	196
Carolinas Medical Center	609	174
Carolinas Medical Center - Lincoln	186	44
Carolinas Medical Center - Mercy	105	9
Carolinas Medical Center - NorthEast	335	171
Carolinas Medical Center - Pineville	336	121
Carolinas Medical Center - Randolph	19	1
Carolinas Medical Center - Union	329	74
Carolinas Medical Center - University	350	121
Carteret General Hospital	152	53
Catawba Valley Medical Center	140	97
Central Carolina Hospital	241	64
Central Prison Hospital	10	0
Charles A. Cannon Jr. Memorial Hospital	35	9
Carolinas Rehabilitation	1	1
Chatham Hospital	61	13
Cherokee Indian Hospital	74	6
Cherry Hospital	26	2
Cherry Point Naval Hospital	73	15
Chowan Hospital	59	13
Cleveland Regional Medical Center	227	83
Columbus Regional Healthcare System	163	20
Craven Regional Medical Center	201	47
Davie County Hospital	66	12
Davis Regional Medical Center	136	21
Dorothea Dix Hospital	52	1
Dosher Memorial Hospital	82	12
Duke Health Raleigh Hospital	106	25
Duke University Hospital	415	82
Duplin General Hospital	105	22
Durham Regional Hospital	180	57
FirstHealth Montgomery Memorial Hospital	47	15
FirstHealth Moore Regional Hospital	309	63
FirstHealth Richmond Memorial Hospital	104	26
Forsyth Medical Center	110	131
Franklin Regional Medical Center	135	28
Frye Regional - Alexander Campus	23	3
Frye Regional Medical Center	131	56
Gaston Memorial Hospital	389	164
Good Hope Hospital	1	0
Grace Hospital	104	64
Granville Medical Center	58	19
Halifax Regional Medical Center	194	46
Harris Regional Hospital	69	29
Haywood Regional Medical Center	101	48
HealthEast Family Care	3	0
Heritage Hospital	86	12
High Point Regional Health System	301	108
Highlands-Cashiers Hospital	4	1
Highsmith Rainey Express Care	28	7
Holly Hill Mental Health Services	6	4
Hoots Memorial Hospital	30	7
Hugh Chatham Memorial Hospital	99	26
Iredell Memorial Hospital	181	52

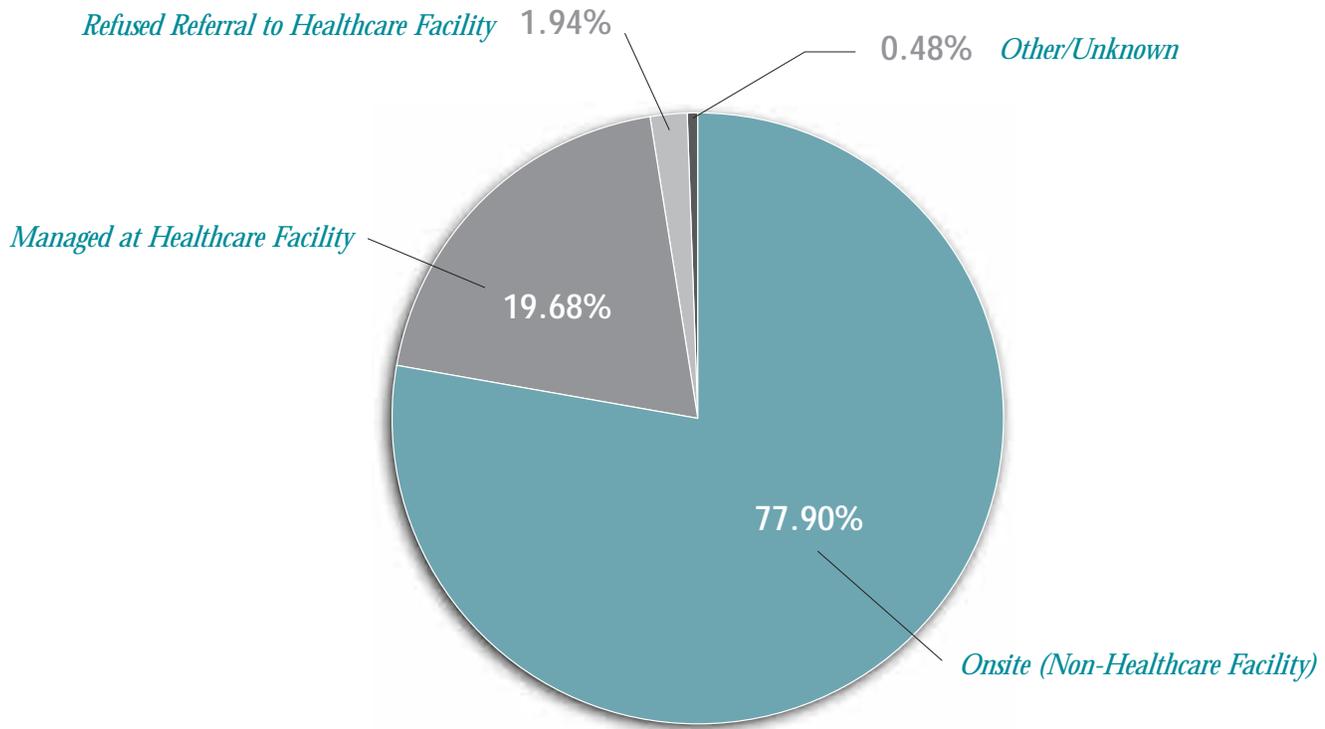
HEALTHCARE FACILITY	PRIMARY SITE	REFERRED BY CPC
J. R. Jones Medical Center	16	1
John Umstead Hospital	34	0
Johnston Memorial Hospital	252	51
Kings Mountain Hospital	103	27
Lake Norman Regional Medical Center	133	51
Lenoir Memorial Hospital	98	24
Lexington Memorial Hospital	234	42
Margaret R. Pardee Memorial Hospital	247	69
Maria Parham Hospital	117	48
Martin General Hospital	95	14
McCain Correctional Hospital	1	0
McDowell Hospital	211	40
Medical Park Hospital	1	0
Memorial Mission Medical Center	169	146
Morehead Memorial Hospital	159	38
Moses H. Cone Behavioral Health	28	2
Moses H. Cone Memorial Hospital	618	170
Murphy Medical Center	110	34
Nash General Hospital	323	52
New Hanover Regional Medical Center	254	124
North Carolina Cancer Center	1	0
North Carolina Specialty Hospital	1	0
Northern Hospital of Surry County	78	56
Onslow Memorial Hospital	193	102
Our Community Hospital	6	0
Park Ridge Hospital	69	30
Pender Memorial Hospital	57	20
Person Memorial Hospital	124	26
Pitt County Memorial Hospital	67	83
Presbyterian Hospital	309	129
Presbyterian Hospital - Huntersville	210	80
Presbyterian Hospital - Matthews	196	124
Pungo District Hospital Corporation	36	4
Randolph Hospital	258	86
Rex Hospital	140	75
Roanoke-Chowan Hospital	71	15
Rowan Regional Medical Center	231	72
Rutherford Hospital	134	57
Sampson Regional Medical Center	184	36
Sandhills Regional Medical Center	95	12
Scotland Memorial Hospital	114	15
Southeastern Regional Medical Center	383	67
Southern Wake Hospital	0	1
Spruce Pine Community Hospital	46	15
St. Luke's Hospital	63	13
Stanly Regional Medical Center	210	59
Stokes-Reynolds Memorial Hospital	19	3
Swain County Hospital	76	11
The Outer Banks Hospital	186	33
Thomasville Medical Center	138	46
Transylvania Community Hospital	106	35
UNC Hospitals	350	105
V.A. Medical Center Asheville	4	4
V.A. Medical Center Durham	30	5
V.A. Medical Center Fayetteville	27	3
V.A. Medical Center Salisbury	10	4
Valdese Hospital	81	22
Wake County Alcoholism Treatment Center	5	0
Wake Forest University Baptist Medical Center	221	118
WakeMed	805	217
WakeMed - Cary	375	115
WakeMed - North Healthplex	142	43
Washington County Hospital	58	5
Watauga Medical Center	77	40
Wayne Memorial Hospital	204	79
Wesley Long Community Hospital	447	71
Wilkes Regional Medical Center	135	43
Wilmington Treatment Center	1	0
Wilson Memorial Hospital	343	40
Womack Army Medical Center	285	101
Women's Hospital of Greensboro	1	1
Yancey Community Medical Center	0	1
Unknown/Other	698	68

What were the most common substances that resulted in poisonings?

PHARMACEUTICALS	# OF CASES
Analgesics	50,027
Sedative, Hypnotic & Anti-Psychotics	19,423
Unknown Drug	11,812
Cough & Cold Preparations	10,714
Antidepressants	10,449
Cardiovascular Drugs	9,628
Antihistamines	9,533
Antimicrobials	9,027
Topical Preparations	6,821
Muscle Relaxants	6,229
Hormones & Hormone Antagonists	5,917
Gastrointestinal Preparations	5,317
Stimulants & Street Drugs	4,606
Anticonvulsants	4,412
Vitamins	4,310
Miscellaneous Drugs	2,648
Electrolytes & Minerals	2,191
Asthma Therapies	2,054
Diuretics	2,019
Dietary Supplements/Herbals/Homeopathics	1,635

NON-PHARMACEUTICALS	# OF CASES
Cosmetics & Personal Care Products	13,270
Cleaning Substances-Household	12,793
Foreign Bodies, Toys & Miscellaneous	7,818
Insecticides & Pesticides (excluding Rodenticides)	6,874
Food Products & Food Poisoning	5,277
Bites & Envenomations	5,130
Alcohols	5,019
Plants	4,895
Hydrocarbons	3,510
Chemicals	3,428
Other/Unknown Non-Pharmaceutical	2,754
Arts, Crafts, Writing Products & Office Supplies	2,239
Fumes, Gases & Vapors	1,676
Deodorizers (Not For Personal Use)	1,526
Rodenticides	1,498
Paints, Varnishes & Lacquers	1,108
Adhesives, Glues, Cements & Pastes	1,006
Heavy Metals (excluding Iron)	995
Automotive, Aircraft & Boat Products	954
Cleaning Agents-Industrial	638

Where were the poisonings managed?



What prevention materials were distributed?

Phone Stickers	65,992
Magnets	27,305
Safety Brochure	23,432
Plant Brochure	12,820
Coloring Books	3,138
Kids' Stickers	3,038
Medicine Spoons	951
Spanish Booklet	2,584
Activated Charcoal	238
Parent Handbook	31
Mixed Mass Mailings	79,878
Total	219,407

What was the budget for 2006 & 2007?

INCOME	2006	2007
State of North Carolina	\$1,236,492	\$1,336,492
Carolinas HealthCare System	\$1,716,205	\$1,707,238
Other Revenue	\$127,859	\$102,542
Grants:		
Health Resources & Services Administration	\$593,832	\$494,642
Office of Emergency Medical Services & NC Division of Public Health	\$329,663	\$174,336
Kohl's		\$65,493
Children's Miracle Network Telethon	\$43,690	
Health & Wellness Trust Foundation	\$25,000	
Other Grants	\$40,000	
Total	\$4,112,741	\$3,880,742

EXPENSES	2006	2007
A. Operating Expenses		
Salaries/Benefits	\$2,687,601	\$2,632,217
Operations	\$558,743	\$335,919
Health Education/Poison Prevention	\$60,035	\$115,075
B. Other Expenses		
Indirect	\$666,347	\$652,616
Medical Toxicologists	\$140,015	\$144,916
Total	\$4,112,741	\$3,880,742

STAFF

Director

Marsha Ford, MD, FACEP, FACMT

*Adjunct Professor, Department of Emergency Medicine,
School of Medicine, UNC- Chapel Hill.*

*Director, Division of Toxicology, Department of Emergency
Medicine, Carolinas Medical Center, Charlotte*

Medical Director

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Assistant Medical Director

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*Adjunct Associate Professor, Division of Pharmacotherapy &
Experimental Therapeutics, School of Pharmacy,
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*Clinical Associate Professor of Pharmacy,
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Assistant Director, Operations

Cheryl Thomas, RN, CSPI*

Toxicology Consultants

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*Director, Medical Toxicology Fellowship, Department of
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*Academic Physician, Department of Emergency Medicine,
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*Director, Medical Toxicology Hospital Services,
Carolinas Medical Center, Charlotte*

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*Faculty Attending, Emergency Medicine & Toxicology,
Carolinas Medical Center, Charlotte*

*Medical Director, Hyperbaric Medicine, Department of
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*Clinical Associate Professor of Emergency Medicine,
School of Medicine, UNC- Chapel Hill*

Specialists in Poison Information (SPI)

Becki Baker, SPI
Deb Coffey, CSPI*
Merilyn Crittenden, CSPI*
Louisa Fiacco, CSPI*
Stephanie Frazier, CSPI*
Marlene Gennari, CSPI*
Sandy Hill, SPI
Germaine Knox, SPI
Bernice Kraus, CSPI*
Pam Lansinger, CSPI*
Patty Lee, SPI
Barbara Loftus, CSPI*
Cheryl Lucas, CSPI*
MaryAnn McEachern, CSPI*
Marilyn Meyer, CSPI*
Denise Mills, SPI
Julie Moeller, SPI
Alison Mullis, SPI
CJ Murray, CSPI*
Dale Murray, CSPI*
Barb Pinkston, CSPI*
Linda Puzsier, CSPI*
Terri Ramsey, SPI
Beth Rickenbaugh, CSPI*
Kristi Stout, CSPI*
Laura Weaver, CSPI*
Ashley Webb, SPI
Joyce Whisenant, SPI
David Willis, SPI
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**CSPI -- AAPCC Certified Specialist in Poison Information*

Poison Information Provider

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Frankie Lopez
Roz Bethea

Grants & Contracts Coordinator

Rebecca Rembert, BS

TOXICOLOGY CONSULTANTS

Biostatistics/Epidemiology

Dr. Jim Norton

Botany

Dr. Larry Mellichamp

Cardiology

Dr. Lazlo Littman

Dermatology

Dr. Libby Edwards

Disaster/Hazardous Material/ Mass Exposures to Toxin

Dr. Thomas Blackwell

Environmental/Occupational Toxicology

Dr. Larry Raymond

Forensics

Dr. John Butts

Dr. Ruth Winecker

Gastroenterology

Dr. John Hanson

Health Physicist

Elizabeth Franklin, MS

Herpetology

Eric Stine

Hyperbaric Medicine

Dr. Chris Tomaszewski

Immunology/ID

Dr. Jim Horton

Laboratory Toxicology

Dr. Susan Maynard

Mycology

Allein Stanley, MA

Nephrology

Dr. Chris Beuhrig

Ophthalmology

Dr. Scott Jaben

Pathology

Dr. Ned Lipford

Pediatrics Critical Care

Dr. Edwin Young

Pharmacology

Dr. Joan Settemyer

Public Health

Dr. Stephen Keener

Pulmonary Medicine/ Critical Care Medicine

Dr. Michael Haley

Surgery

Dr. Michael Thomason

Zoology/Veterinarian

Wendy Ryan, DVM

PUBLICATIONS/PRESENTATIONS

Refereed Publications

Kerns W. Management of beta-adrenergic blocker and calcium channel antagonist toxicity.

Emerg Med Clin North America 2007; 25:309-31.

Raymond LW, **Ford MD.** Severe Illness in Furniture Makers Using a New Glue: 1-Bromopropane Toxicity Confounded by Arsenic. *J Occup Environ Med* 2007; 49:1009-1019.

Tomaszewski C. S.I. for dummies. *Journal of Medical Toxicology* 2007; 3:87-88.

Tomaszewski C: The power of the case report. *Journal of Medical Toxicology* 2006; 2:139-140.

Tomaszewski C: Off-label: just what the doctor ordered. *Journal of Medical Toxicology* 2006; 2:87-88.

Tomaszewski C: Conflicts of interest: Boon or bias? *Journal of Medical Toxicology* 2006; 2:51-54.

Abstracts

Lavonas EJ. Safety Analysis of Transdermal Medication Delivery Systems in the Hyperbaric Environment. *Undersea Hyperbaric Med* 2006; 33(5): 351.

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