

## 2007-08 EXECUTIVE REPORT

### CENTRAL OHIO TRAUMA SYSTEM

431 East Broad Street, Columbus, Ohio 43215

Phone (614) 240-7419

[www.goodhealthcolumbus.org/cots](http://www.goodhealthcolumbus.org/cots)

#### LETTER FROM COTS PRESIDENT

This report is significant to the *Central Ohio Trauma System (COTS)* because it marks COTS' ten-year anniversary. COTS was incorporated in 1997, and hired its first staff in 1998. COTS' earliest work included establishing the COTS Regional Trauma Registry; convening stakeholder groups to ascertain local trauma care issues; and teaching stakeholders about "getting the right (trauma) patient to the right hospital in the right amount of time." Trauma stakeholders had not heard of COTS, nor did they know what a "regional trauma system" was. Originally, only hospitals, EMS and public health within Franklin County were involved with COTS, but it did not take long for contiguous counties to participate once they recognized the benefits of regional collaboration through COTS. COTS has grown from serving stakeholders in one county, to serving stakeholders in twenty Central Ohio counties.

Ten years later, COTS is a significant force in the Central Ohio community around issues of trauma and emergency services. COTS is THE organization where patient care issues affecting more than one stakeholder group can be brought and addressed in a neutral forum. COTS is the one place in Central Ohio where no matter which stakeholder groups are involved in addressing the issue---hospitals, EMS, public health---the PATIENT is always at the center of decisions being made. COTS' work is to ultimately benefit patients, although no direct patient care services are provided through COTS. COTS facilitates the work of often-disparate disciplines of emergency medical care providers who are passionate about patients, saving lives, and improving healthcare systems. In the COTS forum, stakeholders who "show up" to address issues are considered to be *colleagues* regardless of their discipline.

Over the years, COTS has expanded its focus from "trauma-only" to also include emergency medical care issues such as emergency department diversion, patients with STEMI and strokes, and transportation of patients with concealed carry weapons. Most recently, COTS has taken on a large role in coordinating the collective disaster preparedness of the region's hospitals and other health care systems.

The first ten years have seen the tremendous growth of COTS as a community asset. COTS' success is due to the tireless dedication of many stakeholders---physicians, nurses, EMS providers, public health experts, emergency response personnel, registrars, program coordinators, administrators and countless others. If you have not been a part of COTS, now is the time to check us out and see how we might help improve an aspect of your program area. Given the continued involvement of collaborative partners, the next ten years are likely to be just as dynamic and successful as the first ten!

Sincerely,



Clifford L. Mason, Fire Chief, EMT-P, OFE  
COTS President

## **MISSION, PURPOSE, GOALS, CORE VALUES**

The Central Ohio Trauma System (COTS) mission is to save and improve lives through the coordination of trauma and emergency healthcare resources. COTS supports prevention, education, data collection and research initiatives. COTS' purpose is to serve as the forum for addressing issues affecting the delivery of trauma/emergency healthcare services and injury prevention in central Ohio.

COTS' goals are to:

- Improve patient outcomes
- Advance practice efficiency
- Enhance the preparedness and response of the Central Ohio healthcare community in emergencies and disasters
- ◆ Save costs to patients, caregivers, institutions and the community overall from healthcare associated with medical emergencies and trauma
- ◆ Serve as a community resource/expert on trauma and emergency service issues

COTS' objectives include:

- ◆ The establishment of an inclusive system where community partners work together to resolve issues associated with trauma services, emergency care, and healthcare-related disaster preparedness
- ◆ Reliable data analysis on the region's trauma patients to improve patient care; to provide a basis for focusing initiatives on areas of highest need; and to provide benchmarks for measuring progress
- ◆ Stakeholder participation in a trusted COTS-facilitated process that accomplishes:
  - ~ Central Ohio resources working together for a reduction in deaths and permanent disabilities from trauma and emergency health issues
  - ~ Enhanced emergency care
  - ~ Improved collaboration among healthcare and community services
  - ~ Expanded public education with regards to injury prevention
  - ~ Comprehensive preparedness and response by local healthcare partners in disasters
- ◆ To be the recognized leader addressing issues related to trauma, emergency services, and healthcare disaster preparedness in Central Ohio

COTS' core values are service-oriented and include:

- ◆ Inclusiveness
- ◆ Collaboration
- ◆ Integrity
- ◆ Transparency
- ◆ Evidence-based work
- ◆ Excellence

COTS is a voluntary, cooperative, self-regulatory organization and maintains a 501(c)(3) Internal Revenue status for charitable, educational and scientific intent. COTS is also an affiliate organization of the Columbus Medical Association.

## **BOARD OF TRUSTEES**

The COTS Board of Trustees is comprised of health care experts from hospitals and emergency medical services (EMS) providers serving Franklin County and contiguous counties; physicians from the Columbus Medical Association; and representatives from local government health agencies. The COTS Board meets quarterly; meetings are open to all healthcare providers and the public.

The following individuals are currently serving as Officers of COTS.

**Clifford L. Mason**, Fire Chief, EMT-P, OFE, Madison Township Fire Department, Groveport, Ohio; representing the Franklin County Fire Chiefs, Columbus, Ohio; *COTS President*

**Kathryn J. Haley**, RN, BSN, Trauma Program Manager, Nationwide Children's Hospital, Columbus, Ohio; *COTS Immediate Past-President*

**Robert A. Lowe**, MD, FACEP, Emergency Medicine, EMS Medical Director, Doctors Hospital, Columbus, Ohio; *COTS Vice-President*

**Susan A. Tilgner**, MS, RD, LD, RS, Franklin County Health Commissioner, Franklin County Board of Health; representing the Franklin County Commissioners, Franklin County, Ohio; *COTS Secretary-Treasurer*

The following individuals are appointed by their institutions to serve on the COTS Board of Trustees.

**Angela Allion**, RN, MSN, Manager, Emergency Services, Fairfield Medical Center, Lancaster, Ohio

**David Boehmer**, DO, FACEP, Medical Director, Emergency Services, Dublin Methodist Hospital, Dublin, Ohio

**Jennifer A. Bogner**, PhD, Director of the Ohio Valley Center for Brain Injury Research & Prevention, Department of Physical Medicine and Rehabilitation, The Ohio State University Medical Center, Columbus, Ohio

**Marco J. Bonta**, MD, FACS, Medical Director, Trauma & Surgical Services, Riverside Methodist Hospital, Columbus, Ohio

**Mary Jean Botos**, RN, BSHM, Director Risk Management, Quality & Accreditation, Mount Carmel New Albany, New Albany, Ohio

**Philip H. Cass**, PhD, CEO, Columbus Medical Association, Columbus Medical Association Foundation, the Physicians Free Clinic, and COTS (Ex-officio)

**Robert W. Coles**, Deputy Chief of Special Operations, Columbus Division of Fire, Columbus, Ohio

**Michael R. Dick**, MD, Medical Director, Emergency Medicine, The Ohio State University Hospitals East, Columbus, Ohio

**Robert E. Falcone**, MD, FACS, Consultant; Past-President Grant Medical Center, Columbus, Ohio; *COTS Past-President & Trustee Emeritus*

**Jonathan I. Groner**, MD, FACS, Trauma Medical Director, Nationwide Children's Hospital, Columbus, Ohio; representing the Columbus Medical Association; *COTS Past-President*

**Lucinda F. Hill**, RN, BSN, Trauma Nurse Coordinator, Southeastern Ohio Regional Medical Center, Cambridge, Ohio

**Robert Kaufman**, Assistant Chief/EMTP, Norwich Township Fire Dept., Hilliard, Ohio; representing the Franklin County Fire Chiefs Association

**K. William Kumler**, MD, Columbus Bone, Joint & Hand Surgeons, Columbus, Ohio; representing the Columbus Medical Association

**Loren Leidheiser**, DO, FACEP, Chairman & Director, Dept. of Emergency Medicine, Mount Carmel St. Ann's, Westerville, Ohio

**Bradley Lewis**, MD, Franklin County Coroner, Franklin County Coroner's Office, Columbus, Ohio

**Medard R. Lutmerding**, MD, FACEP, Department of Emergency Medicine, Mt. Carmel West and East, Columbus, Ohio representing the Columbus Medical Association

**Nikki McKee**, RN, Manager, Emergency Department, Pike Community Hospital, Waverly, Ohio

**Richard N. Nelson**, MD, FACEP, Professor & Vice Chair of the Department of Emergency Medicine, The Ohio State University College of Medicine, Columbus, Ohio; representing the Columbus Medical Association

**Robert E. Newland**, EMTP, EMS Liaison, Emergency Services, Adena Regional Medical Center, Chillicothe, Ohio

**Jennifer A. Piccione**, RN, Director of Ambulatory Care Services, Madison County Hospital, London, Ohio

**Ty Sanders**, RN, Director of Emergency Services, Knox Community Hospital, Mt. Vernon, Ohio

**Steven A. Santanello**, DO, Director Trauma Services, Grant Medical Center, Columbus, Ohio

**James M. Sinard**, MD, FACS, Director Trauma Services, Mount Carmel West, Columbus, Ohio

**Robin Slattman**, RN, MS, Chief Nursing Officer, Memorial Hospital of Union County, Marysville, Ohio

**Mike Smeltzer**, MPH, Director Clinical Preventative Services, Columbus Public Health Department, Columbus, Ohio

**Steven M. Steinberg**, MD, FACS, Director Division of Critical Care, Trauma & Burn, The Ohio State University Medical Center, Columbus, Ohio

**Kimberly S. Thompson**, RN, BSN, Manager Emergency Services, Grady Memorial Hospital, Delaware, Ohio

**Joseph Tulga**, Director of Safety & Security, Marion General Hospital, Marion, Ohio

**Porter R. Welch**, Fire Chief, EMTP, OFE, Fire Chiefs Association of Central Ohio, Columbus, Ohio  
**Howard Werman**, MD, FACEP, Medical Director, Medflight of Ohio, Columbus, Ohio  
**Debora Yarborough**, RN, MA, Director of Emergency Services, Berger Health System, Circleville, Ohio  
**Paul Zeeb**, MD, FCEP, Medical Director, Emergency Services, Mount Carmel East, Columbus, Ohio

## COMMUNITY COLLABORATION

The majority of COTS work is done through its committees. Over 250 community members participated in one or more of COTS committees in 2007-08. The following organizations had one or more representatives serve on a COTS committee and/or participate in a COTS-committee-driven initiative this past year.

Adena Regional Medical Center, Chillicothe, Ohio  
American Red Cross of Greater Columbus, Columbus, Ohio  
Barix Clinics of Ohio, Groveport, Ohio  
Battelle, Columbus, Ohio  
Berger Health System, Circleville, Ohio  
Bucyrus Community Hospital, Bucyrus, Ohio  
Central Ohio Amateur Radio Emergency Services, Columbus, Ohio  
Central Ohio Poison Control Center, Columbus, Ohio  
Clinton Township Fire Department, Columbus, Ohio  
Columbus Bomb Squad, Division of Fire, Columbus, Ohio  
Columbus Coalition Against Family Violence, Columbus, Ohio  
Columbus Division of Fire, Columbus, Ohio  
Columbus Division of Police, Columbus, Ohio  
Columbus Medical Association, Columbus, Ohio  
Columbus Medical Association Foundation, Columbus, Ohio  
Columbus Public Health, Columbus, Ohio  
Concord Township Fire Department, Delaware, Ohio  
Coshocton County Memorial Hospital, Coshocton, Ohio  
Delaware City Fire Department, Delaware, Ohio  
Delaware County Fire Department, Delaware, Ohio  
Doctors Hospital, Columbus, Ohio  
Dublin Methodist Hospital, Dublin, Ohio  
Fairfield Medical Center, Lancaster, Ohio  
Fayette County Health Department, Washington Court House, Ohio  
Fayette County Memorial Hospital, Washington Court House, Ohio  
Fire Chiefs Association of Central Ohio  
FirstLink, Columbus, Ohio  
Franklin County Board of Health, Columbus, Ohio  
Franklin County Coroner's Office, Columbus, Ohio  
Franklin County Fire Chiefs Association, Columbus, Ohio  
Franklin County Fire Fighters Association/Grant Medical Center EMS Education, Columbus, Ohio  
Franklin County Emergency Management & Homeland Security Agency, Columbus, Ohio  
Franklin County Police Chiefs Association, Worthington, Ohio  
Franklin Township Fire Department Columbus, Ohio  
Galion Community Hospital, Galion, Ohio  
Grandview Heights Division of Fire, Grandview Heights, Ohio  
Genesis Healthcare System, Zanesville, Ohio  
Genoa Township Fire Department, Galena, Ohio  
Grady Memorial Hospital, Delaware, Ohio  
Grant Medical Center, Columbus, Ohio  
Hamilton Township Fire Department, Columbus, Ohio  
Hardin Memorial Hospital, Kenton, Ohio

Hilliard Division of Police, Hilliard, Ohio  
Jackson Township Fire Department, Grove City, Ohio  
Jefferson Township Fire Department, Blacklick, Ohio  
Jerome Township Fire Department, Plain City, Ohio  
Knox Community Hospital, Mt. Vernon, Ohio  
Liberty Township Fire Department, Powell, Ohio  
Licking Memorial Hospital, Newark, Ohio  
Madison County Hospital, London, Ohio  
Madison Township Fire Department, Groveport, Ohio  
Marion General Hospital, Marion, Ohio  
Mary Rutan Hospital, Bellefontaine, Ohio  
Medflight of Ohio, Columbus, Ohio  
Memorial Hospital of Union County, Marysville, Ohio  
Mifflin Township Division of Fire, Gahanna, Ohio  
Monroe Township Fire Department, Johnstown, Ohio  
Morrow County Hospital, Mt. Gilead, Ohio  
Mount Carmel East, Columbus, Ohio  
Mount Carmel New Albany Surgical Hospital, New Albany, Ohio  
Mount Carmel St. Ann's, Westerville, Ohio  
Mount Carmel West, Columbus, Ohio  
Morrow County Firefighters & Squadsman Association  
Nationwide Children's Hospital, Columbus, Ohio  
Newark Division of Fire, Newark, Ohio  
Northwest Area Strike Team, Franklin County, Ohio  
Norwich Township Fire Department, Hilliard, Ohio  
OhioHealth, Columbus, Ohio  
Ohio Department of Health, Columbus, Ohio  
Ohio Domestic Violence Network, Columbus, Ohio  
Ohio Orthopedic Institute, Columbus, Ohio  
The Ohio State University Medical Center, Columbus, Ohio  
The Ohio State University Hospital East, Columbus, Ohio  
Orange Township Fire Department, Delaware, Ohio  
Pike Community Hospital, Waverly, Ohio  
Plain Township Fire Department, New Albany, Ohio  
Prairie Township Fire Department, Columbus, Ohio  
Riverside Methodist Hospital, Columbus, Ohio  
Southeastern Ohio Regional Medical Center, Cambridge, Ohio  
State of Ohio Fire Marshal's Office, Columbus, Ohio  
Twin Valley Behavioral Health, Columbus, Ohio  
Truro Township Fire Department, Reynoldsburg, Ohio  
United States Army, 52<sup>nd</sup> WMD Civil Support Team, Dayton, Ohio  
Union County Health Department, Marysville, Ohio  
Upper Arlington Division of Fire, Upper Arlington, Ohio  
Violet Township Fire Department, Pickerington, Ohio  
Washington Township Fire Department, Dublin, Ohio  
Westerville Division of Fire, Westerville, Ohio  
Westerville Division of Police, Westerville, Ohio  
Whitehall Division of Fire, Whitehall, Ohio  
Worthington Division of Fire, Worthington, Ohio  
Wyandot Memorial Hospital, Upper Sandusky, Ohio

## FUNDING

Community support for COTS is also demonstrated in its funding base. The Columbus Medical Association Foundation continues to be a strong supporting partner, providing 24% of COTS annual operating costs. The following agencies provided funding to sustain COTS operations in 2007-2008.

Adena Regional Medical Center, Chillicothe, Ohio  
Berger Health System, Circleville, Ohio  
Columbus Coalition Against Family Violence, Columbus, Ohio  
Columbus Division of Fire, Columbus, Ohio  
Columbus Medical Association Foundation, Columbus, Ohio  
Columbus Public Health Department, Columbus, Ohio  
Coshocton County Memorial Hospital, Coshocton, Ohio  
Doctors Hospital, Columbus, Ohio  
Dublin Methodist Hospital, Dublin, Ohio  
Fairfield Medical Center, Lancaster, Ohio  
Fire Chiefs Association of Central Ohio  
Franklin County Fire Chiefs Association, Columbus, Ohio  
Franklin County Homeland Security Advisory Council, Columbus, Ohio  
Genesis Healthcare System, Zanesville, Ohio  
Grady Memorial Hospital, Delaware, Ohio  
Grant Medical Center, Columbus, Ohio  
Jefferson Township Fire Department, Blacklick, Ohio  
Jerome Township Fire Department, Plain City, Ohio  
Knox Community Hospital, Mt. Vernon, Ohio  
Liberty Township Fire Department, Powell, Ohio  
Madison County Hospital, London, Ohio  
Madison Township Fire Department, Groveport, Ohio  
Marion General Hospital, Marion, Ohio  
Memorial Hospital of Union County, Marysville, Ohio  
Mifflin Township Division of Fire, Gahanna, Ohio  
Morrow County Hospital, Mt. Gilead, Ohio  
Mount Carmel East, Columbus, Ohio  
Mount Carmel New Albany Surgical Hospital, New Albany, Ohio  
Mount Carmel St. Ann's, Westerville, Ohio  
Mount Carmel West, Columbus, Ohio  
Nationwide Children's Hospital, Columbus, Ohio  
The Nationwide Foundation, Columbus, Ohio  
Newark City Fire Department, Newark, Ohio  
Ohio Department of Health, Bureau of Environmental Health, Columbus, Ohio  
Ohio Medical Transportation Inc. / Medflight of Ohio, Columbus, Ohio  
Orange Township Fire Department, Delaware, Ohio  
Pike Community Hospital, Waverly, Ohio  
Prairie Township Division of Fire, Columbus, Ohio  
The Ohio State University Medical Center, Columbus, Ohio  
The Ohio State University Hospital East, Columbus, Ohio  
Riverside Methodist Hospital, Columbus, Ohio  
Southeastern Ohio Regional Medical Center, Cambridge, Ohio  
Truro Township Division of Fire, Reynoldsburg, Ohio  
Upper Arlington Division of Fire, Upper Arlington, Ohio  
Washington Township Fire Department, Dublin, Ohio

The following individuals also contributed to COTS in 2007-08.

Nancie Bechtel  
Asha Bhagat  
Jennifer Bogner  
Abigail Cowan  
Judy D'Andrea  
Jonathan I. Groner  
Kathryn Haley  
Virginia Haller  
Pat Klimek  
K. W. Kumler  
Loren Leidheiser  
Medard R. Lutmerding  
Clifford Mason  
Harlan D. Meyer  
Richard N. Nelson  
Robert E. Newland  
Ty Sanders  
Steven A. Santanello  
James M. Sinard  
Michael Smeltzer  
Steven M. Steinberg  
Susan Tilgner  
United Way of Central Ohio (Anonymous)  
V. E. White  
Jocelyn Zerkle-Kidd

*Contributions to COTS are tax-deductible. For more information on supporting COTS general operations or contributing to the COTS Endowment Fund, contact (614) 240-7420, extension 120. For a copy of the COTS 2007 Annual Audit, contact Nancie Bechtel at (614) 240-7419.*

## **STAFF SUPPORT**

The following staff supports COTS work.

Philip H. Cass, PhD, CEO, Columbus Medical Association, Columbus Medical Association Foundation, Physicians Free Clinic, and COTS  
Nancie M. Bechtel, RN, BSN, MPH, CEN, EMTB, Executive Director  
Marshal A. Bickert, MPH, Associate Director of Emergency Preparedness  
Nora L. Bolon, Emergency Preparedness Associate  
Barbara J. Clark, Financial Associate  
Janelle N. Clark, RNC, Nurse Educator  
Judy D'Andrea, MSW, MBA, Chief Operating Officer  
Roxanna L. Giambri, BS, RHIA, Trauma Registry Coordinator  
Barb Lyon, BS, MEP, Healthcare Training and Exercise Coordinator; Interim Central Region Healthcare Emergency Preparedness Coordinator  
Melissa S. Rose, BS, Critical Incident Response Planner  
Jacklyn A. Shaffer, RN, MS, Medical Surge Planner  
Christine M. Sheppard, BS, Education Coordinator  
Tara L. Wilcox, MBA, Administrative Assistant

## COMMUNITY SERVICE & LEADERSHIP

COTS work is driven in one of two ways: (1) By issues and requests presented from participating stakeholders at the committee level; and/or (2) Directed to a committee by the COTS Board based on a perceived community need. COTS work is achieved via voluntary participation and a community collaboration process.

COTS provides ongoing support for its stakeholder committees. COTS committees serve as the neutral “place” where community issues related to trauma, emergency healthcare services, and/or health system disaster preparedness can be presented, openly discussed, and addressed.

COTS committee membership is open to any interested members of the central Ohio community. Over 250 community volunteers including physicians, nurses, paramedics and public health experts currently serve on one or more COTS committee. COTS committees have the latitude to address community issues related to trauma, emergency services and healthcare-related disaster preparedness under a community consensus process; all major initiatives must be ultimately approved by the COTS Board. Local trauma and emergency services healthcare leaders (hospital CEOs/presidents, fire chiefs, health commissioners) along with COTS leadership sign off on written community care guidelines before they are disseminated in the region.

Each COTS committee has a distinct focus with Board-delineated roles and responsibilities aimed at enhancing trauma and/or emergency healthcare services for central Ohioans. Local stakeholders serve as COTS Committee chairpersons. The committees meet monthly, bi-monthly, or quarterly depending on need. A list of COTS committees as well as their co-chairs, roles and responsibilities are as follows.

**Executive/Finance Committee**, *Clifford Mason, Fire Chief, EMTP, OFE (Madison Township Fire Department), & Robert A. Lowe, MD, FACEP (Doctors Hospital), Co-Chairs*

- ◆ Manages the general business of the COTS Board of Trustees and coordination of COTS committee projects/work
- ◆ Oversees COTS' legal activities and legal documents
- ◆ Assesses budgetary needs and drafts the Annual Budget; oversees the Budget and accounting
- ◆ Assists with grant-seeking and writing
- ◆ Establishes public and corporate partnerships to promote the COTS mission and goals in the community; establishes community partnerships to aid in financial support
- ◆ Facilitates long-term financial planning
- ◆ Coordinates COTS Internal Review Board to allow information sharing from COTS Registry with legitimate researchers and community agencies; oversees COTS Trauma Registry data for publication and research
- ◆ Publishes the bi-ennial injury report on trauma to the Community
- ◆ Liaisons with State trauma-related groups (State EMS Board, State Trauma Committee, State Registry Advisory Committee, Region V Regional Physicians Advisory Board)
- ◆ Oversees other executive-related activities as directed by the COTS Board of Trustees

**Central Ohio Burn Education Coalition (COBEC)**, *Rebecca A. Coffey, RN, MSN, CNP (The Ohio State University Medical Center), & Sheila Giles, RN, CPN (Nationwide Children's Hospital), Co-Chairs*

- ◆ Provides a forum for local hospital burn programs and fire department personnel
- ◆ Conducts fire and burn public education and prevention initiatives in conjunction with local division of fire partners
- ◆ Establishes public burn prevention initiatives
- ◆ Links COTS burn prevention initiatives to existing community agencies in order to maximize resources and minimize duplication of local efforts
- ◆ Engages in other burn prevention activities as directed by the COTS Board of Trustees

**Clinical Trauma Committee**, *Sally Betz, RN, MSN, CCRN (The Ohio State University Medical Center), & Steven A. Santanello, DO, FACS, (Grant Medical Center), Co-Chairs*

- ◆ Monitors trauma care from a regional perspective as consistent with mandates of Ohio legislation related to trauma victims; assesses regional trauma care trends
- ◆ Conducts regional trauma care process improvement initiatives
- ◆ Recommends clinical trauma protocols based on data analysis from COTS' Registry
- ◆ Coordinates professional continuing medical and nursing education related to trauma care
- ◆ Establishes regional baseline standards for Level I and Level II trauma alert criteria
- ◆ Assists regional hospitals in complying with the establishment of written protocols and transfer agreements as mandated by Ohio law
- ◆ Undertakes other clinically-related activities relevant to trauma care as directed by the COTS Board of Trustees

**Diversion Committee**, *Medard R. Lutmerding, MD, FACEP (Mount Carmel Health System), Chair (election of Co-Chair pending)*

- ◆ Provides a forum for hospitals, emergency departments, and emergency medical services to address issues related to regional diversion patterns
- ◆ Established, maintains and oversees the Regional Emergency Care Access Plan (RECAP) and Emergency Patient Transport Plan (EPTP)
- ◆ Provides oversight for regional performance improvement related to diversion
- ◆ Oversees the regional diversion database/real-time emergency department status website
- ◆ Engages in other diversion and patient access-related activities as directed by the COTS Board

**Ethics Committee**, *Ad Hoc*

- ◆ Addresses ethical issues that affect COTS and its members
- ◆ Serves as an expert resource on the issues of:
  - ~ The ethical and moral responsibility of staff to respond to their hospital of employment in a weapons of mass destruction or natural disaster event
  - ~ The ethical allocation of resources when need exceeds availability
  - ~ The discussion of other ethical and moral medical community dilemmas faced during a disaster, as directed by the COTS Board

**Injury Prevention Committee**, *Amy Wermert, MPH (Grant Medical Center), & Dara Bakes, BS, EMT-P (Riverside Methodist Hospital), Co-Chairs*

- ◆ Assesses injury trends in Central Ohio via COTS Registry data and other databases as appropriate
- ◆ Establishes and oversees injury prevention initiatives based on community need
- ◆ Liaisons COTS injury prevention activities with other injury prevention stakeholders in Central Ohio
- ◆ Provides a forum for Central Ohio hospitals' injury prevention coordinators to collaborate and share resources

**Pre-Hospital Committee**, *Thomas J. Gavin, MD, FACEP (Dublin Methodist Hospital), & Alan G. Gora, MD, FACEP (Mount Carmel Health System), Co-Chairs*

- ◆ Provides a forum for resolution of community-wide EMS / hospital issues (other than diversion)
- ◆ Assesses pre-hospital trauma care trends and recommends protocol changes based on need
- ◆ Coordinates pre-hospital trauma training as requested by the emergency medical services community
- ◆ Establishes and evaluates EMS field triage destination protocols of trauma victims
- ◆ Establishes regional protocols/guidelines as needed to promote emergency services care; provides oversight and ongoing assessment of existing regional protocols/guidelines
- ◆ Assists with community disaster management planning involving hospitals and EMS
- ◆ Engages in other prehospital-related activities as directed by the COTS Board of Trustees

**Regional Hospital Emergency Preparedness (RHEP) Committee**, *Medard R. Lutmerding, MD, FACEP (Mount Carmel Health System), & Jodi Keller, RN (Bucyrus Community Hospital), Co-Chairs*

- ◆ Assists central Ohio hospitals with regional disaster management planning and exercises to maximize local resources in the event of a mass-casualty event

- ◆ Liaisons central Ohio hospitals with the city, region, and state in disaster/terrorism preparedness efforts
- ◆ Oversees the COTS Hospital Incident Liaison (HIL) role to assist Central Region hospitals, the Central Ohio community, and the State with healthcare response in a large-scale, mass-casualty incident
- ◆ Helps hospitals receive preparedness funding and meet deliverables of the Health Services Resources Administration (HRSA); the Assistant for Preparedness and Response (ASPR); the Urban Area Security Initiative (UASI); Occupational Safety & Health Administration (OSHA); Joint Commission; the Ohio Department of Health (ODH); and the Ohio Hospital Association (OHA)
- ◆ Oversees other regional disaster preparedness activities as directed by the COTS Board

*Note: The RHEP has several subcommittees working on specific aspects of preparedness planning & response: Hospital Emergency Preparedness Education & Exercises; Levels of Surge; Pan Flu; Pediatric Surge; PPE/Decon; Safety and Security; & Disaster Triage*

**Registry Committee**, *Rena Kable, RHIT, CSTR, CAISS (Nationwide Children's Hospital), & Peggy Rhoades, CSTR (The Ohio State University Medical Center), Co-Chairs*

- ◆ Establishes procedures for trauma registry data submission in accordance with State guidelines, regional requirements, and hospitals' needs
- ◆ Assesses COTS Registry software needs
- ◆ Provides ongoing education for hospital registry-related personnel via a COTS Registry manual and on-site one-on-one Registry data abstraction training
- ◆ Monitors data quality, reliability, and validity
- ◆ Participates in other registry-related activities as directed by the COTS Board of Trustees

**Stroke Committee**, *Duane Kusler, RN, MBA (Nationwide Children's Hospital), & Jack McCoy, EMTP (Washington Township Fire Department), Co-Chairs*

- ◆ Provides a forum for discussion of stroke care issues in Central Ohio
- ◆ Establishes recommendations for the uniform screening of suspected stroke patients
- ◆ Completes and disseminates to EMS an accurate assessment of Central Ohio Hospitals stroke capabilities
- ◆ Develops an educational plan for EMS colleagues inclusive of a uniform screening tool and destination guidelines
- ◆ Implements and oversees a regional process improvement plan for the emergency care of stroke patients in Central Ohio
- ◆ Engages in other activities related to the assessment and care of stroke patients as directed by the COTS Board of Trustees

**Sudden Cardiac Arrest Committee**, *Lyn Nofziger, Lt., EMTP (Upper Arlington Division of Fire), & Michael R. Sayre, MD (The Ohio State University Hospitals), Co-Chairs*

- ◆ Provides a forum for discussion of sudden cardiac arrest (SCA) care issues in Central Ohio
- ◆ Establishes regional recommendations and/or guidelines for the care of SCA patients
- ◆ Establishes sample EMS protocols for the care of SCA patients
- ◆ Engages in other activities related to SCA care as directed by the COTS Board of Trustees

*Several of these COTS Committees have one or more active subcommittee. COTS committee membership is open to any interested members of the central Ohio community. For information about their work and/or to join any COTS Committee, contact (614) 240-7419.*

## **COTS ACTIVE COMMUNITY INITIATIVES**

COTS has maintained several ongoing initiatives and established some new ones in 2007-08. COTS Board, Committees and staff continually evaluate COTS work for relevance and community improvement. As the following COTS work is described, the reader can realize that the verbiage for "what COTS did" is recounting

**dedication to patients by many physicians, nurses, EMS providers, public health experts, emergency response personnel, registrars, program coordinators, administrators and countless others in Central Ohio. None of COTS successes can be claimed by any one person, discipline or group.**

**Regional Trauma Registry.** Ohio law mandates that hospitals report trauma data to the Ohio Trauma Registry (OTR). COTS serves as the regional repository for submission of Central Ohio hospitals' trauma data to the OTR. The COTS Trauma Registry has collected data on over 87,000 trauma admissions since its inception in 1999. This trauma data is used by:

- ◆ COTS to ascertain that the best possible care is being provided to local citizens
- ◆ COTS to achieve system-wide improvements in the trauma and emergency care system
- ◆ The public at-large via a biennial community injury report
- ◆ Columbus Public Health Department in planning community prevention initiatives
- ◆ Central Ohio hospitals to improve patient care
- ◆ Community planners working to reduce injuries
- ◆ Researchers studying an aspect of trauma in the community
- ◆ The Ohio Trauma Registry (Ohio Department of Public Safety)
- ◆ The National Trauma Data Bank (Chicago, IL)

The COTS Registry captured **11,536** trauma patients in 2007. This means that there were over 11,000 patients in Central Ohio injured to the extent that they were admitted to a hospital for multiple days because of a serious, potentially life-threatening injury. 353 of these 11,000-plus patients died in hospitals as a result of their trauma. In central Ohio, **falls** are the leading cause of trauma-related hospitalization, while **gunshot wounds** are the leading cause of trauma deaths among those hospitalized. **Motor vehicle crashes** are also a leading mechanism for unintentional trauma fatalities.

*For a copy of COTS community injury report, contact COTS at (614) 240-7419.*

**Regional Health System Preparedness Planning & Response.** COTS is the regional coordinator for 27 Central Region hospitals' collective disaster planning and response. (The Central Region is a cluster of 15 Central Ohio counties as delineated by the Ohio Department of Homeland Security.) COTS provides a forum where hospital experts from various departments---emergency, trauma, administration, safety, security, infectious disease and laboratory services among others---address key preparedness issues in relation to local, state and federal plans. In addition, COTS and Central Region hospitals work with other community partners such as law enforcement, fire, EMS, public health, and emergency management on preparedness initiatives as appropriate. COTS has been working with the Central Ohio community to advance disaster preparedness since 1998.

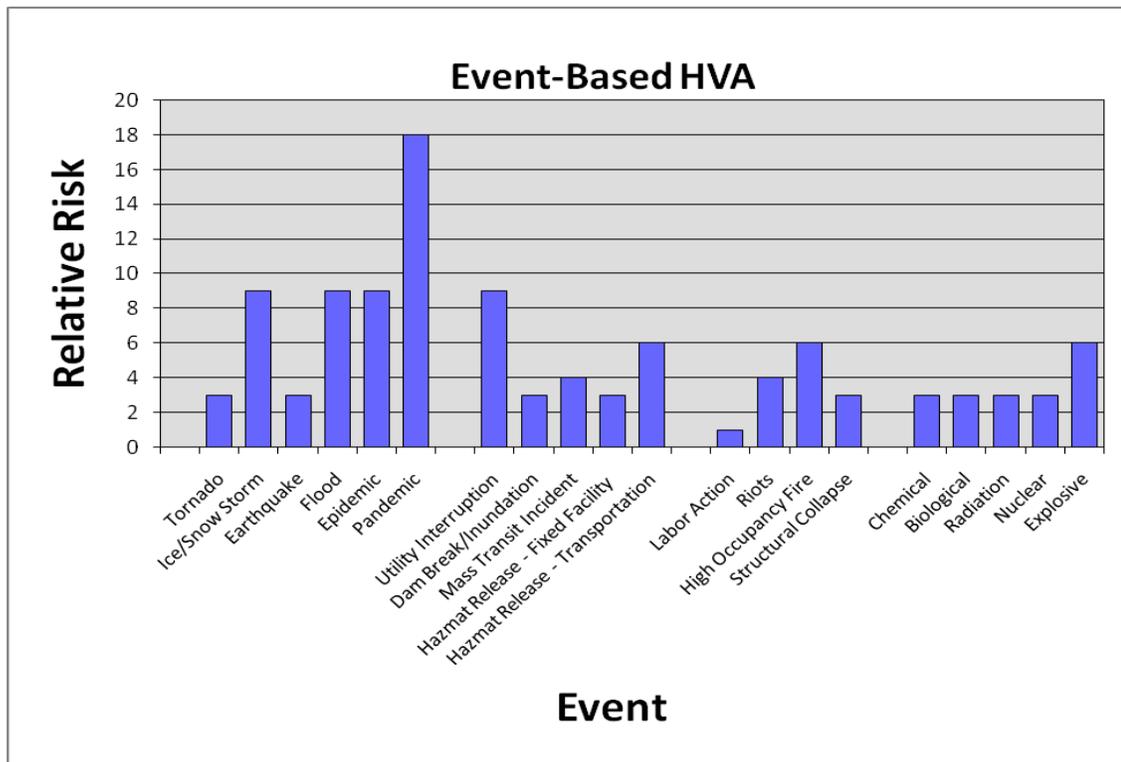
In 2007-08, COTS coordinated a number of disaster preparedness and response initiatives. Interoperability among systems is key during a disaster as equipment and human resources may be moved among systems. COTS strives for interoperability among healthcare systems and community first responders when conducting disaster planning initiatives.

- ◆ *Hospital Incident Liaison:* COTS serves as the Central Ohio **Hospitals' Incident Liaison** or **HIL**. The COTS HIL is on-call around the clock, 365 days a year, to serve as a clearinghouse for information and to assist with allocation of resources to hospitals during a disaster. The COTS HIL role is written into city, county, regional and state emergency response plans. COTS is proactive and preemptively contacts hospitals in potential disasters such as during tornado warnings. COTS created the Central Ohio Hospital Emergency Alert System which uses the Telephone Emergency Notification System to rapidly notify hospitals of emergency situations.
- ◆ *Preparedness Funding to Hospitals:* COTS serves as a pass-through agency for federal preparedness funds to local hospitals and other health care partners. **2007-08 saw Central Ohio hospitals receive over \$653,000**

**directly through COTS from these funds.** Central Region hospitals strategically used these dollars to purchase equipment, supplies and training necessary for chemical, biological, radiological, nuclear, explosive and environmental (CBRNEE) disaster response. **An additional 2.5 million dollars in HRSA/ASPR funding was spent through COTS these same years on regional equipment caches and training to benefit patient care that will be rendered by Central Region health systems in the event of large number of disaster victims.**

- ◆ *Assessment of Regional Threats and Capabilities:* COTS works to assess Central Region hospitals’ threats and capabilities. Individually and collectively, the HVAs and resource assessments drive COTS’ strategic planning and preparedness initiatives in the region. Gaps are identified and addressed to meet regional, state and federal target capabilities in order to assure the best care possible for the greatest number of victims in a large-scale disaster.

~ *Hazard Vulnerability Assessments:* COTS coordinates Central Region hospitals’ completion of an annual Hazard Vulnerability Assessment (HVA). The HVA includes potential hazards; the probability of the hazard occurring; the impact that the hazard could have on the community; and primary outcomes if the hazard occurs. The hazard relative risk and outcome relative risk chart for Central Ohio is below.



~ *Hospital Capabilities:* COTS routinely assesses Central Region hospitals’ resources for ready-communications, pharmaceutical prophylaxis and treatment, decontamination, personal protective equipment (PPE), other emergency equipment stockpiles and hospital surge capacity.

~ *Hospital Staff Knowledge of Disaster Events and Response:* COTS provided training for Central Region hospitals on the conversion of the Hospital Emergency Incident Command System (HEICS) to the Hospital Incident Command System (HICS) as part of the National Incident Management System (NIMS). Nearly all Central Region hospitals are now NIMS compliant. COTS provides ongoing training on HICS as needed. In 2007, COTS also conducted an assessment of Central Region hospital staff’s educational

needs related to emergency preparedness. COTS completed guidance for hospitals which details the competencies and training for each position in the Hospital Incident Command System (HICS) at the management level. COTS also published a course listing to meet these training needs. Via the ASPR and UASI grants, COTS was also able to provide funding for training and backfill to hospital staff, with the intent of creating a larger pool of local subject matter experts. Such training included courses such as *Exercise Program Basics, Resource Management, (FEMA 703), Fundamentals of Healthcare Emergency Management (FEMA B965); WMD Technical Emergency Response Training (FEMA PER- 260); and Incident Response to Terrorist Bombings (FEMA PER-230)*. Additionally topic-specific webinars with expert speakers will be hosted by COTS. COTS also offered the *Basic Disaster Life Support Course* in the region. Additionally, COTS established a training and exercise plan that correlated to the Strategic Plan for the Central Region Hospitals and grant deliverables.

- ~ *Drills and Exercises:* COTS participates on a number of drills and exercises that advances knowledge of preparedness and response of Central Region hospitals and community responders. COTS incorporates the Homeland Security Exercise and Evaluation Program (HSEEP) into regional drills and exercises as appropriate. COTS also established exercise field kits at Central region hospitals to assist with conducting exercises. Examples of drills that COTS participated in during 2007-08 include:
  - June 2007: Columbus Regional Airport Authority Exercise
  - Sept 6, 2007: Franklin County Full-Scale IED Exercise
  - April 16, 2008: "Operation Evacuation" Tabletop Exercise
  - June 10, 2008: Franklin County Pandemic Influenza Functional Exercise
  - June 12, 2008: Doctors Hospital Drill with Battelle
  - June 21, 2008: Mary Rutan Hospital's Full Scale Surge Exercise
  - June 21, 2008: Logan County's Full Scale Local Emergency Planning Committee (LEPC)
  - July 1, 2008: Statewide Bed Reporting Drill
  - July 10, 2008: Delaware County Pandemic Influenza Functional Exercise
  - July 15, 2008: State Medical Surge Tabletop Exercise
  - July 21, 2008: OhioHealth's Medical Supply Chain Management Tabletop Exercise
  - July 22, 2008: Morrow, Galion and Crawford Counties' Pan Flu Functional Exercise
  - July 22, 2008: Bucyrus Community Hospital's Tabletop Exercise
  - Aug 5, 2008: Northwest Area Strike Team's Full Scale Mass Casualty Exercise
  - Sept 12, 2008 : Columbus Regional Airport Authority Full Scale Exercise
  - Sept 23, 2008: Multi-Regional IED Tabletop Exercise
  - Quarterly: National Disaster Management System (NDMS) bed-tracking drill
  
- ◆ *Surveillance:* COTS collaborated with the Columbus Public Health Department to integrate the RODS (Real-time Outbreak and Disease Surveillance) system and BioSense program with Central Region urban hospitals. COTS works with Central Region hospitals and local public health as needed to facilitate the Communicable Disease Reporting System in large-scale biological incidents. COTS is a partner in the Ohio Public Health Communication System (OPHCS), and coordinated OPHCS training with Central Region Hospitals for ODH.
  
- ◆ *Disaster Communications:*
  - ~ COTS staff carry pagers to be on call 24/7 as the Hospital Incident Liaison (see above).
  - ~ COTS maintains a SharePoint portal to track and assess hospitals' resources and needs during a disaster; all Central Region hospitals participate in the COTS SharePoint site.
  - ~ COTS utilizes "GoToMeeting" and "Webinar" technologies so that regional partners who may be prohibited from traveling distances on a particular day are able to attend regional meetings and on-line trainings.
  - ~ COTS uses the Telephone Emergency Notification System (TENS) to rapidly notify Central Region hospital partners.
  - ~ COTS assists Central Region hospitals in reporting bed availability during disasters and drills via the mandatory State bed availability site known as *SurgeNet*.

- ~ COTS worked with the Central Ohio Amateur Radio Emergency Services to obtain and install HAM radios for 23 Central Region hospital partners who wanted them as a redundant communications system.
  - ~ COTS works with public health representatives to integrate hospitals in the Central Ohio Public Information Network (COPIN) and the Ohio Public Health Communication System (OPHCS).
  - ~ COTS worked with an OHA-contracted vendor to reprogram Central Region hospitals MARCS radios. Similarly, COTS is working with the local 800 MHz committee to assure that the local network of 800 MHz radios used by hospitals for EMS transports are reprogrammed.
- ◆ *Decontamination:* COTS works to improve the region's ability to decontaminate (decon) patients and protect healthcare providers from being contaminated in a disaster event. In relation to decon preparedness:
- ~ COTS works with all Central Region hospitals in the identification and purchase of decon equipment for CBRNE events as appropriate. COTS tracks decon capabilities of all Central Region hospitals.
  - ~ COTS worked with Central Ohio hospitals to augment their fixed decon capabilities so that large numbers of victims could be rapidly decontaminated in a large-scale metropolitan incident. Each hospital with fixed decon capabilities is anticipated to decon 100 patients per hour.
  - ~ COTS established five portable decon trailers in non-metropolitan counties to augment decon capabilities in times of higher risk. These trailers are mobile within the region to decon victims as they arrive at hospitals or on-scene at large public events and festivals should the need arise. COTS convened a workgroup of community partners to write and disseminate a standard operating procedure (SOP) on procurement, utilization and recovery of these decon trailers and their assets. COTS also coordinated training on-site at the respective hospitals in the operation of these trailers.
  - ~ COTS worked with a nationally-known preparedness vendor to draft regional guidelines on hospital decon preparedness. These guidelines serve as a template for preparedness planning and response of Central Region hospitals.
  - ~ COTS worked with a state university who is well-versed in decon preparedness and response to develop and deliver a series of courses to train hospital-based decon teams in the idiosyncrasies of decon response. Forty-hour courses helped train hospitals' decon team leaders, and eight-hour, hands-on courses provided practical training of hospitals' decon team members. Additionally, modules with both a didactic and interactive skills component were developed for ongoing training of hospital decon team members.
  - ~ COTS also established regional guidance for hospitals' Decon Team Leader role. This guidance provides a framework for maintaining and further developing this unique role.
- ◆ *Staff Safety:* Assuring appropriate decon capabilities at hospitals as described above is one aspect of staff safety in the event of a disaster involving contaminated patients. COTS does additional work related to promoting the safety of hospital staff in the event of a disaster.
- ~ *Personal Protective Equipment (PPE):* COTS worked with hospitals and other responders to stockpile PPE including goggles for eye protection, gloves, splash-protective gowns, N95 masks, half-face respirator masks, half-face respirator filters, and portable air-purifying respirators (PAPRS).
  - ~ *Access Control Guidance:* COTS established regional guidance on lockdown procedures for Central Region hospitals in the event of select terrorist/disaster events.
  - ~ *Bomb/Improvised Explosive Device (IED)/Active Aggressor Guidance:* COTS established regional hospital guidance for bomb threats and incidents involving suicide bombers and/or active aggressors. This guidance will be used by Central Region hospitals as they establish institutional plans around these select high risk terrorist incidents.
- ◆ *Laboratory Readiness:* Central Region hospitals must have rapid and accurate laboratory capabilities to care for patients and the general public in the event of a large-scale biologic event. In conjunction with community experts, COTS provided training recommendations for hospital lab personnel on packaging and shipping lab specimens to ensure swift referral to laboratory response network (LRN) facilities. Training CDs were provided to address safe and appropriate shipping of infectious samples.

◆ *Disaster Patient Care:*

- ~ *Triage:* COTS worked with Central Region hospitals and EMS providers to standardize a disaster triage process in the region that is interoperable and fluid in and between the prehospital and hospital environments. The *SMART® Triage System* was selected. Training via a train-the-trainer model was provided in partnership with *Norwich Township Fire Department* (Hilliard, Ohio, 2007) and *BoundTree Medical* (2008). Every Central Region County hospital and EMS partner was invited to participate. SMART triage training packs were provided to hospitals and EMS agencies for continued training. SMART triage supplies were purchased for every Central Region County to triage 1,000+ victims in a large-scale casualty incident. COTS also worked with hospitals to establish triage algorithms for pandemic influenza. In addition, COTS and *HealthInfoTranslations.com* developed multi-language self-triage forms to assist non-English-speaking patients convey symptoms and medical history to medical staff in a disaster. These triage forms are free on-line at [HealthInfoTranslations.com](http://HealthInfoTranslations.com).
- ~ *Radiologic Emergencies:* COTS staff assisted Battelle in their completion of a regional radiological emergency response assessment in 2007. Members of COTS' Regional Hospital Emergency Preparedness (RHEP) Committee participate on the Columbus Metropolitan Medical Response System (CMMRS) Radiological Subcommittee, which is addressing regional processes for patient assessment and care in a radiological emergency.
- ~ *Enhanced Surge Capacity:* COTS has worked with all Central Region hospitals to develop disaster surge plans to accommodate a rapid influx of patients equivalent to 30% or more of the hospital's total licensed beds.
  - *Acute Care Facilities:* COTS has worked with Central Region hospitals to establish plans inclusive of *Acute Care Facilities (ACFs)*. ACF's are the creation of new patient care areas on hospital campuses to accommodate victim surge in a disaster. All Central Region hospitals have ACF-capability in their surge planning. Central Region Hospitals have Level 1 surge plans written; several are writing Level 2 surge plans; one is writing Level 3 surge plans.
  - *Acute Care Center Partnerships:* COTS has also partnered with healthcare institutions beyond hospitals. COTS has contracted with and provided funding to two free-standing, non-ASPR-eligible medical centers in the Central Ohio region who agreed to serve as mini *acute care centers (ACCs)* and admit less-critical patients on a 24/7/365 basis in a disaster. Together these two ACCs provide an additional 100 beds and 10 ORs at normal capacity. ASPR funds through COTS were provided to these partners to purchase PPE and communications equipment for use in a disaster surge.
  - *Burn Surge Planning:* COTS participated on the Ohio Hospital Association's state burn surge work group, and helped write the State's burn surge plan. As a follow up, COTS is drafting a regional burn surge plan.
  - *Pediatric Surge Planning:* In 2007, COTS conducted a pediatric surge capacity assessment of the region. This year, COTS developed guidance for pediatric surge to non-pediatric Central Region hospitals. COTS provided pediatric disaster caches to care for ten or more critically injured children for up to seven days at every Central Region hospital. Such resources would be needed in a disaster involving inordinate numbers children if current pediatric resources become overwhelmed and incapable of accommodating additional pediatric patients.
  - *Bed Reporting Standard Operating Guidelines:* COTS worked with Central Region hospitals to create regional guidelines for reporting bed availability in a disaster. Common nomenclature and standardized processes will optimize bed resource tracking to care for increased numbers of victims in a disaster.
- ~ *Physician Readiness:* In 2007, COTS worked with the Columbus Medical Association and the Columbus Osteopathic Academy to conduct three focus group meetings with private-practice physicians and their office managers to engage them in disaster preparedness planning in Central Ohio. The forums were representative of small-, medium-, and large-sized physician practices.

- Insight was gained about physician-practices' disaster planning processes and practice needs in order for them to remain open during a large-scale, long-term disaster. In 2008, as a follow up to the '07 forums, COTS contracted with the Columbus Medical Association (CMA) to develop a "Ready Practice Program" to provide guidance to Central Region physician practices in preparing for a disaster. The guidance addresses three aspects of physician-practice readiness: the clinical side of being prepared (i.e. equipment, PPE pharmaceutical cache needs); a business continuity plan; and personal/family preparedness of the practice physicians and staff. The guidance is tailored for small-, medium- and large-size practices.
- ~ *Equipment Caches:* COTS established regional equipment caches to care for those critically ill and/or injured in a disaster when normally-available resources become exhausted. Ventilators, cardiac monitors, portable suction machines, IV poles and cots are stockpiled. Pediatric emergency equipment caches are also in place, in the event that a disaster involves inordinate numbers of children. Funding for this various equipment has come from ASPR via ODH, as well as from UASI via the Franklin County Commissioners and Homeland Security Advisory Council.
  - ~ *Pharmaceutical Caches:* COTS worked with pharmacy leaders to restock Central Region hospitals' pharmacies with sufficient antibiotics to prophylax personnel and their immediate family members in the event of a large-scale biologic disaster. This is necessary to assure the medical work force during such an event. COTS is working to establish regional planning guidelines for hospitals related to the distribution of these pharmaceuticals should they be needed.
  - ~ *Supply and Materials Management Planning:* The current trend of hospitals and suppliers is to function in a "just-in-time" restocking of hospital supplies. While efficient and cost-effective for hospitals on a daily basis, this process is not optimal in a large-scale, long-term disaster when supply chains may become interrupted. In 2007, COTS hosted a Pharmaceutical and Materials Management "Unconference" in which 50 Central Region pharmacy and materials management directors met with vendors to identify current supply chain threats and propose strategies to mitigating shortages. In 2008, COTS jointly-sponsored a course on Resource Management with Ohio Emergency Management Agency. Thirteen material management professionals and emergency preparedness coordinators were in attendance. The course was well-received and will be offered again by request of hospital partners who see the need for colleagues to attend that were unavailable for the first course.
  - ~ *Functional Needs Populations:* COTS is working to assure that disaster response meets the needs of people with functional needs.
    - *Non-English Speaking Persons:* COTS worked with the Columbus Medical Association Foundation and HealthInfoTranslations.com to translate preparedness information that health care providers can use with the non-English-speaking public in a disaster. Languages to be included are the "top ten" in the region in which the residents do not also commonly speak English as a second language. Topics include: *Biological Emergencies; Bombing or Explosion Emergencies; Chemical Emergencies; Decontamination; Nuclear or Radiation Emergencies; Pan Flu: What is It and How to Prepare; Plan for an Emergency; Power Outages; and Preventing Illness During an Emergency.* A *Mass Casualty Patient Self-Assessment Form* to be filled out by walking-wounded and worried-well non-English-speaking victims to aid emergency responders with triage was also developed. The form contains both the English and other foreign language so it can be readily used as a translation tool by emergency response staff. Additionally, portable signage was created with instructions printed in the same ten languages. The signs give simple directions to the public who self-triage to a hospital or health clinic, such as *All patients go here; Decontamination Area; Do Not Block; Do Not Enter; Emergency Vehicles Only; Employee Entrance Only; Exercise in Progress; Information Center; Medical Parking Only; No Visitors; Parking; Parking Area Closed; Patient Drop Off; Waiting Area; Shuttle Pick Up/Drop off; Stop Here First for Medical Care; No Parking; Patient Pick Up; and Road Closed.*

- *Oxygen-Dependent Persons:* COTS worked with numerous partners---the American Red Cross of Greater Columbus; the Franklin County Board of Health; the Franklin County and Columbus Medical Reserve Corps; and the Franklin County Emergency Management and Homeland Security Agency---to establish two trailers and supplies to provide oxygen for persons housed in a disaster shelter who are oxygen-dependent but otherwise independent in daily activities. Each of the two oxygen delivery systems is able to provide supplemental oxygen to approximately 30-90 people, depending on the severity of their chronic lung and/or cardiac disease. The continued mobility of these people at the shelter vs. in a hospital bed promotes their well-being. Also, by assisting this special needs population to stay at the shelter instead of coming to the hospital merely for supplemental oxygen, helps alleviate overcrowding at local hospitals in a disaster.
- *The Elderly who are in a Shelter:* COTS worked with the American Red Cross of Greater Columbus to stockpile equipment that would likely be needed to care for a significant number of geriatric patients in a community shelter during a disaster. These caches include specialized cots, privacy screens, bedside commodes, elevated toilet seats, walkers, wheelchairs, shower chairs, hand-held showers, urinals, denture cups, denture cleaners, bed pads, adult diapers, disposable washcloths, alcohol hand sanitizing gel, masking tape and markers.
- ♦ *Community Partnerships in Disaster Planning and Response:* COTS represents hospitals and healthcare partners on a number of other community committees including the following
  - ~ Central Region Medical Response System (RMRS)
  - ~ Columbus Metropolitan Medical Response System (CMMRS)
  - ~ Columbus Public Health's Health Information Team (2007)
  - ~ Fire Chiefs Association of Central Ohio
  - ~ Franklin County Citizen Corps Council
  - ~ Franklin County Communications Committee
  - ~ Franklin County Fire Chiefs Association
  - ~ Franklin County Medical Reserve Corps Steering Committee
  - ~ Franklin County Pediatric Disaster Committee
  - ~ Franklin County Homeland Security Advisory Council (HSAC)
  - ~ Franklin County Terrorist Early Warning Group (TEWG)
  - ~ Northwest Area Strike Team
  - ~ Ohio Committee on Trauma of the American College of Surgeons
  - ~ Ohio Department of Mental Health, All Hazards Leadership Team
  - ~ Ohio Hospital Association's Burn Surge Planning Committee
  - ~ Ohio Medical Reserve Corps
  - ~ Ohio National Disaster Life Support® Advisory Committee
  - ~ Ohio Regional Metropolitan Medical Response Committee
  - ~ Ohio State Council of the Emergency Nurses Association
  - ~ Ohio Trauma Committee
  - ~ Ohio Society of Trauma Nurse Leaders

**Regionalization of Trauma Care.** COTS provides leadership for emergency medical services providers, trauma centers and acute care hospitals seeking to improve care for their critically injured trauma patients.

- ♦ COTS serves as a clearinghouse to refer rural and acute care hospitals to local trauma centers for transfer agreements.
- ♦ COTS established regional trauma care standards for reference by acute care hospitals for emergency stabilization of trauma victims.
- ♦ COTS established trauma process performance improvement (PI) guidelines for acute care hospitals seeking to establish a trauma PI program.

- ◆ COTS delineated a Regional Performance Improvement Protocol which outlines the process by which COTS will evaluate the region's care over the coming years.
- ◆ COTS monitors regional performance improvement of the trauma system as a whole.
- ◆ COTS established regional prehospital trauma triage guidelines for EMS providers for adult and pediatric victims.
- ◆ COTS established a performance improvement process in which EMS providers can get patient information back from local emergency departments in order to positively affect future care rendered to the public. This process is HIPAA-compliant.
- ◆ COTS serves by request on a number of state committees including the Central Ohio Regional Medical Response System Steering Committee (emergency preparedness), the Ohio Committee on Trauma of the American College of Surgeons, the Ohio Domestic Violence Network, the State Metropolitan Medical Response System, the State Trauma Committee, the State Trauma Registry Advisory Subcommittee, the State Public Records Advisory Group and the State Medical Response Corps Committee.

**Patient Access to Care.** The COTS initiative *Regional Emergency Care Access Plan* or *RECAP* has been in effect in Central Ohio since 2001. RECAP addresses hospital diversion of EMS patients. RECAP encompasses several components:

- ◆ *A Memorandum of Understanding* is signed by all Franklin County hospitals and states that no critical or unstable patients shall be diverted regardless of an emergency department's declared diversion status. Critical or unstable patients include trauma victims, women in active labor, and patients with cardiac chest pain or other life or limb threatening conditions.
- ◆ *A Diversion Explanation Tool* is carried on EMS vehicles and helps prehospital personnel explain to stable patients why they are being diverted by a hospital. This tool is available in English, Spanish, French, Russian, and Somali.
- ◆ Hospitals are working diligently and with each other to minimize emergency department diversion, expedite emergency department throughput, and optimize bed availability for patient admissions. Best practices, protocols and solutions are shared.
- ◆ The *Emergency Patient Transport Plan (EPTP)* is activated when four of eight Franklin County adult hospitals simultaneously declare a diversion status. The EPTP provides a systematic process for the Columbus Fire Alarm Bureau to expedite access to medical care for the public being transported by EMS to overly-busy emergency departments. In 2005 the EPTP was activated for 255 hours compared to over 680 hours in 2004. The Plan secured immediate emergency department destinations for about 2,280 patients in 2005 who would have been otherwise diverted by an extremely busy system, compared to 3,700 patients in 2004. EPTP activation in 2005-06 is down compared to previous years and is an indication that regional efforts at addressing diversion are effective. The EPTP has served over 38,000 patients since 2002.
- ◆ The *Emergency Department Real-Time Activity System* is a web-based, live time database that allows local hospitals to rapidly declare how busy they are to area EMS agencies, local alarm bureaus and each other. This system assists EMS agencies and alarm bureaus in directing area EMS units to less-busy hospitals. It also enables other hospitals to see when neighboring institutions are busy in order to anticipate additional patients. This web page is part of a new database that allows hospitals to trend their diversion data with the effect of improving emergency access to the public.

Additionally, COTS serves as a clearinghouse between the Ohio Department of Transportation (ODOT) and regional emergency medical providers. COTS forwards daily ODOT road construction reports to local EMS and emergency department personnel so that traffic delays and road closures are known, allowing emergency responders to pre-determine alternate routes as necessary.

**Regional Emergency Care Guidelines.** COTS has several active multidisciplinary regional guidelines relative to emergency care. COTS works with hospitals and EMS on continual process improvement to improve care of patients in the prehospital and hospital settings.

- ◆ ***Guidelines for Pre-Hospital Newborn Safe Haven.*** These COTS guidelines are to assist local medical service workers and peace officers who are presented with a relinquished newborn as allowed under Ohio Law

(§2151.3515 & §2151.3517) since 2001. These guidelines pertain to infants who are less than 72 hours old with no indication of abuse or neglect.

- ◆ **EMS Infectious Exposure Guidelines.** This COTS initiative includes guidelines to promote consistency among the Central Ohio prehospital and medical community with regards to treatment and follow-up of EMS personnel exposed to infectious body fluids. These guidelines expedite prompt screening and treatment for EMS colleagues who sustain a potentially hazardous exposure while in the line of duty.
- ◆ **Care Guidelines for Patients with Concealed Weapons.** These COTS guidelines provide a standardized approach for intervening with patients who are legally carrying a concealed weapon and require emergency care. The guidelines incorporate the use of locked gun safety boxes that are exchanged between EMS, hospitals and law enforcement personnel. The guidelines seek to minimize accidents that occur by healthcare personnel handling firearms while caring for patients; to protect the rights of citizens; and to maintain “chain of custody” documentation of weapons.
- ◆ **Emergency Medical Services Clinical Information for Prehospital Performance Improvement.** These COTS guidelines create the process for local hospitals and EMS providers to exchange pertinent details about patient care and outcomes. EMS providers depend upon patient outcome information to validate what was seen “in the field” so that improved decisions in care are made with subsequent patients. These guidelines are HIPAA-compliant.
- ◆ **White Paper for Central Ohio EMS Agencies on the Prehospital Transport of STEMI Patients to Local Hospitals Based on AHA/ACC STEMI Guidelines.** This COTS White Paper is a new initiative completed in 2006. It is a resource for EMS agencies about local hospitals’ abilities to care for STEMI patients. The intent is that this information assists EMS providers in making informed decisions as they create operating procedures that address treatment and destination options for their patients. This White Paper is not intended to depict ongoing quality assurance aspects of STEMI care at individual institutions. This Paper is also not meant to suggest or recommend any facility over another for the care of STEMI patients, or to mandate specific hospital destinations for EMS STEMI patients.

**Professional Trauma Education.** COTS serves as a coordinator/provider of trauma education to medical professionals in the region and State. This training directly impacts the medical care given to seriously ill or injured victims and helps to save lives and reduce long-term disabilities. Through COTS, more training is able to be provided than institutions would be able to coordinate individually, and the costs of providing such training are shared among participating institutions. In the past year, COTS-coordinated courses provided over 11,300 hours of continuing medical, nursing, and/or EMT education credit hours to physicians, nurses, EMTs and other healthcare providers.

- ◆ COTS offers on average 24 established professional trauma courses annually, including the *Advanced Trauma Life Support (ATLS®) Course for Physicians*; the *Basic Disaster Life Support Courses (BDLS®) Course*; the *Emergency Nursing Pediatric Course (ENPC®)* and the *Trauma Nursing Core Curriculum (TNCC®)*. Course sizes ranged from sixteen to thirty-two participants. In 2007 alone, these courses educated 510 physicians, nurses and medics to provide 6,327 hours of CE.
- ◆ COTS partners with Norwich Township Fire Department and The Ohio State University Medical Center Trauma Services to provide a monthly lecture series for local emergency medical services (EMS) providers. An average of fifty paramedics attends on a monthly basis. Similarly, COTS partners with the Upper Arlington Fire Department and Riverside Methodist Hospital to provide a lecture series on trauma and emergency care.
- ◆ Through 2007, COTS partnered with the Columbus Coalition Against Family Violence to provide training to Central Ohio emergency department staff and EMS personnel on uniform screening for domestic violence (DV). The goal was for all emergency-services patients to be screened, with a subsequent offer of referral to a domestic violence intervention service as appropriate. Over the years that COTS was involved with the program, COTS trained 3,381 healthcare providers in the regional DV screening protocols. By discipline,

2,285 EMTs, 769 nurses, 174 social workers, 86 physicians and 67 support staff/technicians were trained. Sixty different institutions including hospitals, fire/EMS departments, public health, social service agencies, a nursing school, and a private physician practice received the training through COTS.

**Burn Prevention Education.** The COTS Central Ohio Burn Education Coalition (COBEC) conducted a number of fire and burn prevention activities in 2007-08.

- ◆ COBEC provides “Burn Smarts” education to local middle-school children, many of which are high-risk for fire play and burn injuries. One-hundred and fifty-four central Ohio fifth and sixth graders attended a Burn Smarts program in 2007-08, and over 750 students since its inception in 2003.
- ◆ COBEC works with Columbus City Hall and the Division of Fire to conduct an annual city employee fire drill during National Fire Prevention Week. Nearly 500 Columbus city employees participate.
- ◆ COBEC members assisted the State Fire Marshal with fire/burn education at their booth at the Ohio State Fair in August ‘07.
- ◆ COBEC created and disseminates a public information brochure with tips on fire prevention and simple burn first-aid.

**Public Education on Injuries.** COTS has a number of brochures aimed at helping to educate the public about trauma, injuries and emergency services issues. These publications are utilized by interested stakeholders and include:

- ◆ *Injury While Drinking Alcohol is No Accident*
- ◆ *Autopsies in Injury-Related Deaths*
- ◆ *Emergency Department Diversion: What Does it Mean?*
- ◆ *Motor Vehicle Traffic Crash and Assault Injuries in Central Ohio---A Public Health Assessment* (published jointly with the Columbus Public Health Department)

## **2009 & BEYOND: COTS FUTURE WORK**

Because COTS work is driven by issues raised throughout the year by COTS stakeholders, it is not possible to know the full extent of COTS “new work” in 2009 and beyond. What is known is that historically there are existing community issues related to emergency healthcare, and COTS Board and/or committees bring them to the COTS forum for solutions. Also known is that local citizens continue to be maimed and/or die from preventable traumatic injuries at epidemic rates: trauma in central Ohio, similar to around the nation, is *the* leading cause of death in the 1-40 year age groups.

Assuming uninterrupted funding, some new work that COTS anticipates doing with community partners in 2009 includes:

- ◆ Renewing the Memorandum of Understanding (MOU) among Central Region hospitals for increased collaboration and shared resources in the event of a disaster
- ◆ Assisting the remainder of the Central Region’s 26 hospitals (fourteen) in writing hospital-based Level 2 surge plans
- ◆ Completing the regional burn surge plan for Central Ohio that addresses local emergent mass-casualty burn care’ the plan will also incorporate MOUs with other Ohio regions to augment local burn management resources
- ◆ Completing evacuation guidance for Central Region hospitals
- ◆ Working with local public health colleagues in the creation of a mass fatality guidance for hospitals.
- ◆ Working with Central Region hospitals to achieve their participation in the Columbus Public Health Department’s regional Strategic National Stockpile drill scheduled for August 2009
- ◆ Conducting a regional tabletop exercise with Central Region hospitals and community response agencies, that combines IED and hospital evacuation scenarios
- ◆ Coordinating and promoting subject matter expert training for Central Region hospital staff who can attend FEMA-sponsored courses at no additional cost to the region or institution
- ◆ Establishing burn surge caches at non-burn-center Central Region hospitals
- ◆ Establishing a community cache of hospital evacuation equipment

- ◆ Establishing regional point-of-distribution guidance for Central Region hospitals to dispense pharmaceutical prophylaxis to hospital employees and their family members in a large-scale biologic disaster event
- ◆ Establishing a PPE cache for physician readiness
- ◆ Conducting forums with the long-term care facility community to further engage them in community disaster preparedness efforts

## **SUMMARY**

COTS is a vital and unique asset in Central Ohio. COTS work is not duplicated elsewhere in the region or state. COTS serves the community by diligently supporting the medical providers and institutions that care for patients. The dedication and diversity of its stakeholders, Board, staff, and funders is what makes COTS a leader in addressing complex issues related to trauma, emergency situations, disaster readiness and response.