CENTRAL OHIO TRAUMA SYSTEM

431 East Broad Street, Columbus, Ohio 43215

2004-05 ANNUAL EXECUTIVE REPORT

LETTER FROM COTS PRESIDENT

The *Central Ohio Trauma System*, now known almost universally as COTS, was introduced to the central Ohio community seven years ago. COTS, a Columbus Medical Association affiliate organization, is compromised of dedicated healthcare professionals working together to improve trauma and emergency healthcare for seriously injured or ill patients in the central Ohio region. COTS creates a community forum where issues related to trauma and/or emergency healthcare services can be presented, openly discussed, and addressed.

COTS' work is multifaceted and includes creating regional plans that address patient issues (such as emerge ncy room diversion or managing patients with concealed weapons), coordinating trauma education for physicians and nurses, helping hospitals prepare for disasters, and collecting and trending trauma data that can be used for targeted improvements in the community. And like its work, the people who comprise COTS are also multifaceted and varied. COTS members include physicians, nurses, trauma centers, acute care hospitals, emergency medical technicians, paramedics, public health experts, data specialists and trauma researchers. Ultimately it is the commitment of these professionals who volunteer their time to COTS that allow COTS work to be successful.

This report is dedicated to those doctors, nurses, hospitals, emergency medical services personnel, public health experts and researchers who serve in the COTS forum to improve healthcare and prevention services in the central Ohio region.

Sincerely,

Jonathan I. Groner, MD

COTS President

MISSION, PURPOSE, GOALS, CORE VALUES

The mission of the Central Ohio Trauma System (COTS) was formally expanded in early 2004 to address a broader spectrum of emergency services concerns in addition to trauma. COTS' mission is to save and improve lives through the coordination of trauma and emergency healthcare resources. 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 overall goals are to:

- > Improve patient outcomes
- Enhance practice efficiency
- > 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 services issues

COTS' objectives include:

- ➤ The establishment of an inclusive system where community partners work together to resolve the issues associated with trauma and emergency care
- The ability to do data analysis on the region's trauma patients demographically and by outcome so that initiatives can be clearly focused on areas of highest need and progress can be concretely measured
- ➤ Achievement of 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 central Ohio hospitals in large scale disasters
- > To be the recognized leader addressing trauma-related and emergency services issues 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.

The achievement of COTS mission, purpose and goals is demonstrated in a number of ways. Some examples of COTS success this past year include:

➤ COTS assisted central Ohio hospitals in procuring over \$1.2 million in federal Health Services Resources Administration (HRSA) funding earmarked for bioterrorism preparedness. This funding is being used by hospitals to augment readiness efforts for mass casualties in the event of a large-scale disaster. COTS also coordinates local hospitals' emergency preparedness planning so that precious resources can be shared in a disaster, with the goal of providing the greatest good to the greatest number of people.

- ➤ COTS developed the *Regional Emergency Care Access Plan* to address diversion¹ when multiple local emergency departments are simultaneously full. Data indicates that **over 3,700 patients avoided diversion in 2004 (over 38,000** patients since the plan was established) due to this COTS plan.
- ➤ COTS coordinates resources to provide continuing medical education for physicians, nurses, EMTs and other health professionals. Through COTS more training is able to be provided than institutions would be able to coordinate individually and costs of providing such training are shared among participating institutions. In the past year over 20,000 hours of continuing medical, nursing, and EMT education credit hours were provided through COTS. Continuing education of central Ohio healthcare professionals means better healthcare rendered to local citizens.

MEMBERSHIP

COTS is a collaboration of emergency health care providers in the central Ohio community including physicians, nurses, emergency medical technicians, paramedics, fire departments, hospitals, researchers, and public health professionals. COTS hospital partnerships increased in 2004 with the addition of Adena Regional Medical Center (Chillicothe, Ohio), Marion General Hospital (Marion, Ohio), New Albany Surgical Hospital (New Albany, Ohio) and Pike Community Hospital (Waverly, Ohio).

The following organizations are currently members of COTS:

Adena Regional Medical Center, Chillic othe, Ohio

Berger Health System, Circleville, Ohio

Central Ohio Fire Chiefs' Association, Columbus, Ohio

Children's Hospital, Columbus, Ohio

Columbus Division of Fire, Columbus, Ohio

Columbus Health Department, Columbus, Ohio

Columbus Medical Association, Columbus, Ohio

Coshocton County Memorial Hospital, Coshocton, Ohio

Doctors Hospital, Columbus, Ohio

Fairfield Medical Center, Lancaster, Ohio

Franklin County Coroner's Office, Columbus, Ohio

Franklin County Fire Chiefs Association, Columbus, Ohio

Genesis Healthcare System, Zanesville, Ohio

Grady Memorial Hospital, Delaware, Ohio

Grant Medical Center, Columbus, Ohio

Knox Community Hospital, Mt. Vernon, Ohio

Madison County Hospital, London, Ohio

Marion General Hospital, Marion, Ohio

Memorial Hospital of Union County, Marysville, Ohio

Morrow County Hospital, Mt. Gilead, Ohio

Mount Carmel East, Columbus, Ohio

Mount Carmel St. Ann's, Westerville, Ohio

Mount Carmel West, Columbus, Ohio

New Albany Surgical Hospital, New Albany, Ohio

Pike Community Hospital, Waverly, Ohio

¹Diversion is when emergency departments are filled to capacity and "turn away" patients en route via emergency squads.

The Ohio State University Hospitak, Columbus, Ohio The Ohio State University Hospital East, Columbus, Ohio Rehabilitation Services, Dodd Hall, The OSU Hospitals, Columbus, Ohio Riverside Methodist Hospital, Columbus, Ohio Southeastern Ohio Regional Medical Center, Cambridge, Ohio

BOARD OF DIRECTORS

The COTS Board of Directors 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 agencies. COTS Board meetings are quarterly and open to the public. The following individuals serve on the COTS Board of Directors:

- **Jonathan I. Groner, MD**, Trauma Medical Director, Children's Hospital, Columbus, Ohio; representing the Columbus Medical Association, *COTS President*
- Kathryn J. Haley, RN, BSN, Trauma Program Manager, Children's Hospital, Columbus, Ohio, COTS Vice-President
- **Kirk A. Hummer, RN, MBA**, Chief Operating Officer, Mount Carmel St. Ann's, Westerville, Ohio, *COTS Secretary-Treasurer*
- Robert E. Falcone, MD, FACS, President, Grant Medical Center, Columbus, Ohio, COTS Immediate Past-President
- **Jennifer A. Bogner, PhD,** Director of Research, Department of Physical Medicine and Rehabilitation, The Ohio State University Medical Center, Columbus, Ohio
- Marco J. Bonta, MD, Medical Director, Trauma Services, Riverside Methodist Hospital, Columbus, Ohio
- **Scott R. Bryant, RN, BBA,** Administrative Director, Emergency Department, Adena Regional Medical Center, Chillicothe, Ohio
- Robert Coles, Deputy Chief, Public Safety Department, Fire Division, Columbus, Ohio
- Susan G. Cook, RN, BSN, Manager Emergency Services, Fairfield Medical Center, Lancaster, Ohio
- **Rebecca K. Dillon, RN,** Manager Emergency Services, Memorial Hospital of Union County, Marysville, Ohio
- **John Drstvensek, MD, FACEP**, Chairman & Medical Director, Emergency Services, Grant Medical Center and Riverside Methodist Hospital, Columbus, Ohio
- Carol J. Elliott, MSN, RN, CEN, Director, Emergency Services, Mount Carmel East, Columbus, Ohio
- Jan E. Elston, MD, Medical Director, Trauma Services, Genesis Health Care System, Zanesville, Ohio
- **Elaine L. Flowers , RN,** Department Director, Emergency Services, Knox Community Hospital, Mt. Vernon, Ohio
- **Thomas J. Gavin, MD, FACEP,** Associate Professor, Clinical Emergency Medicine, The Ohio State University Department of Emergency Medicine, Columbus, Ohio, representing The Ohio State University Hospital East
- **Lucinda F. Hill, RN, BSN, EMTP,** Trauma Nurse Coordinator, Southeastern Ohio Regional Medical Center, Cambridge, Ohio
- **Henry K. Kauffman, Jr., AAS, EMTP**, Fire Chief, City of Grandview Heights, Ohio; representing the Franklin County Fire Chiefs Association, Grove City, Ohio
- **David P. Keseg, MD, FACEP**, Medical Director, Columbus Division of Fire/EMS, Ohio and Chief Development Officer for Premier Health Care Services, Dayton, Ohio; representing the Columbus Medical Association

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

Medard R. Lutmerding, MD, FACEP, Chairman of the Department of Emergency Medicine, Mount Carmel West, Columbus, Ohio; representing the Columbus Medical Association

Clifford Mason, EMTP, Fire Chief, Madison Township Fire Department; representing the Fire Chiefs Association of Central Ohio, Hilliard, Ohio

Jennifer A. Piccione, RN, BSN, Emergency Services Department Manager, Madison County Hospital, London, Ohio

Kevin J. Pugh, MD, Director, Division of Trauma, Department of Orthopedics, The Ohio State University Hospitals, Columbus, Ohio

Tracy E. Richmond, RN, Associate Director of Nursing, Coshocton County Memorial Hospital, Coshocton, Ohio

Kathleen Shafron, RN, MS, Director Emergency Services, Doctors Hospital, Columbus, Ohio

James M. Sinard, MD, Trauma Medical Director, Mount Carmel West, Columbus, Ohio

Mike Smeltzer, MPH, Director, Office of Public Health Standards and Violence Prevention, Columbus Health Department, Columbus, Ohio

Jody Ciccione Snyder, RN, BSN, Risk Manager/Quality Coordinator, New Albany Surgical Hospital, New Albany, Ohio

Kimberly S. Thompson, RN, BSN, Nurse Director Emergency Department and Critical Care, Grady Memorial Hospital, Delaware, Ohio

Susan A. Tilgner, MS, RD, LD, RS, Health Commissioner, Franklin County Board of Health, Columbus, Ohio

Carla Withers, RN, Manager Emergency Services, Berger Health System, Circleville, Ohio

COMMUNITY COLLABORATION & SUPPORT

The majority of COTS work is done through its committees. Community collaboration is demonstrated in the active participation of over 240 community members who participate in one or more of COTS committees. The following central Ohio organizations served on one or more of COTS Committees in 2004-05:

Arthur G. James Cancer Hospital and Richard G. Solove Research Institute, Columbus, Ohio

Barix Clinics of Ohio, Groveport, Ohio

Battelle Memorial Institute, Columbus, Ohio

Berger Health System, Circleville, Ohio

Bucyrus Community Hospital, Bucyrus, Ohio

Central Ohio Amateur Radio Services, Columbus, Ohio

Central Ohio Poison Control Center, Columbus, Ohio

Central Ohio Fire Chiefs Association, Columbus, Ohio

Children's Hospital, Columbus, Ohio

Clinton Township Fire Department, Columbus, Ohio

Columbus Coalition Against Family Violence, Columbus, Ohio

Columbus Division of Fire, Columbus, Ohio

Columbus Health Department, Columbus, Ohio

Columbus Medical Association & Foundation, Columbus, Ohio

Coshocton County Memorial Hospital, Coshocton, Ohio

Delaware County Fire Department, Delaware, Ohio

Doctors Hospital, Columbus, Ohio

Fairfield Medical Center, Lancaster, Ohio

Fayette County Memorial Hospital, Washington Court House, Ohio

Franklin County Board of Health, Columbus, Ohio

Franklin County Coroner's Office, Columbus, Ohio

Franklin County Fire Chiefs Association, Columbus, Ohio

Franklin County Emergency Management Agency, Columbus, Ohio

Franklin County Prosecutor's Office, Columbus, 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, 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

Madison County Hospital, London, Ohio

Madison Township Fire Department, Groveport, Ohio

Marion General Hospital Marion, Ohio

Mary Rutan Hospital, Bellefontaine, Ohio

Med Central Crestline Hospital Crestline, 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 St. Ann's, Westerville, Ohio

Mount Carmel West, Columbus, Ohio

New Albany Surgical Hospital, New Albany, Ohio

Newark Division of Fire, Newark, Ohio

Norwich Township Fire Department, Hilliard, Ohio

Ohio Department of Public Safety, EMS Division, Columbus, Ohio

Ohio Domestic Violence Network, Columbus, Ohio

The Ohio State University Hospitals, Columbus, Ohio

The Ohio State University Hospital East, Columbus, Ohio

Plain Township Fire Department, New Albany, Ohio

Prairie Township Fire Department, Columbus, Ohio

Rehabilitation Services, Dodd Hall, The OSU Hospitals, 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

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

Whitehall Division of Fire, Whitehall, Ohio

Worthington Division of Fire, Worthington, Ohio

Wyandot Memorial Hospital, Upper Sandusky, Ohio

In addition to participation in COTS committees, the community supports COTS in other ways:

- ➤ Participation in regional trauma system work has continued to grow this year as two additional hospitals signed service contracts with COTS. With one exception, all hospital, fire/EMS, corporate, governmental, and non-profit agencies that participated in regional initiatives with COTS in 2003 continued their involvement in 2004-05.
- ➤ The Columbus Medical Association Foundation continues to be a strong supporting partner providing 39% of COTS operating costs. The Nationwide Foundation, the Columbus Coalition Against Family Violence, the Columbus Health Department, the Ohio Hospital Association, the Ohio Department of Health, the Ohio Department of Public Safety, participating hospitals and COTS Board members provided additional funding support in 2004-05.
- ➤ COTS is recognized by city, county and state leaders as the organization where trauma and emergency healthcare stakeholders are part of a solution-oriented forum. COTS representatives have been invited by Columbus and Franklin County officials to serve on strategic community committees including the *Franklin County Terrorism Advisory Team, Critical Infrastructure and Key Assessments Committee, the Columbus Metropolitan Medical Response System,* and *Project Heartstart.* COTS was also recently named by Columbus officials as the agency to conduct an emergency/disaster healthcare bed assessment in the region.

STAFF SUPPORT

The following staff supports the activities of COTS.

Philip H. Cass, PhD, CEO Columbus Medical Association/ Columbus Medical Association Foundation/ Physicians Free Clinic / COTS

Nancie M. Bechtel, BSN, RN, CEN, EMTB, Executive Director

Marshal A. Bickert, MPH, Regional Hospital Emergency Preparedness Coordinator

Roxanna L. Giambri, RHIA, Trauma Registry Coordinator

Christine M. Sheppard, BS, CPS, Education Coordinator/Administrative Assistant

FUNDING

COTS is funded by community foundation grants, healthcare partners, and private donors. The following agencies provided funding to support COTS operations in 2004-2005.

Adena Regional Medical Center, Chillicothe, Ohio

Berger Health System, Circleville, Ohio

Children's Hospital, Columbus, Ohio

Columbus Coalition Against Family Violence, Columbus, Ohio

Columbus Health Department, Columbus, Ohio

Columbus Medical Association Foundation, Columbus, Ohio

Coshocton County Memorial Hospital, Coshocton, Ohio

Doctors Hospital, Columbus, Ohio

Fairfield Medical Center, Lancaster, Ohio

Genesis Healthcare System, Zanesville, Ohio

Grady Memorial Hospital, Delaware, Ohio

Grant Medical Center, Columbus, Ohio

Knox Community Hospital, Mt. Vernon, Ohio

Madison County Hospital, London, Ohio

Marion General Hospital, Marion, Ohio

Memorial Hospital of Union County, Marysville, Ohio

Morrow County Hospital, Mt. Gilead, Ohio

Mount Carmel East, Columbus, Ohio

Mount Carmel St. Ann's, Westerville, Ohio

Mount Carmel West, Columbus, Ohio

The Nationwide Foundation, Columbus, Ohio

New Albany Surgical Hospital, New Albany, Ohio

Ohio Department of Health, Bureau of Environmental Health, Columbus, Ohio

Ohio Department of Public Safety, Division of EMS, Columbus, Ohio

Ohio Hospital Association, Columbus, Ohio

The Ohio State University Hospitals, Columbus, Ohio

The Ohio State University Hospital East, Columbus, Ohio

Pike Community Hospital, Waverly, Ohio

Riverside Methodist Hospital, Columbus, Ohio

Southeastern Ohio Regional Medical Center, Cambridge, Ohio

As a designated 501(c)(3) organization, contributions to COTS are tax-deductible. The following individuals contributed to COTS in 2004-2005:

Sharon Brewer Debbie Brown Medard R. Lutmerding, MD Harlan D. Meyer, MD

For more information on supporting COTS general operations or the COTS Endowment Fund, contact (614) 240-7420, extension 120. For a copy of the COTS 2004 Annual Audit, contact Nancie Bechtel at (614) 240-7419, extension 6.

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. 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 put into effect.

ONGOING CURRENT WORK. Much of COTS work in 2004-05 is ongoing from preceding years and involves sustaining active community initiatives and their structure. Such maintenance includes:

➤ **Providing support for COTS committees.** COTS committees serve as the community forums for collaboration and problem resolution. They provide the neutral "place" where community issues related to trauma and/or emergency healthcare services can be presented, openly discussed, and addressed. Issues presented in the COTS forum may be long-standing or newly developed.

COTS committee membership is open to any interested members of the central Ohio community. Over 240 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 or emergency services healthcare under a community

consensus process; all major initiatives, policies and community standards must be ultimately approved by the COTS Board.

Each COTS committee has a distinct focus with Board-delineated roles and responsibilities aimed at improving trauma or emergency healthcare services for central Ohio citizens. Local stakeholders serve as COTS Committee chairpersons. The committees meet monthly, bimonthly, or quarterly depending on their work at hand. The COTS Committees, co-chairs, roles and responsibilities are as follows.

- **Executive/Finance Committee,** Co-chairs Jonathan I. Groner, MD, FACS (Children's Hospital) & Kathryn J. Haley, RN, BSN (Children's Hospital)
 - Manages the general business of the Board and coordination of committee projects
 - Oversees COTS Trauma Registry data in order to assure risk-adjustment and reliable reporting
 - Publishes the Annual Report to the Community on Trauma
 - Coordinates COTS Internal Review Board to allow information sharing from COTS Registry with legitimate researchers and community agencies
 - Liaisons with State trauma-related groups (State EMS Board, State Trauma Committee, State Trauma Registry Advisory Subcommittee, Region V Regional Physicians Advisory Board)
 - Oversees COTS' legal activities and legal documents
 - Establishes public and corporate partnerships to promote the COTS mission and goals in the community
 - Assesses budgetary needs and drafting an Annual Budget
 - Oversees the Budget and accounting
 - Assists with grant-seeking and writing
 - Establishes community partnerships that will aid in financial support
 - Facilitates long-term financial planning
 - Oversees other executive-related activities as directed by the COTS Board
- Central Ohio Burn Education Coalition (COBEC), Co-chairs Becky Coffey, RN, MSN (The Ohio State University Hospitals) & Sheila Giles, RN (Children's Hospital)
 - 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 concretely measurable by COTS' Registry data
 - Links COTS burn prevention initiatives to existing community agencies in order to maximize resources and minimize duplication of local efforts
 - Other burn prevention activities as directed by the COTS Board
- Clinical/Hospital Committee, Co-chairs Sharon Deppe, RN (Grant Medical Center) and James M. Sinard, MD, FACS (Mount Carmel West)
 - Assesses regional trauma care trends
 - Monitors trauma care from a regional perspective as consistent with mandates of Ohio legislation related to trauma victims
 - 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 as directed by the COTS Board
- **Diversion Committee,** Co-chairs Medard R. Lutmerding, MD, FACEP (Mount Carmel Health System) and Bob Walsh, RN, BHA (Riverside Methodist Hospital)
 - Provides a forum for hospitals, emergency departments, and emergency medical services
 to address issues related to regional diversion patterns, including the establishment and
 ongoing assessment of the city's Emergency Patient Transport Plan
 - Maintains the regional Emergency Departments' Activity Webpage
 - Provides oversight for regional performance improvement related to diversion
 - Engages in other diversion and patient access-related activities as directed by the COTS Board
- **Domestic Violence Protocols Work Group,** Co-chairs Peg Gulker, RN, BSN (Mount Carmel West) & Vince Papa, PhD, Captain, EMTP (Norwich Township Fire Department and the Central Ohio Fire Chiefs Association)
 - Establishes domestic violence uniform screening protocols for hospitals and emergency medical services in the central Ohio region
 - Evaluates the effectiveness of regional uniform domestic violence screening training at emergency departments and emergency medical services agencies
 - Participates in other domestic violence initiatives as directed by the COTS Board
- **Pre-Hospital Committee,** Co-chairs Thomas J, Gavin, MD (The Ohio State University Hospitals) and Alan G. Gora, MD, FACEP (Mount Carmel Health System)
 - 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 as needed to promote emergency services care
 - Assists with community disaster management planning involving hospitals and EMS
 - Engages in other prehospital-related activities as directed by the COTS Board
- Regional Hospital Emergency Preparedness (Disaster) Committee, Co-Chairs Marsha Jevis (Grady Memorial Hospital) & Medard R. Lutmerding, MD, FACEP (Mount Carmel Health System)
 - Assists central Ohio hospitals with regional disaster management planning 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 other regional disaster preparedness activities as directed by the COTS Board
 - Helps hospitals receive preparedness funding and meet deliverables of the Health Resources Services Administration (HRSA), the Ohio Department of Health (ODH), and the Ohio Hospital Association (OHA)

The Regional Hospital Emergency Preparedness (RHEP) Committee has multiple active subcommittees including:

 Safety and Security Subcommittee, Co-chairs Brian S. Saul (OhioHealth for Riverside Methodist Hospital and Grant Medical Center) & Josef H. Tulga, BA (Marion General Hospital)

- Mass Casualty Incident Surge Subcommittee, Chair Medard R. Lutmerding, MD, FACEP (Mount Carmel Health System)
- Laboratory Subcommittee, Co-chairs Donna McNeely, BS (Memorial Hospital of Union County) & Megan L. McGee, MPH (Union County Health Department)
- Strategic Planning Subcommittee, *Chair Matthew A. Vail, MD, MPH (OhioHealth)*
- PPE/Decon Subcommittee, Chair Lori A. Schwartzkopf (Mount Carmel Health System)
- Registry Committee, Co-Chairs Sally Betz, RN, MSN, CCRN (The Ohio State University Hospitals) & Renae Kable, RHIT, CSTR (Children's Hospital)
 - Establishes procedures for trauma registry data submission in accordance with State guidelines, regional requirements, and individual 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

For information on meeting times or to join any of the COTS Committees, contact Nancie Bechtel at (614) 240-7419, extension 6.

Other ongoing work for COTS in 2004-05 includes:

- ➤ COTS Regional Trauma Registry. Ohio law mandates that hospitals report trauma data to the Ohio Trauma Registry (OTR). COTS serves as the regional repository for hospitals' trauma data to the OTR. COTS then uses the data to improve trauma/emergency healthcare services in the central Ohio region. COTS Trauma Registry has collected data on over 34,000 trauma admissions in central Ohio since its inception 1999. This trauma data is used by:
 - COTS to ascertain that the best possible care is being provided to local citizens and to drive system improvements
 - The public at-large via an annually published community injury report
 - The Columbus Health Department in planning community prevention initiatives funded by state block grants
 - Local hospitals who receive confidential benchmarking reports from COTS as a means of generating and measuring internal improvements to patient care
 - Community researchers

The COTS Registry captured approximately **8,400 trauma patients** in 2004. **Falls** continue to be the leading cause of hospitalizations from trauma in the region, while **gunshot wounds** are the leading cause of trauma deaths. **Motor vehicle crashes** are the leading mechanism for unintentional trauma fatalities in central Ohio.

For more trends related to central Ohio trauma data available through the COTS Registry, contact (614) 240-7419 for a copy of the COTS 2004 community injury report. For information on how to request aggregate data, contact Roxanna Giambri at (614) 240-7419, extension 3.

Maintaining COTS initiatives actively in use by the community. COTS has established several community initiatives which require continued oversight, troubleshooting problems, and ongoing evaluation. Four examples of such initiatives include:

- 1) The *Regional Emergency Care Access Plan (RECAP*) was first established in 2002. RECAP addresses hospital diversion of EMS patients and access of sick people to local busy emergency departments. RECAP encompasses the following:
 - A *Memorandum of Understanding* signed by all Franklin County hospitals stating that no **critical or unstable patient** shall be diverted regardless of an emergency department's declared diversion status. Critical or unstable patients include trauma victims, women in active labor, patients with cardiac chest pain or other life or limb threatening conditions.
 - A *Diversion Explanation Tool* carried on EMS vehicles which 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.
 - The *Emergency Department Activity Webpage* that allows local hospitals to rapidly declare how busy they are to area EMS agencies, local alarm bureaus and each other. This webpage prevents EMS personnel from attempting to call a patient report to an emergency department that is diverting; the webpage assists alarm bureaus in directing area EMS units to less-busy hospitals; and it enables other hospitals to see when neighboring institutions are busy in order to anticipate additional patients.
 - The *Emergency Patient Transport Plan (EPTP)* that is activated when four of eight Franklin County adult hospitals simultaneously declare a diversion status: The EPTP provides a systematic process for the Columbus Alarm Bureau to expedite access to medical care for the public being transported by EMS to overly-busy emergency departments. This past year the EPTP was activated for over 680 hours and secured immediate emergency department destinations for over 3,700 patients who would have been otherwise diverted by an extremely busy system. The EPTP has served over 38,000 patients since 2002.

For information on participating in the RECAP and/or EPTP, contact COTS at phone (614) 240-7419, extension 6.

- 2) The *Regional Guidelines for Newborn Safe Haven in the Pre-Hospital Arena* describe a process for access to care in the central Ohio region when an infant less than 72 hours old with no indication of abuse or neglect is relinquished to a medical service worker, peace officer, or hospital employee as allowed under new state legislation.
- 3) The *Regional EMS Critical Infectious Exposure Guidelines* promote consistency among the Central Ohio prehospital and medical community with regards to treatment and follow-up of EMS personnel exposed to hazardous infectious body fluids while in the line of duty.
- 4) COTS provides leadership for acute care hospitals seeking to improve care for their critically injured trauma patients by:
 - Serving as a clearinghouse to refer rural and acute care hospitals to local trauma centers for transfer agreements*
 - Maintaining regional trauma care standards for reference by acute care hospitals who are establishing protocols for emergency stabilization of trauma victims*
 - Maintaining trauma process performance improvement (PI) guidelines for acute care hospitals seeking to establish a trauma PI program*
 - Maintaining the COTS Regional Performance Improvement Protocol which outlines the process by which COTS will evaluate the region's care over the coming years

*Transfer agreements with verified trauma centers, trauma care protocols, and trauma PI are mandated for all hospitals under ORC §3727 & §4765.

Advancing regional disaster health planning. COTS has been involved regionally with hospital disaster preparedness since 1998. In the past year COTS assisted central Ohio hospitals in procuring over 1.2 million dollars in federal Health Services Resources Administration (HRSA) funding earmarked for bioterrorism preparedness through the Ohio Department of Health and the Ohio Hospital Association (HRSA grant # 8-U3RHS000055-02-04). This funding is being used by hospitals to augment readiness efforts for mass casualties in the event of a large-scale disaster. COTS also helps coordinate local hospitals' emergency preparedness planning so that precious resources can be shared in a disaster to provide the greatest good to the greatest number of people. COTS staff carry a pager and serve as the hospitals' incident liaison in the event of a disaster in order to provide a clearinghouse for information and oversight for resource allocation. Additionally COTS participates by invitation on other local preparedness work groups including the Franklin County Terrorism Advisory Task Force; the Franklin County Communication Committee; the Franklin County Critical Infrastructure and Key Assessments Committee; the Franklin County Emergency Management Agency Equipment Committee; and the Columbus Metropolitan Medical Response System (CMMRS).

Two key COTS regional preparedness documents were revised this year and include: In conjunction with hospital, EMS, public health, and community response partners, COTS made progress on the following regional initiatives in 2004-05:

- A Memorandum of Understanding Between Central Ohio Hospitals for Shared Services, Personnel, and Supplies in a Disaster. This document affirms the commitment of hospitals to share precious resources in the event of a large-scale disaster.
- The Central Ohio Regional Hospital Disaster Plan. This plan, established by the COTS Regional Hospital Emergency Preparedness Committee, provides a framework for providing medical care to 1,000 disaster victims given the finite healthcare resources in the central Ohio region. The plan is multifactorial and encompasses assessing for hazards & vulnerability on healthcare campuses, mobilization of staff and resources to respond to a patient surge, inter- and intra-agency communication, command structure, collaboration with other community agencies, medical and mental health care of patients, protection of staff, patient allocation, and destination of fatalities. The plan is fluid and undergoes frequent updates as preparedness progresses in the region.

Contact Marshal Bickert at phone (614) 240-7419, extension 4 for information on participating in COTS hospital disaster preparedness activities.

- Coordinating professional trauma continuing education. COTS serves as a coordinator/provider of trauma education to medical professionals throughout the region. 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. Continuing education of central Ohio healthcare professionals means better healthcare rendered to local citizens. In the past year over 20,000 hours of continuing medical, nursing, and EMT education credit hours were provided through COTS via:
 - Twenty-one established professional trauma courses including the Advanced Trauma Life Support (ATLS®) Course for Physicians, the Emergency Nursing Pediatric Course (ENPC),

- and Trauma Nursing Core Curriculum (TNCC). Course sizes ranged from sixteen to thirty-two participants.
- A monthly lecture series for local emergency medical services (EMS) providers. An average of fifty paramedics attends on a monthly basis.
- Education to emergency department staff and EMS personnel on uniform screening for domestic violence; all patients who present for care will be screened and community assistance offered as appropriate. This project is funded by the Columbus Coalition Against Family Violence.

For information about educational opportunities through COTS, contact Chris Sheppard at phone (614) 240-7419, extension 1. To schedule domestic violence screening training, contact phone (614) 240-7419, extension 5.

- ➤ **Providing Public Education on Injury Prevention.** The COTS Central Ohio Burn Education Coalition (COBEC) conducted a number of fire and burn prevention activities in 2004-05.
 - 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 city of Columbus employees participate.
 - COBEC members assist the State Fire Marshal with fire/burn education at their booth at the Ohio State Fair in August.
 - COBEC members staffed a booth at the WBNS Project Safe Child event in May 2004 held at Crew stadium. COBEC members provided burn education to children attendees and their families.
 - COBEC established a public information brochure with tips on fire prevention and simple burn first-aid.
 - COBEC provided "Fire Smarts" fire and burn prevention education to middle-school children in Columbus in 2005.

For information on joining the COTS Central Ohio Burn Education Coalition, contact (614) 240-7419, extension 6.

In addition to the COBEC activities, COTS has other public education brochures including: *Injury While Drinking Alcohol is No Accident; Autopsies in Injury-Related Deaths; and Emergency Department Diversion: What Does it Mean?*

For a copy of any of COTS brochures or protocols, contact COTS at phone # (614) 240-7419, extension 1.

COTS work on large-scale initiatives to improve emergency care for citizens extends beyond local committees. COTS is an active participant in a number of state committees including:

- ➤ Central Ohio Regional Medical Response System Steering Committee (emergency preparedness)
- Franklin County Airport Exercise Committee
- Franklin County Citizen Corps
- Franklin County Northwest Area Strike Team
- ➤ Ohio Committee on Trauma of the American College of Surgeons
- ➤ Ohio Domestic Violence Network
- > State Metropolitan Medical Response System
- > State of Ohio's Trauma Committee
- ➤ State of Ohio's Trauma Registry Advisory Subcommittee
- > State of Ohio's Public Records Advisory Group

> State of Ohio's Volunteers Medical Response Corps Committee

2005---NEW WORK. Because COTS work is driven by issues raised throughout the year at the committee level and or by COTS Board of Trustees, it is not possible to know the full extent of COTS "new work" in 2005-06. What is known is that historically there are existing community issues related to emergency healthcare, and COTS committees/Board 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.

Some "new" COTS work in 2005-06 is known based on work from 2004-05 and includes the following.

- ➤ Implementation of two new regional protocols. Two regional protocols have been created this past year by the COTS Prehospital Committee.
 - Regional Guidelines for Patients with Concealed Weapons. With the passage of recent state legislation allowing citizens to carry concealed weapons, the incidence of EMS personnel finding a loaded weapon while caring for a patient will increase. Local prehospital and emergency department personnel expressed concerns over handling a loaded firearm while caring for a patient. These COTS Regional Guidelines for Patients with Concealed Weapons provide a standardized approach to intervening in such situations. The guidelines include locked gun safety boxes that are exchanged between EMS, hospitals, and law enforcement personnel. The guidelines seek to: (1) minimize accidents that could occur by healthcare personnel handling firearms while caring for patients; (2) protect the rights of citizens; and (3) maintain a "chain of custody" documentation of the weapon.
 - Emergency Medical Services Clinical Information for Prehospital Performance Improvement. EMS providers have long-depended upon hospital personnel to share the outcomes of patients that EMS cares for "in the field." Such outcome information from hospitals serves as a learning tool to validate what was seen and on which to make improvements in future care. With the advent of the federal Health Insurance Portability and Accountability Act (HIPAA), local hospitals and EMS providers were seeking a regional standard of care that under HIPAA would allow such exchange of information to occur. The COTS regional protocol Emergency Medical Services Clinical Information for Prehospital Performance Improvement establishes a HIPAA-compliant process for hospitals and EMS providers in the region to assure that this vital communication continues.
- ➤ The formation of a STEMI Task Force by the COTS Board. August 2004 saw the national publication of *Guidelines for the Management of Patients with ST-Elevation Myocardial Infarction* (STEMI) by the American College of Cardiology (ACC) and the American Heart Association (AHA). These "STEMI" guidelines outline the modern standard of care for patients having a "heart attack." One directive states that "every community should have a written protocol that guides EMS system personnel in determining where to take patients with suspected or confirmed STEMI." The COTS STEMI Task Force is drafting a white paper that outlines the necessary cardiology services of local hospitals deemed necessary for STEMI patients by the AHA/ACC STEMI Guidelines so that EMS providers can make informed decisions about where they take STEMI patients.

The creation of a database to trend emergency department activity and diversion. This database is in line with two existing COTS initiatives---the *Regional Emergency Care Access Plan (RECAP)* and regional hospital disaster preparedness. With RECAP, emergency department activity and diversion have never been concretely measured in the region. This database will allow COTS to provide hospitals and EMS agencies insight into diversion trends in the region so that system improvements and ultimately patient care services can be improved. It will also provide a method for assessing for a covert biological terrorism event based on unlikely patient surges to local emergency departments. The database will include a patient bed count screen for use by hospitals in a disaster. This work is dependent upon a grant from the Columbus Health Department.

SUMMARY

The growth of COTS as a regional trauma system is unprecedented in the State of Ohio. Clearly COTS serves an essential role in central Ohio as evidenced by community involvement and active initiatives. The work undertaken by COTS is not duplicated elsewhere in the region. COTS' ability to problem-solve community issues through collaborative forums is made possible through the continued investment of trauma stakeholders and the public as well as the expert professionals serving on its Board, Committees, and staff.

For more information about COTS, contact phone (614) 240-7419 or visit www.goodhealthcolumbus.org.