

UNIVERSITY OF MARYLAND

MARYLAND INSTITUTE FOR EMERGENCY MEDICAL SERVICES SYSTEMS

OFFICE OF THE DIRECTOR

Shock Trauma Center
CNS Center
Traumatology
Critical Care
Critical Care Nursing
Hyperbaric Medicine
Medical Engineering
Research & Development
Operations Research/
Systems Analysis
EMS Systems
Education
Training
Communications
Transportation
Administration
Evaluation

June 28, 1982

Dear Maryland EMS System User:

The critical role that the Systems Communications Center plays in the delivery of EMS care in Maryland and the increased number of organizational interfaces with SYSCOM have prompted the compilation of existing protocols, which is attached. This document represents the first consolidated listing of protocols pertaining to SYSCOM Operations, and is intended to provide you with a better understanding of what to expect from the system and the communication operators at SYSCOM. These protocols will be periodically reviewed and updated as improvements in the system occur.

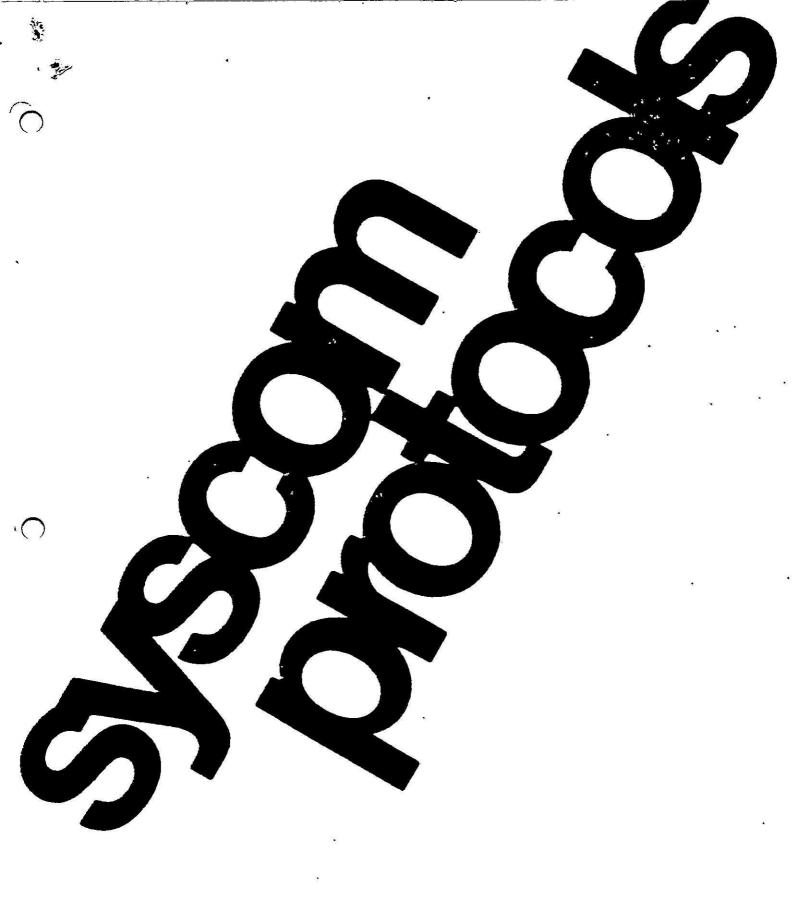
Please assist us by familiarizing yourself and others who may utilize SYSCOM with these protocols. Your cooperation is greatly appreciated.

Sincerely,

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R Adams Cowley, M.D. Professor of Thoracic and Cardiovascular Surgery MIEMSS (301) 528-5085

RAC/dcb





INTRODUCTION

The Maryland Institute for Emergency Medical Services Systems (MIEMSS) has developed a statewide system for the care of the critically ill and injured. This system consists of a series of Specialty Referral Centers, including trauma centers; a rapid transportation system; and a statewide Emergency Medical Services Communications System (EMSCS).

There are currently seven categories of Specialty Referral Centers. These categories are adult trauma (with the MIEMSS Shock Trauma Center serving as the highest level of trauma care in Maryland), pediatric trauma, burns, hand trauma (treating patients with full or partial amputations of upper and/or lower extremities), eye trauma, neonatal emergencies, and perinatal emergencies. All specialty referral centers are serviced by the rapid evacuation and transportation system provided primarily by the Maryland State Police Aviation Division's Med-Evac helicopters. The State Police Med-Evac system is augmented with helicopter services provided by the United States Park Police (based in the Washington, D.C. area) and by the Davison Army Air Field, Crash Rescue Branch (based at Fort Belvoir, Virginia).

The Maryland EMSCS has its hub at the Systems Communications Center (SYSCOM) located in the MIEMSS. The system facilitates medical consultation and coordinates rapid transportation and admission to the various Specialty Referral Centers. The EMSCS is able to rapidly tie together all providers of emergency medical care (i.e., ambulances, helicopters, hospitals, and dispatch centers) throughout the state to facilitate effective decision making and subsequent implementation.

This document outlines the protocols under which the Communications Operators at SYSCOM will provide the coordination services necessary for the system to meet the demands of emergency medical care in Maryland. It must be kept in mind that the function of the SYSCOM Operators is to facilitate consultation and to coordinate the rapid transportation system, at no time will SYSCOM Operators provide medical direction or consultation.

As SYSCOM is often the initial point of contact with the Maryland EMS System it is vital that the Operators put MIEMSS "best foot forward" by always providing the service in a professional and courteous manner. This should also hold true for MIEMSS physicians providing medical consultation services. If necessary the patient data for the SYSCOM Information Form can be obtained at a later time. The Operator should never insist on complete patient data prior to coordinating the patient transfer. A brief description of the nature of the patient's injuries will suffice to implement transfer procedures.

Whenever the SYSCOM Operator receives a request from the field or from another hospital that would require an exception to the protocols as outlined herein, the Operator will seek Medical

Control from the Director of Field Operations (Dr. Alasdair Conn or his designee) which shall be the source for granting exceptions to protocol. These protocols are not meant to be so inflexible as to preclude the use of common sense and good judgment in facilitating medical consultation and patient transfers.

Whenever SYSCOM is aware of a helicopter landing in any jurisdiction within Maryland (with the exception of landings at the MIEMSS heliport) the Central Alarm/Fireboard responsible for that jurisdiction shall be notified for informational purposes.

Extraordinary circumstances regarding admissions to MIEMSS:

1. Double admissions in one helicopter: The Operator will ask the Medic Observer if both patients can be safely transported in one ambulance.

If Not the Operator will notify the Campus Police and request additional manpower for a second ambulance. All pertinent patient information will be provided.

If Yes the Operator will notify the Campus Police and request additional manpower for the 641 area to assist in off loading the patients from the ambulance.

- Very heavy patients: Whenever SYSCOM is notified by the helicopter personnel that the incoming patient is very heavy (approximately 300 lbs. or greater), the Operator will contact the Campus Police and request additional manpower for the 641 area.
- 3. Anytime a second admission is due at the helipad within fifteen (15) minutes of the preceding admission the Operator will: notify the Campus Police and request additional manpower for a second ambulance. All pertinent patient information will be provided. Additionally the Trauma Transport Technicians will be notified of the new admission and will be requested to meet the Campus Police in the 641 area to assist with the transfer of the patient from the ambulance to the Admitting Area.
- 4. Whenever SYSCOM is notified of an equipment shortage on the helipad, the Operator will relay that information to the Admitting Area Charge Nurse.

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I. MIEMSS

Criteria for admission to MIEMSS are as follows:

- a. Adults (age 14 and older) with one or more of the following -
 - (1) severe multiple injuries (two or more systems)
 - (2) cardiac and major vessel injuries
 - (3) multiple injuries with complications such as shock, sepsis, respiratory failure, cardiac failure, alcohol and drug overdose
 - (4) severe facial injuries
 - (5) gas gangrene
 - (6) carbon monoxide poisoning
 - (7) scuba and diving accidents
 - (8) smoke inhalation
 - (9) all adult spinal cord injuries with neurological deficit
- b. Patients will also be accepted in the following situations:
 - (1) Children (under age 14) when an adult family member is also a MIEMSS patient.
 - (2) Adult burn patients when the Burn Specialty Referral Centers are full.
 - (3) Children requiring the use of the Hyperbaric Chamber.

A. Adult Trauma

1. Field Transports

When SYSCOM is contacted by field personnel and informed of an adult trauma victim (14 years old and older) in need of Specialty Center Care, and it has

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been determined that MIEMSS will be the receiving facility the Operator will:

- a. Contact the closest available helicopter and inform them of the location of the accident, type of injury, ascertain estimated time of arrival (ETA) of the helicopter at the accident scene. Relay ETA to field.
- b. Attempt to retrieve patient data pertinent to patient care. (Complete SYSCOM Patient Form).
- c. Immediately initiate internal call-down sequence, and inform each of the following of the indicated information.
 - Admitting Area Nurses Patient information, ETA
 - Nurse Anesthetist Patient information, ETA
 - Trauma Transport Technicians-ETA
 - Team Leader-Patient information, ETA
 - Ward Clerks-Patient information, ETA
 - Campus Police-ETA
 - Attending Physicians-Patient information, ETA
 - Baltimore City Police destination, direction of approach, ETA
- d. Once the SYSCOM Operator has received a final E.T.A. to MIEMSS from the Unit that is transporting the patient, the Operator will contact all of the following personnel, and advise of E.T.A.:
 - Admitting Area Nurses
 - Trauma Transport Technicians
 - Nurse Anesthetist
 - Campus Police
 - Team Leader and entire team on call

- Ward Clerks
- Baltimore City Police Dept.
 - Alert to direction of approach, destination, E.T.A.
- Public Address Announcement (117)
- All request for medical/trauma consultation will be directed to the MIEMSS Team Leader or Attending Physician on call.
- Admitting Office
- Lab

When a physician from another Medical Facility contacts SYSCOM requesting the transfer of a patient from that facility to MIEMSS the Operator will:

- a. Get the physicians name, hospital, location within the hospital, and call back number.
- Ask if the physician would like a medical consultation. If a consult is requested the Operator will immediately summon the Team Leader or attending physician on call to provide the consultation. If medical consultation is not requested, and MIEMSS has available beds, the Operator will contact the closest available helicopter and request services for transportation. When aware of an E.T.A. to the sending hospital, the Operator will inform the referring physician of same and at that time obtain the information necessary to complete the patient information form. The Operator will then notify all mission essential MIEMSS personnel as if this were a Field Transport, (i.e., initiate call down sequence as indicated for a field transport).

B. Spinal Cord Center

When SYSCOM is notified that a Spinal Cord Injury is being directed to MIEMSS the Operator will automatically

coordinate the transportation of that patient to MIEMSS.

MIEMSS is never closed for spinal cord injuries. The

Operator should initiate the call down sequence as indicated for a field transport.

C. Hyperbaric Medicine Center

- 1. When SYSCOM is notified of a patient with suspected carbon monoxide (CO) poisoning, cyanide poisoning or smoke inhalation, the Operator will coordinate the transport using the appropriate protocol (i.e., for field transport or hospital transfer), except;
 - Patient information should include;
 - (1) Is the patient conscious? Has the patient ever been unconscious as a result of the incident?
 - (2) Is the patient combative?
 - (3) If CO poisoning is suspected, was it accidental or a suspected suicide attempt?
 - Internal call down sequence should be as follows;

Admitting Area Nurses

Nurse Anesthetist

Trauma Transport Technicians

Director, Hyperbaric Medicine

Team Leader

Chamber Area Nurse on call

Chamber Operator on call

Ward Clerks

Campus Police

Attending Physicians

Lab (advise to turn on blood gas machine for CO)
Baltimore City Police

- 2. If Hyperbaric consultation is requested regarding air embolisms consultation will be provided by either Dr. Roy Myers or Dr. John Britten (If the air embolism is the result of a diving accident Charlie Gross may be contacted).
- 3. When contacted for consultation regarding any type of diving accident the Operator will:
 - a. Get the individual's name, location, call back number and brief description of the problem.
 - Relay above information to the Director of Hyperbaric Medicine or Charlie Gross (beeper).
 - c. If treatment at MIEMSS is required the patient will report to the nearest Hospital Emergency Department, and transport to MIEMSS will be coordinated in the same manner as other interhospital transfers to the MIEMSS Hyperbaric Medicine Center.

II. Areawide Trauma Centers

Criteria for admission to Areawide Trauma Centers are as follows:

- severe multiple injuries (two or more systems)
- cardiac and major vessel injuries
 - multiple injuries with complications such as shock, sepsis, respiratory failure, alcohol and drug overdose
 - severe facial injuries
 - spinal cord injuries without neurological deficit

A. Prince Georges General Hospital

1. Field Transports

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When SYSCOM is contacted by field personnel and informed of an adult trauma victim in need of specialty care at a trauma center, and it has been determined that Prince Georges General will be the receiving trauma facility, the Operator will:

- a. Contact the closest available helicopter and inform them of the location of the accident and the type of injury and will ascertain the E.T.A. of the helicopter to the accident scene. The Operator will then relay this information to the field, via the appropriate Central Alarm/Fire Board.
- Attempt to retrieve data pertinent to patient care. (complete SYSCOM patient form)
- c. The Operator will reconfirm, to the helicopter personnel, that the receiving facility is Prince George's General. In addition, the helicopter personnel will be instructed to coordinate their return E.T.A. to Prince George's General through the Prince George's Fire Board.
- d. SYSCOM will make initial notification to Prince George's Trauma Center through the EMSTEL Communications System (Dial Code S-61), of all available patient information. Final notification shall be the responsibility of the Prince George's County Fire Board.
- e. A patient information form will be made on all transports of this type.

Hospital Transfers

When a physician from another Medical Facility contacts SYSCOM requesting the transfer of a patient from that facility and it has been determined that Prince George's Trauma Center will be the receiving trauma Facility, the Operator will:

- a. Get the physician's name, hospital and call back number.
- Obtain all patient information and inform the physician you will call back shortly.
- Contact Prince George's Trauma Center on the EMSTEL Communications System (Dial Code S-61) and relay all patient information to the physician on duty. Once the transfer has been accepted, contact the closest available helicopter and ascertain E.T.A. to sending hospital. Be sure to give the crew brief description of the patient information and advise them that final E.T.A. to Prince George's Trauma Center is to be coordinated through Prince George's Fire Board.
- d. Re-establish contact with the referring physician and advise of the E.T.A. of the helicopter.
- e. A patient information form will be made on all transports so coordinated.

B. Suburban Trauma Center

1. Field Transports

When SYSCOM is contacted by field personnel and informed of an adult trauma victim in need of specialty care at a trauma center, and it has been determined that Suburban will be the receiving trauma facility the Operator will:

- a. Contact the closest available helicopter and inform them of the location of the accident, and the type of injury, and will ascertain the E.T.A. to the accident scene. The operator will then relay this information to the field via the Montgomery county Fire Board.
- Attempt to retreive data pertinent to patient care. (Complete SYSCOM patient information form.)
- c. Reconfirm to helicopter personnel that the final destination is Suburban.

- d. The Operator will notify Suburban's Trauma Center and Montgomery County Fire Board to make them both aware of impending transport.
- e. Montgomery County Fire Board will be contacted by the Operator once the helicopter has made them aware of a final E.T.A. to Suburban.

Transfers to Suburban General Trauma Center are generally handled independently of SYSCOM coordination and facilitated by surface transportation.

However, if SYSCOM is contacted and requested to assist in the coordination of such a patient transfer, the operator will fully cooperate in that process. Procedures for normal hospital transfer shall be followed.

*Patient information forms will be completed on all patients.

C. WASHINGTON COUNTY GENERAL TRAUMA CENTER

1. Field Transports

When SYSCOM is notified of an adult trauma victim in need of Specialty Care at a Trauma Center and it has been determined that Washington County General will be the receiving trauma facility the Operator will:

- a. Contact the closest available helicopter and inform them of the location of the accident, and the type of injury, and will ascertain E.T.A. to the scene. Advise helicopter that the patient will be transported to Washington County General Hospital.
- Contact Washington County Fireboard and advise them of details of transport.

- c. The operator will then make the field unit aware of the E.T.A. of the helicopter to the scene via the appropriate Central Alarm/Fire Board.
- d. SYSCOM will contact Washington County General Hospital and advise them of patient transport.

Transfers to Washington County General Hospital are generally handled independently of SYSCOM coordination and facilitated by surface transportation.

However, if SYSCOM is contacted and requested to assist in the coordination, of such a patient transfer, the Operator will fully cooperate in the process. Procedures for normal hospital transfers shall be followed.

*Patient information forms will be completed on all patients.

D. Peninsula General Hospital

1. Field Transports

When SYSCOM is notified that a trauma victim in the field is in need of specialty care at a Trauma Center and it has been determined that Peninsula General will be the receiving trauma facility the Operator will:

- a. Contact the closest available helicopter and inform them of the location, and the type of injury, and will ascertain E.T.A. to the accident scene. Advise helicopter personnel that the patient will be transported to Peninsula General Hospital.
- Contact Wicomico County Fire Board and advise them of details of transport.

- c. The Operator will then make the field unit aware of the E.T.A. of the helicopter to the scene, via the appropriate Central Alarm/Fire Board.
- d. The Operator will contact Peninsula General Hospital and advise them of the impending transport.

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All interhospital transfers to Peninsula General will be coordinated by SYSCOM. When a physician from another medical facility contacts SYSCOM requesting the transfer of a patient from that facility to the Peninsula General Trauma Center, the Operator will:

- a. Get the physician's name, hospital, location within the hospital, and call back number.
- Obtain all necessary patient information and inform the physician you will call back shortly.
- c. Contact the Peninsula General Trauma Center on the EMSTEL Communications System and relay all patient information to the physician on duty. It may be necessary for this physician to recontact SYSCOM before final acceptance of the transfer can be made.
- d. When the transfer has been accepted, contact the closest available helicopter and ascertain the ETA of the helicopter to the sending hospital. Be sure to give the crew a brief description of the patient information and advise them that the final ETA to Peninsula General is to be coordinated through the Wicomico County Central Alarm.
- e. Reestablish contact with the referring physician and advise of the ETA of the helicopter.
- f. A patient information form will be completed on all transports so coordinated.

E. Areawide Trauma Centers for Baltimore City

- ** The transporting of adult trauma victims within the city of Baltimore to the following Trauma Centers are to be coordinated by the EMRC. Transportation will be by land ambulance.
 - 1. Johns Hopkins Adult Emergency Room
 - 2. University of Maryland Emergency Room
 - 3. Baltimore City Hospitals Emergency Room
 - 4. Sinai Hospital Emergency Room

F. Cumberland Memorial Hospital Trauma Center

1. Field Transports

When SYSCOM is notified of an adult trauma victim in need of specialty care at a Trauma Center and it has been determined that Cumberland Memorial will be the receiving trauma facility, the Operator will:

- a. Contact the closest available helicopter and inform them of the location of the accident, and the type of injury, and will ascertain the E.T.A. to the scene. Advise the helicopter crew that the patient will be transported to Cumberland Memorial Hospital.
- b. Contact the Allegany County Central Alarm and advise them of the details of the transport.
- c. The operator will then make the field unit aware of the E.T.A. of the helicopter to the scene via the appropriate Central Alarm/Fire Board.
- d. Contact the Cumberland Memorial Hospital and advise of the patient transport.

Transfers to Cumberland Memorial Hospital are generally handled independently of SYSCOM coordination and facilitated by surface transportation.

However, if SYSCOM is contacted and requested to assist in the coordination of such a patient transfer, the Operator will fully cooperate in the process.

III. Pediatric Trauma

A. Johns Hopkins Pediatric Trauma Center

1. Field Transports

When SYSCOM is contacted by field personnel and informed of pediatric trauma victim (13 yrs. and younger) in need of specialty referral center care the Operator will:

- a. Contact the closest available helicopter and inform them of the location of the accident, type of injury and ascertain E.T.A. of the helicopter to the accident scene. Relay same to field, via the appropriate Central Alarm/Fire Board.
- b. Attempt to obtain patient data pertinent to patient care. (Complete SYSCOM form)
- C. Establish simultaneous contact with Johns Hopkins Adult Emergency Room (JHH-ER) and Johns Hopkins Pediatric Intensive Care Unit (JHH PICU) through the EMRC phone line. When simultaneous contact has been made the Operator will relay all information relevant to the patient transport (i.e., patient data).
- d. Once the SYSCOM operator has received a final E.T.A. to Johns Hopkins from the unit that is transporting, the Operator will contact all of the following:

- Johns Hopkins E.R. and P.I.C.U. (simultaneously), through the E.M.R.C. phone line and advise of current patient status and E.T.A. of transporting unit.
- Baltimore City Police Department (Direct Auto Dial) Alert to direction of approach, destination and E.T.A. of transporting aviation unit.
- * In the event SYSCOM is initially contacted through the E.M.R.C. by a field unit, requesting to direct a patient to a pediatric trauma facility, the Operator will request the E.M.R.C. to bridge the call into the Johns Hopkins Hospital Emergency Room and Pediatric Intensive Care Unit simultaneously. The Operator will then monitor the direct consult between the field unit and Hopkins, to obtain patient data, E.T.A., etc.

When a physician from another medical facility contacts SYSCOM requesting the transfer of a patient from their facility to the Hopkins Pediatric Trauma Center the Operator will:

- a. Get the physician's name, hospital, location within the hospital, and call back number.
- b. Obtain patient information pertinent to patient care (complete patient information form).
- c. Contact Johns Hopkins Adult E.R. and P.I.C.U. simultaneously and relay patient information. Once information has been given, ascertain if the patient can be accepted.
- d. Once patient has been accepted, ascertain the receiving physicians's name.
- e. Contact the closest available helicopter and request services for transportation. Ascertain E.T.A. to sending hospital. Give helicopter personnel a brief description of the patient information.
- f. Contact physician at sending hospital and inform them of the E.T.A. of the helicopter.

- g. When informed of a final E.T.A., the Operator will simultaneously contact Hopkins Adult E.R. and P.I.C.U. to inform them of the patient's E.T.A.
- h. The Baltimore City Police Department will be notified, through the direct line, of the destination, direction of approach and E.T.A.
- *** In the event the Operator is initially contacted through the E.M.R.C. by a referring physician, the Operator will request the E.M.R.C. to bridge the call into Hopkins Adult E.R. and P.I.C.U. simultaneously. The Operator will then monitor the direct consult between Hopkins and the referring Physician, to obtain patient information.

B. D.C. Children's Hospital

Field Transports

All Pediatric Trauma victims are to be directed to the Johns Hopkins Pediatric Trauma Center. However, if in the opinion of field providers or Maryland State Police Aviation personnel it appears that life or limb will be compromised by the longer flying time to Baltimore, personnel may request an exception to protocol to fly to D.C. Children's Hospital.

Hospital Transfers

When SYSCOM is contacted by a physician requesting the transfer of a pediatric patient to D.C. Children's Hospital the Operator will:

- a. Get physician's name, hospital, location within the hospital, call back number, and inform the physician that the transport must be approved and you will call back shortly.
- b. Contact Dr. Conn or his designee for approval of transport. (Beeper)

- c. If the transport <u>is</u> approved, contact closest available helicopter and ascertain E.T.A. to the sending hospital. Be sure to inform crew of patient's destination.
- d. Contact the referring physician and advise of the E.T.A. of the helicopter.
- e. Upon receipt of a final E.T.A. to D.C. Children's Hospital the Operator will contact the receiving facility and inform them of the E.T.A. In addition the Operator will contact the staff at the Medstar Pad and inform them of the type of patient enroute, destination, and the E.T.A.

IV. BURNS

A. Baltimore City Hospital Burn Unit

- 1. Patient criteria for transport to Burn Unit
 - a. Second and third degree burns
 - (1) Greater than 10% body surface area in patients under 10 or over 50 years of age
 - (2) Greater than 20% in other age groups
 - (3) Burns of the face, hands, feet or perineum.
 - b. Patients with burns and inhalation injury.
 - c. Electrical burns
 - d. Chemical burns

Field Transports

When SYSCOM is contacted by field personnel and informed of a burn victim and it has been determined that the City Burn Unit will be the receiving facility, the Operator will:

- a. Obtain all pertinent patient data from the field personnel, i.e., age, size of burn, mechanism of burn, respiratory status, vital signs.
- b. If helicopter transport is requested, the Operator will contact the closest helicopter and inform them of the location of the burn patient, the receiving hospital, and ascertain

the E.T.A. to the scene. Relay E.T.A. to the scene, via the appropriate central Alarm/Fire Board.

- c. Relay pertinent patient data to the City Burn Unit via EMRC.
- d. When notified of an E.T.A. to the receiving facility, the Operator will so notify the City Burn Unit and relay updated patient information.
- e. SYSCOM will coordinate the dispatch of the Baltimore City F.D. ambulance fifteen (15) minutes prior to E.T.A., if possible, to transport the patient from the City Hospital helipad to the Emergency Room.
- f. Contact Baltimore City Police Department and alert them of the direction of approach, destination, and E.T.A.

NOTE: Patients with burns and major trauma will be directed to the appropriate Maryland Trauma Center, for stabilization.

3. Hospital Transfers

When a physician from another medical facility contacts SYSCOM requesting the transfer of a patient from that facility to the City Burn Unit, the Operator will:

- a. Get the physician's name, hospital, location within the hospital, call back number and the following patient data: name, address, date of birth, respiratory status, extent of injury, mechanism of injury, and treatment rendered.
- b. Contact City Burn Unit (396-8765) and request to speak to the physician or P.A. on duty in the Burn Unit, and advise of all of the above information.
- Operator will request direction from the Burn Unit as to whether Army helicopter, MSP helicopter, or land ambulance should be utilized to transport the patient.

- d. If it is determined that helicopter transport is needed, the Operator will contact the closest available helicopter and request services for transportation. When aware of an E.T.A. to the sending hospital, the Operator will notify the referring physician.
- e. When aware of an E.T.A. to the City Burn Unit, the Operator will coordinate the dispatch of the Baltimore City Fire Department ambulance fifteen (15) minutes prior to the E.T.A., if possible, to transport the patient from the City Hospitals heliport to the Emergency Room.
- f. Notify City Burn Unit of the E.T.A.
- g. Contact the Baltimore City Police Department and alert them of the direction of approach, destination, and E.T.A.

NOTE: When the incoming request is made via one of the 800 numbers, the call should be patched directly through to the Specialty Center involved.

4. Special Cases

Under an agreement between the Baltimore City
Hospitals Burn Unit and the U.S. Army Rotary Wing
Priority Air Transport Division, army helicopters
may be utilized to transport medical personnel from
the Burn Unit to accompany burn patients to that
unit.

When this specialized service is needed the City
Burn Unit will contact SYSCOM requesting the use of
the army helicopter. The Operator will coordinate
the transport following the appropriate usual protocol (i.e., field transport or hospital transfer).

B. Washington Burn Center (telephone no. 202-541-7241)

(Director: 202-541-6662)

- 1. Patient criteria for transport
 - a. Patients 16 years or older with 20% or greater of the body surface burned, regardless of the degree of burns.
 - b. Patients 16 years and older with burns of any degree on the hands, face, feet or perineum area.
 - c. Age 60 or older with any burn injury.
 - d. Patients 16 years and older with electrical burns.
 - e. Patients 16 years and older with respiratory system burns.

2. Field Transports

When SYSCOM is contacted by field personnel and informed of a burn victim in need of specialty care, and it has been determined that the Washington Burn Center will be the receiving facility, the Operator will:

- a. obtain all pertinent patient data from field personnel, i.e., age, size of burn, mechanism of burn, respiratory status, vital signs.
- b. If helicopter transport is requested, the Operator will contact the closest helicopter and inform them of the location of the burn patient, the receiving hospital, and ascertain the E.T.A. to the scene.
- c. Relay patient data to the Washington Burn Center (1-202-541-7241).
- d. When notified of an E.T.A. to the receiving facility the Operator will notify the Washington Burn Center of the E.T.A. and any updated patient information.

e. Contact the Washington Hospital Center Emergency Room (MEDSTAR) 1-202-541-7272 and provide them with the mission information.

NOTE: Any patient with burns and major trauma will be directed to the appropriate Maryland Trauma Center.

3. Hospital Transfers

When a physician from another medical facility contacts SYSCOM requesting the transfer of a patient from that facility to the Washington Burn Center the Operator will:

- a. Get the physician's name, hospital, location within the hospital, call back number and the following patient data: name, address, date of birth, extent of injury, mechanism of injury, respiratory status and treatment rendered.
- b. Contact the Washington Burn Center and request to speak to The Director or his designee, and relay the above information.
- c. When the patient has been accepted, the Operator will coordinate the transfer.
- d. If helicopter transport is needed, the Operator will contact the closest available helicopter and request services for transportation. When aware of an E.T.A. to the sending hospital, the Operator will notify the referring physician.
- e. When aware of an E.T.A. to the Washington Burn Center, the Operator will relay this information to the Burn Center and to the Washington Hospital Center Emergency Room (MEDSTAR) 1-202-541-7272.

V. HAND TRAUMA

A. Union Memorial Hospital Curtis Hand Center

1. Patient Criteria

a. Patients of all ages with partial or full amputations of upper and/or lower extremities.

2. Field Transports

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When SYSCOM is contacted by field personnel and informed of a patient in need of Hand Center Care, the Operator will:

- a. Obtain pertinent patient data, i.e., age, race, sex, mechanism of injury, extent of injury, and vital signs, as well as E.T.A.
- b. Contact the Union Memorial Hospital Emergency Department via EMRC, and relay the above information.
- c. If helicopter transport is utilized, the Operator will coordinate the dispatch of a Baltimore City Fire Department ambulance fifteen (15) minutes prior to E.T.A., if possible, to meet the helicopter at the Montebello Helipad and transport the patient to Union Memorial Hospital Emergency Department.
- d. If helicopter transport is utilized, the Operator will also contact the Baltimore City Police Department and alert them of the direction of approach, destination, and E.T.A.

Hospital Transfers

When a physician from another medical facility contacts SYSCOM requesting the transfer of a patient to the Curtis Hand Center, the Operator will:

- a. Get the physician's name, hospital, location within the hospital, call back number and the following patient data: name, address, date of birth, extent of injury, mechanism of injury, and treatment rendered.
- b. Contact the charge nurse or her designee at the Union Memorial Hospital Emergency Department via the EMRC, and relay the above information and request any specific instruction for the management of the patient.
- when the patient has been accepted, the Operator will coordinate the transfer by the most expedient means available.

d. If it is determined that helicopter transport is needed, the Operator will contact the closest available helicopter and request services for transportation. When aware of an E.T.A. to the sending hospital, the Operator will notify the referring physician.

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- e. Coordinate the dispatch of a Baltimore City Fire Department ambulance, fifteen (15) minutes prior to the E.T.A., if possible, to meet the helicopter at the Montibello Helipad and transport the patient to the Union Memorial Hospital Emergency Department.
- f. Contact the Baltimore City Police Department and alert them of the direction of approach, destination, and E.T.A.
 - NOTE: When the incoming request is made via one of the 800 numbers, the call should be patched directly to the Union Memorial Hosptial Emergency Department at 235-1016, or if busy at 235-7200 x 2626, and monitor the call.
- 4. Transfers from Fairfax Hospital, Fairfax, Virginia.

 Fairfax Hospital will initiate the call to SYSCOM requesting a Med-Evac helicopter to transport the patient to the Curtis Hand Center. The Operator will:
 - a. Get the physician's name, hospital, location within the hospital, call back number and obtain all pertinent patient information, i.e., name, address, date of birth, extent of injury, mechanism of injury, and treatment rendered.
 - b. Contact Union Memorial Hospital Charge RN in E.D. and confirm that the patient has been accepted, and request any specific instructions for the management of the patient.
 - c. Contact the U.S. Park Police Dispatcher at 116-426-6600 (if 116 tie-line is busy use 1-202-426-6600) and request the services of a helicopter and ascertain E.T.A.
 - d. Recontact referring physician and advise of E.T.A. of helicopter.

- e. The U.S. Park Police will contact SYSCOM on unicom frequency 123.05 when enroute to the Montebello Helipad to advise SYSCOM of the E.T.A
- f. Coordinate the dispatch of a Baltimore City Fire Department ambulance to the Montebello Helipad fifteen (15) minutes prior to E.T.A., if possible, to transport the patient to Union Memorial Hospital.
- q. Notify Union Memorial Hospital of the E.T.A.
- h. Contact the Baltimore City Police Department and alert them of the direction of approach, destination, and E.T.A.

VI. Eye Trauma

- A. Johns Hopkins Wilmer Eye Center
 - 1. Eye trauma patients in Regions III and IV will be referred to this center. If there is other significant trauma, the patient should be transported to the nearest appropriate facility for stabilization before transfer to the Eye Center.
 - 2. Unless otherwise requested by the physician at the Wilmer Eye Center, transports should be made by land ambulance.
 - 3. During the hours of 9:00 a.m. to 5:00 p.m. Monday through Friday, all eye trauma patients will go directly to the Eye Emergency Room, at all other times patients will be transported to the Adult Emergency Department.
 - When SYSCOM is contacted by field personnel and informed of a patient in either Region III or IV in need of Eye Center care the operator will:

- a. Obtain the necessary patient information (i.e., age, extent of injury, mechansim of injury, any other significant trauma), and their location, and ETA to Hopkins.
- b. Contact the Wilmer Eye Center via direct line from the EMRC, so that a physician can respond to meet the patient. If there is no response on the direct line, the information should be relayed through the Hopkins Adult Emergency Department.
- 5. Hospital Transfers -

When a physician from another medical facility contacts SYSCOM requesting the transfer of a patient from that facility to the Wilmer Eye Center, the Operator will:

- a. Get the physician's name, hospital and call back number or advise physician to contact via EMRC.
- b. Obtain all patient information (age, sex, race, extent of injury, mechanism of injury, any other significant trauma, treatment rendered).
- c. Contact the Wilmer Eye Center via direct line through the EMRC and advise them of the above information. If there is no response on the direct line, the information should be relayed to the Hopkins Adult Emergency Department.
- d. Recontact the referring physician and advise that the patient should be transported by land ambulance (unless otherwise directed by the Eye Center). If assistance is requested in dispatching a local ambulance, the Operator will cooperate by contacting the appropriate Central Alarm/Fire Board.
- B. Georgetown University Eye Speciality Center
 - 1. Eye trauma patients in Regions I, II and V will be referred to this center. If there is other signif-cant trauma, the patient should be transported to the nearest appropriate facility for stabilization before transfer to the Eye Center.

- Unless otherwise requested by the physician at the Georgetown Eye Center, transports should be made by land ambulance.
- When SYSCOM is contacted by field personnel and informed of a patient in Region I, II or V, in need of Eye Center care, the Operator will:
 - a. Contact the closest available helicopter and inform them of the location of the accident and the type of injury, and will ascertain the ETA of the helicopter at the scene, and advise the helicopter crew that the destination will be the Georgetown University Helipad. The Operator will then relay this information to the field.
 - b. Patient information and the ETA of the patient (when known) will be relayed to the charge nurse at the Georgetown Emergency Department. Georgetown will maintain the responsibility of arranging for an ambulance to meet the patient at the helipad.
 - c. Contact the Washington, D.C. Police Department and advise them of the destination, and direction of approach of the mission.
- 4. The Georgetown University Eye Speciality Center can be reached on 1-202-625-7151 and 1-202-625-EYES. All consultations should be handled through the latter number.
- VII. Maryland Intensive Care Neonatal Program
 - A. Six Specialty Referral Centers cooperate to provide specialized care for high-risk infants, they are:
 - 1. Baltimore City Hospitals Neonatal Center.
 - 2. University of Maryland Hospital Neonatal Center.
 - 3. Johns Hopkins Hospital Neonatal Center.

- 4. St. Agnes Hospital as a back up center when the other units are full.
- 5. Sinai Hospital as a back up center when the other units are full.
- 6. Mercy Hospital as a back up center when the other units are full.

- All initial requests for neonatal transfers shall be referred to the EMRC.
- Once the preliminary arrangements have been made the Neonatal Transport Nurse on call will contact SYSCOM to coordinate helicopter transport of the infant. The Operator will:
 - a. Obtain the patient's name, date of birth, diagnosis, name of the referring physician, referring hospital, location within the hospital, telephone number.
 - b. Ascertain whether the Neonatal Transport Nurse will accompany the patient, and at which facility she is located.
 - c. If the Neonatal Transport Nurse is to accompany the patient, the Operator will:
 - Utilize the Baltimore based helicopter when available.
 - 2) Contact the closest available helicopter and advise them of the request for a neonatal transport, the patient information, location of the patient, and that a Neonatal Transport Nurse will accompany the patient. Also advise them of the location of the Neonatal Transport Nurse and whether she will provide the isolette, and ascertain the ETA.
 - Recontact the Neonatal Transport Nurse and advise of ETA of helicopter.

- 4) Contact the Baltimore City Police Department and inform them of the destination, direction of approach and ETA of the helicopter.
- 5) When an ETA to the referring facility is known, contact the referring physician and so advise.
- 6) When SYSCOM becomes aware of a return ETA to the receiving facility the Operator will notify that center and the following of the ETA (also contact the Baltimore City Police Department of the destination, direction of approach and ETA).
 - University Neonatal Center Trauma Transport Technicians
 Campus Police
 - b. Sinai Neonatal Center -Baltimore City Fire Department - to dispatch an ambulance to the Sinai helipad.
 - c. Mercy Hospital Neonatal Center

 Baltimore City Fire Department to

 dispatch an 'ambulance to Mercy Hospital

 to pick up a physician and an isolette.

 The ambulance will then report to the

 University of Maryland Redwood Street

 Garage.

Trauma Transport Technicians - to transport the patient from the heliport to the Garage entrance.

Campus Police

- d. If the Neonatal Transport Nurse does not accompany the patient the Operator will:
 - 1) Contact the closest available helicopter and advise of the request for a neonatal transport, the sending facility and the receiving facility, as well as brief patient information. Ascertain ETA to sending facility.

- When an ETA to the receiving facility is known the Operator will notify that center and the following of the ETA (also contact the Baltimorte City Police Department and advise of the destination, direction of approach and ETA).
 - a) University Neonatal Center
 Trauma Transport Technicians
 Campus Police
 - b) Sinai Neonatal Center Baltimore City Fire Department - to dispatch an ambulance to the Sinai heliport.
 - c) Mercy Hospital Neonatal Center

 Baltimore City Fire Department to

 dispatch an ambulance to Mercy Hospital

 to pick up a physician and an isolette.

 The ambulance will then report to the

 University of Maryland Redwood Street

 Garage.

Trauma Transport Technicians - to transport the patient from the heliport to the Garage entrance.

Campus Police

VIII. Perinatal Emergencies

- A. A 24-hour consultation/referral service for high risk pregnancies is provided by the faculty in Perinatal Medicine at the Johns Hopkins Hospital and the University of Maryland Hospital, on a rotational basis. (Back up referral centers include Baltimore City Hospitals, Mercy, St. Agnes and Sinai).
- B. All initial requests for perinatal consultation and/or transfer shall be referred to the appropriate center via the EMRC. If the availability of an intensive care nursery bed is a consideration in the transfer, the high risk obstetrician will verify that a bed is open at that institution.

- 1. If helicopter transport is indicated the high risk obstetrician will contact SYSCOM to coordinate the transfer. The Operator will:
 - a. Ascertain the following information
 - 1) Name, hospital and call back number of the high risk obstetrician approving the transfer and name of the receiving physician and receiving facility.
 - Name, hospital, location within the hospital of the referring physician.
 - 3) Patient name, date of birth and diagnosis.
 - b. Contact the closest available helicopter to the referring facility and request a perinatal transfer, advising them of the sending and receiving facilities and brief patient information.
 - c. When an ETA to the referring facility is known, contact the referring physician and so advise.
 - d. When an ETA to the receiving facility is known, contact the receiving physician and so advise, requesting that the Helicopter Reception Protocol be implemented.
 - e. The remainder of the mission should be coordinated following the normal procedures for hospital transfers.