“When the Circus Comes To Town”
Medical Coverage & Coordination For Special Athletic Events

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“We would like to have an event in your town!”

What kind of events?

What venue?

Pluses?

Minuses?
Special Athletic Events
Traditional Athletic Events

- Sports Championships
  - Little League World Series
  - Region High School
  - College Championships

- Traditional Road Races
  - 10 K Races
  - 10 Milers
  - Road Bike Races
Extreme Sports Events

- Marathons
Triathlons
Mountain Bike Events
“X Games”
Rodeos
Adventure Racing
“What Do They Want From Us?”
“Just wanted to let you know…”

- Is there an expectation of coverage?
- Providing their own coverage
  - Assess Level of Service Needed
  - Assess Level of Service Provided
Breaking News
LIVE EMT Squirrel Saves Life With CPR!

[Image of two squirrels, one appearing to perform CPR on the other]
Requested a Standby

- Level of Care Requested
- Level of Care Required
Extended Coverage

- Length of Event
  - Hour?
  - Days?

- Advanced Levels of Care
  - ALS
  - Wilderness Medicine
  - Advanced Practice Paramedic
  - Physician
Needs Assessment
Risks Assessment

- Potential Hazards
  - Environment Hazards, i.e. Heat, Cold, Terrain
  - Flora and Fauna, i.e. Poison plants, snakes, insects, deer, cows, lions, tigers and bears (Oh, My!), etcetera.

- Potential for Injury/Illness Related to the Event.
  - Participants
  - Event Staff/Volunteers
  - Bystanders
Other Risks

- Terror Risk Potential
  - Does the event present a threat for terrorist activity?
  - High profile venue
  - Urban area
  - Large crowds
  - High profile or controversial dignitaries
Other Risks (cont.)

- Protesters
  - Environmentalist
Other Risks (cont.)

- Protesters
  - Environmentalist
  - Animal Rights
Other Risks (cont.)

- Protesters
  - Environmentalist
  - Animal Rights
  - Political
I'm so angry I made a sign
Other Risks (cont.)

- Protesters
  - Environmentalist
  - Animal Rights
  - Political
  - Generalized Squirrel Turds
Other Risks (cont.)

- Protesters
  - Environmentalist
  - Animal Rights
  - Political
  - Generalized Squirrel Turds

- Coordination when a treat is identified
  - Be involved in the coordination
  - If you have questions, ask them
  - Know the WHOLE plan (as much as possible)
Venue Requirements

- By the Event Organizers
- Event Coverage
  - Event Sight/Course
  - Event Periphery
- Back-up Units
Extent of the Venue

- **Single Service Area**
  - Single Crew Response Area
  - Agency response Area

- **Multiple Agency Areas**
  - Multiple Agency Area within a Locality
  - Multiple Localities, i.e. Town/City, Counties, States.
Impact on Resources Assessment

- Event vs. Community
- Cost vs. Benefit
Coordination with Other Area Agencies

- Other EMS Agencies
- Hospitals
- Air Medevac Resources
- Fire Services
- Law Enforcement
- Municipal Services
- Private Companies, i.e. Sponsors, Hotels, Suppliers, etc.
Event Critique/Action Items

- What Went Right?
- What Went Wrong?
- Would You Do It Again?
A Case Study: Lynchburg Regional Air Show - 2011
Lynchburg Regional Airshow STIP Tent Deployment

Review & Critique
Lynchburg Regional Air Show

- U.S. Navy Blue Angels
- The Black Daggers U.S. Army Special Operations Parachute Team
- The Flying Circus (Barnstormers, Bi-planes, Wing walkers, and Skydivers)
- Static Displays
Lynchburg Regional Air Show

- May 21 & 22, 2011
- Two weeks pre-event- Estimated crowd: 3000 – 5000 persons per day (Includes spectators, staff, volunteers, and performers)
- Three days pre-event- Estimated crowd: 10,000 - 20,000 persons per day.
Weather Forecast

- Saturday, May 21th- Sunny, High in the mid 80s

- Sunday, May 22nd- Mostly sunny, High in the mid 80s, Slight chance of morning showers.

“Airfield Factor”-

When on an airfield, air temperatures will be 10-15 degrees hotter, depending on the surface color.
STIP Tent
STIP Tent Staffing

- Centra Health
- Blue Ridge Medical Reserve Corp

- 4 Physicians (FP, EM)
- 5-7 Registered Nurses
- 1-2 ED Technicians (EMT thru Paramedic)
- 3-4 Support Personnel (HUCs, Scribes, Medical Comms, Ham Operator, Other Non-Medical Personnel)
EMS Staffing

- Campbell County Department of Public Safety
- Lynchburg Fire & EMS Bike Team
- Centra One Air Medical Services
- Approximately 4 Ambulances Stationed throughout the event area
- Two ALS ambulances on stand-by at the STIP Tent
- EMS Walking Teams through the crowd
- Two EMS “Gator” Ambulances, Response ATV
Agencies Involved

- Lynchburg Regional Airport Fire Department
- Lynchburg Regional Airport Police
- Campbell County Public Safety
- Campbell County Rescue Squad
- Lyn-Dan Heights Volunteer Fire Department
- Evington Volunteer Fire Department
- Campbell County Sheriff’s Office
- Virginia State Police
- Centra
- Blue Ridge Medical Reserve Corp
- Near Southwest Preparedness Alliance
- Centra One Air Medical
- Lynchburg Area Radio Club
STIP Tent Positioning
Transportation of Spectators

- Parking at Liberty University and Central VA Community College (Handicap)
- Bus pick-up at parking locations starting at 0830
- 60 buses utilized
- No public parking at airport, except VIP and volunteers
- ONE drop off/pick up point at the airport
- Round-trip – 30-40 minutes
Thursday, May 19th

- Erected STIP Tent
- Set up of basic equipment (Lighting, Beds, Tables, Curtains, Sink, Tables & Chairs, Etc.)
- Generator and water testing
Saturday, May 21st

0800-0900 –
• Complete STIP Tent equipment set-up
• Training for New STIP Personnel and Issuing of STIP I.D.s.
• Meeting of STIP Coordinator with EMS Operations.
• Communication Checks with EMS, Law Enforcement, and Lynchburg General Medical Control via radio and telephone.
• 0900 STIP Tent is operational
Saturday, May 21st

0900-1100

• 0905- First patients arrive. Primary CC: Minor cuts and abrasion, Ankle and knee injuries.
• As morning progress, more heat related illness/injuries.
• Other medical complains, including chest pain, respiratory complains, pregnancy complications.
• IV fluid supplies, Ice, Water supplies getting low
Saturday, May 21st

1100-1330

- Addition supplies requested from Lynchburg General Hospital.
- Supplies picked up by transporting EMS unit and delivered to STIP Tent.
- Patient continue to arrive with heat related injuries.
- Ambient air temperature at 1300- 88 degrees.
Saturday, May 21st

1330-1430

- US Navy Blue Angles Perform
- Patient influx basically STOPS!
- STIP Tent staff regroup, clean, and restock.
- Rotate staff to enjoy the performance
Saturday, May 21st

1430-1900

- Crowds began to gather at the single bus boarding point.
- Spectators are channeled tightly into lines to board the buses.
- Buses are pulling up to be boarded one at a time
- Ambient temperature is now in the upper 80s to low 90s
- Spectators are waiting up to 2-2.5 hours to board buses
• Spectators are running out of water.
• The number of heat related illnesses/injury is expanding exponentially
• Bus boarding point is on the opposite end of the air show area from the STIP Tent
• EMS providers on scene set up a secondary treatment area in the lobby of Virginia Aviation Terminal Lobby
• MCI is declared. Additional EMS support is requested and the LGH-ED notified
• Patients are triaged, directed to areas to cool, treated and released, transported to the STIP Tent, or transported to the Emergency Department
Patient Treatment Included

- Heat Injury/Illness
- Dehydration
- Hypoglycemia
- ACS
- Pediatric Cardiac
- Respiratory Distress
- Labor
- Minor Trauma
- Orthopedic Injuries
- Syncope
- Hypertension
- Eye Injuries
- GI Symptoms
Saturday, May 21st

- Additional mutual aid ambulances arrive – Include units from Campbell Co. (Concord RS, Rustburg RS,), Bedford Co. (Boonsboro RS, Goode RS), Amherst Co. (Monelison RS), Lynchburg City (Lynchburg F&R, Lynchburg Life Saving Crew)
- Fire trucks are moved in and deck guns used to create cooling mist over the crown
- Crown control expanded by law enforcement and bused loaded
- Additional buses are brought in and additional loading areas established
- Crowds thin as loading is better controlled
Saturday, May 21st

1900-2230

- STIP Tent supply request made by phone to LGH and picked up.
- EMS plan made for Sunday, May 22nd
- Meeting between EMS/Fire/Police and air show organizers
- Information disseminated to all agencies
**Sunday, May 22nd**

0900-1330

- Additional EMS and Police brought in
- Three additional loading/unloading areas are established. Handicap drop-off is closer to seating
- Additional treatment and rehab center set up by Lynchburg Fire & EMS at the old CFR building
- Light rain on and off for approximately an hour before performances start
- Low patient volume into STIP Tent
Sunday, May 22nd

1330-1430

- US Navy Blue Angles perform
- Patient flow stops. No patient arrived at the STIP during the performance
Sunday, May 22nd

1430-1900

- Patients utilize rehab areas for cooling
- Event organizers hand out bottled water to spectators
- STIP Tent receives a smaller number of heat injury patients. Several that are seen and transported have serious underlying medical conditions
- Most patients treated and released
• Spectators are moved out of the airport with minimal difficulty.
• Area was swept by EMS and police for stragglers.
• Airport was secured and breakdown started by staff and volunteers
Challenges for the STIP Tent

- Communications: During the most critical time of the MCI, all cell phone towers were tied up. Unable to communicate to other agencies or hospital by cell phone.
- Ham operators: Excessive radio conversation.
- Cell Tower: Overloaded
Successes

- Cooperation: All agencies worked well together and communicated well.
- Radio Communication: Despite multiple radio frequencies (Lynchburg Regional Airport Fire & Police – UHF, Campbell Co. - VHF-Hi, Lynchburg, Bedford Co., Amherst County – 800 MHz Trunked, Centra – UHF Trunked, LARC – UHF Ham) Radio communication, direct and relay, went well.
- Flexibility: All agencies remained flexible, adapting to the situation changes.
Additional Agencies for Sunday, May 22nd

- Lynchburg Fire & EMS
- Lynchburg Life Saving Crew
- Rustburg Rescue Squad
- Babcock & Wilcox Nuclear Technologies Police Department
- Liberty University Police Department
Total Numbers for the STIP Tent

- Treated & Released Saturday- 29 Patients
- Treated & Transported Saturday- 5 Patients
- Treated & Released Sunday- 20 Patients
- Treated & Transported Sunday- 3 Patients

Trivia: Over 11 cases of IV fluid was used over the two days of the air show.

11 cases = 27.5 Gallons
Total Number of Patients Treated on Saturday

Over 200 Patients
(Estimated by Campbell Co. DPS)
STIP Tent Impact on LGH Emergency Department

- On Saturday, May 21th, LGH-ED saw approximately 300 patients in a 24 hour period
- Over 200 patients diverted from the ED by treatment at the STIP Tent and EMS at the Lynchburg Regional Air Show.
NSPA STIP Tent Thanks To:

- Centra – Emergency Services
- Blue Ridge Medical Reserve Corp
- Centra - Emergency Physicians
- Centra – Lynchburg Family Medicine
- Near Southwest Preparedness Alliance
For More Information

Primal Quest Adventure Race –
  www.ecoprimalquest.com
Odyssey Adventure Racing –
  www.OAREvents.com
United States Adventure Racing Association -
  www.usara.org
Wilderness Medical Society –
  www.wms.org
Appalachian Center for Wilderness Medicine –
  www.appwildmed.org
National Outdoor Leadership School
  www.nols.edu
Photo Credits

- Tim Soyars, RN CEN NREMT-P
- DeeDee Soyars, RN MSN
- Will Ramos, Will Ramos Photography
- Primal Quest, LLC
- Odyssey Adventure Racing
Bring a compass, it’s awkward when you have to eat your friends.