NEWS FROM THE AFFILIATED EMS MEDICAL DIRECTOR'S OFFICE

St. Luke's & EMS

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'Dirty Bomb' Disaster Drill: Not a Complete Disaster!

The hospital and local EMS companies conducted a joint disaster drill in late March, responding to a simulated "dirty bomb", i.e. a bomb that spread radioactive materials among its shrapnel.

The drill involved more than 100 patients, nearly all UMass Darthmouth nursing students who volunteered their time.

"Victims" were moulaged with amazing-looking injuries by Gloria & Company cosmeticians, who donated their time and materials, and spent weeks in the run-up to the disaster studying Youtube videos and other materials to prepare for the job.

Victims — many of them candidates for Academy Awards for their moaning, sobbing, and other acting — were spread around the Collins House, and had to be triaged and extricated by EMS. Five local EMS companies were involved, including Acushnet, New Bedford, Fairhaven, Alert, and EasCare. Chief Kevin Gallagher of Acushnet provided incident command for EMS.

The drill involved local fire, EMS, hospital staff, and students

Once extricated, patients were taken to a Mobile Decon Unit (a tent with a waist-high conveyor belt down the middle, where contaminated patients lie and are rolled through for washing; we did not run

INSIDE THIS ISSUE:

OEMS Approves New Treatment Options for Opioid O.D.s, Emergent Airways, Spinal Immobilizations and Arrests

An update to state EMS protocols published in February 2014 allows for new BLS and ALS procedures, including:

- Intranasal Naloxone (for BLS providers)
- Selective spinal assessment / immobilization
- Cricothyrotomy
- Cardio-Cerebral Resuscitation (as an alternative to standard CPR).

Per the OEMS protocol update, use of these new options requires:

- Each service doing so has a written policy signed by the affiliated EMS director;

Each EMT-B or paramedic who will perform the procedure undergo training and then be signed off by the affiliated EMS director

I look forward to working with EMS companies that would like to use these new optional protocols.

— Matt Bivens, MD

Disaster Drill

water given the weather but simulated the rest). New Bedford Fire Department had arrived early to set up the tent.

From the decon area, patients were taken to a Medical Isolation Tent, set up to serve as a mock ED. (This so that the drill would not interfere with patient care in the ED that day.) Among those working the tent in the role of attending ED physician were Rah Morris, MD, and the chair of the emergency department, Jennifer Pope, MD.
An "incident command" for Southcoast was also set up and manned by ED and Southcoast leadership, to simulate mobilizing personnel and resources from other hospitals to assist in managing the disaster Food for the morning was donated by Honeydew Donuts.
An after-action report will be developed to identify areas for improvement, and a future disaster drill will be held next year.

During the post-drill briefing, EMS leaders expressed enthusiasm for an even-more realistic drill. (In the interests of EMS safety, we avoided lifting and physically extricating patients, for example).

Next drill, the hospital disaster preparedness team plans to involve EMS early and possibly have local EMS design the pre-hospital scene.

On the Horizon: EMS Activating Our Cath Lab from Field!

Southcoast's emergency physicians and cardiologists are interested in working with our colleagues in EMS to arrange transmission from the field of EKGs. With an EKG in hand, the ED physician and paramedic could jointly determine whether a patient's history, exam and EKG were consistent with an ST elevation myocardial infarction, and if so, the cath lab could be open and ready by the time of EMS arrival. More information to follow!

$2,000 in Frozen EMS Medications Replaced by St. Luke's

This winter saw an incident where an ambulance with Alert EMS was parked outside the ED with engine idling for more than 2 hours. The ambulance was on standby to take a critically ill patient to a tertiary care center, and the ED team was grateful for the crew's professionalism and patience with this difficult situation. Ultimately the patient did not need transport.

Upon leaving the ED, however, the crew found someone — later identified as a St. Luke's employee — had turned off their ambulance engine (but not the headlights). The battery was dead, and most of the ambulance's medications were frozen and ruined.

> *Someone had turned off the ambulance (but not the headlights), killing the battery and ruining the medicines.*

Southcoast leadership were informed of this incident by the EMS Coordinator, Brian Giorgianni, and the company paid to replace all of the Alert ambulance's medicines, at a cost of $2,000. A new "air curtain" planned to be installed at the EMS entrance should reduce diesel fumes and cold air, and St. Luke's staff have been told not to tamper with EMS vehicles.

My Call Has Been 'QA'd!' Does This Mean I'm in Trouble?

Massachusetts OEMS has put a greater emphasis on EMS systems, working with medical directors, providing review of calls, with an eye toward improving our work.

This is already a routine for physicians, by the way: Our ED team at St. Luke's has a Quality Assurance (QA) director, Dr. Anil Shukla, and we regularly review the care provided in our emergency department.

Your local EMS leadership, under orders from the state OEMS, is either already conducting formal QA reviews of your calls, or will be soon. Selected reviews — including every cardiac arrest, major procedure, trauma, or critically ill pediatric case, to name a few — are forwarded to the EMS Medical Director for further review. This is not meant to be a punitive or adversarial process. The goal is to identify areas for improvement, but also to highlight excellent work and to identify cases all could learn from.

When Should Medics Call Med Control?

You are called for an inter-facility transfer. The patient is a 65-year-old on Warfarin for A Fib who is altered and moaning. BP is 220/105, pulse is 65. The referring hospital tells you she has a head bleed and that a neurosurgeon is waiting at a nearby tertiary care center. You start to ask questions but are told, "This is an emergency situation, you need to go now!"

It is one thing to pick up a patient from the field and "just go," because you are trading a resource-free environment (the street) for a resource-rich environment (a hospital). But it's well-recognized that when a patient is leaving an emergency department or hospital ward, it makes sense to review the situation dispassionately and to make sure the patient has been stabilized as much as possible prior to heading out. This is why *medical control should be called prior to every inter-facility transport.* In this hypothetical scenario, it is likely the Med Control physician and his or her colleague at the referring hospital would have had a quick, frank discussion. Perhaps the patient needs intubated prior to transfer? Certainly she needs her blood pressure lowered, probably with a Nicardipine or Labetolol drip (both meds that ALS can titrate on IFTs per protocol), and ideally anti-coagulation reversal should be underway. If paramedics can't get those questions answered or aren't comfortable with the answers, the Med Control physician can help. Paramedics who get caught up in the referring hospital's excitement may find themselves with a herniating, dying patient that all will agree, with the 20/20 vision of hindsight, should not have been rushed out.

> *If paramedics can't get their questions answered, the Medical Control physician can help.*

What if the Med Control is Also the Sending Physician?

It happens often that St. Luke's will have a critically ill patient who needs definitive care — a cardiac catheterization, a brain aneurysm coiling, or a pediatric critical care unit — found elsewhere. In these high-risk, high-stress cases, we are as likely as any other ED physician to be caught up in the urgency of "needing to go now!", and just as likely to benefit from a dispassionate 3rd party review.

Therefore, in cases where paramedics leaving St. Luke's feel it would be beneficial, they can formally ask the ED's unit coordinators for a "medical control call."

At that point, the HUCs can identify another ED physician to immediately review the call — either by having one of the other ED physicians in the department step over, or by pulling in one of the ED administrators on call (either myself, Jen Pope, Colin Stack, Anil Shukla or Mark Mahoney), either by phone or in person. This should take just minutes to organize and can happen in parallel with the EMS crew taking further report, moving the patient to the stretcher, etc.

If somehow this 3rd party review simply cannot be organized in a timely fashion, then the final decision will rest with the sending ED physician, but the case will be reviewed afterwards.

Radio Etiquette: What Does the ED Team Hope to Hear?

EMS radio calls to the ED come in two flavors, the **informational** and the **request for medical control.**

Informational Calls

With low-priority calls, "less is more." A medic who reports, "Priority 3, abdominal pain, stable vitals, ETA 10 minutes" has given us everything we need to know. A paramedic who with the same patient reports all of the vitals and some of the HPI is probably wasting time at this stage — we will want to hear *all* of that *later*, when we take formal report, but don't have any use for that in the heads-up calls.

With sicker patients, we would welcome just a bit more data. "Priority 1, presumed sepsis, tachy to 130s, hypotensive to 70s/30s, getting IV fluids, ETA 10 minutes" would be a fine, short informational call that would let us plan accordingly.

It's always good to know if a patient is combative or intubated, so we can have security or respiratory on hand. That said, apply common sense here, too. If the information call is for a cardiac arrest, knowing if they're intubated is mildly helpful, but we don't need to know (at this stage) all of the meds given or the access achieved.

Med Control Calls

We are here to help, not give you a hard time. Don't worry if your presentation is a little scattered or disjointed. If possible, have the vitals at hand, and it's a good discipline to have specific questions (i.e., "should I give Amiodarone now?"). But if everything's falling apart and you need advice, we can try to walk each other through it.

2014 Lecture Schedule
EMS Educational Rounds

Tues Jan 7 1 pm
MATT BIVENS, MD
ED Physician, EMS Director
PACERS, DEFIB'ERS, LVADs

Weds Feb 5 4pm
SARAH MORRIS, MD
ED Physician
NEURO EMERGENCIES

Tues March 4 4pm
CURT MELLO, MD
ICU Physician, Pulmonologist
RESPIRATORY ILLNESSES

Weds April 16 1pm
MITCHEL SKLAR, MD
Cardiologist
Medical Director, Charlton Cardiac Cath Lab
STEMI RECOGNITION

Tues May 6 1pm
BRIAN SARD, MD
Pediatrician
Chair, St. Luke's Pedi ED
PEDIATRIC EMERGENCIES

Weds June 11 4pm
MATT BIVENS, MD
ED Physician, EMS Director
CARDIAC ARREST: NEW APPROACHES

Tues July 1 1 pm
TBA

Tues Sept 2 1 pm
EMILY KAPLAN, MD
ED Physician
Topic TBA

Weds Oct 8 4pm
MICHAEL SANTONI, MD
ED Physician
ANGIOEDEMA, AIRWAY BURNS & OTHER NIGHTMARES

Weds Nov 5 1 pm
LAUREN GALLAGHER, MD
ED Physician
Topic TBA

Tues Dec 2 1pm
MICHAEL BUGGIA, MD
ED Physician
Topic TBA

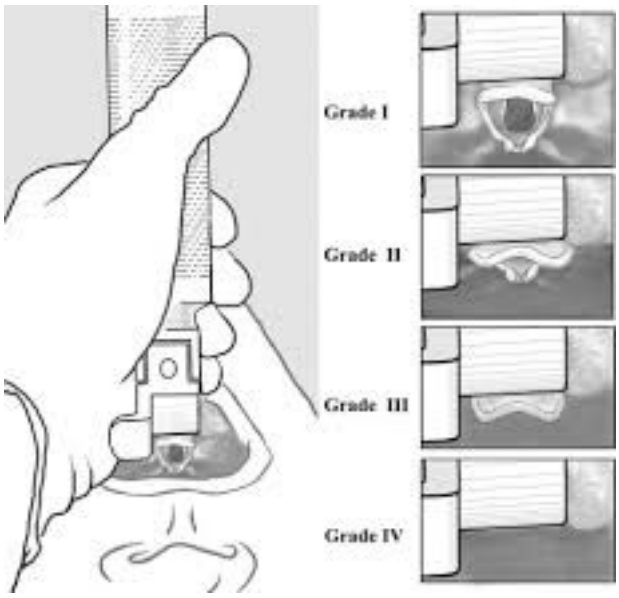
St. Luke's Hospital provides medical direction for six local EMS companies: Acushnet, Alert EMS, EasCare, Fairhaven, New Bedford and Stat New England.

Matt Bivens, MD, Affiliated Hospital EMS Medical Director, can be reached at BivensM@Southcoast.org

Brian Giorgianni, the EMS Coordinator, can be reached at GiorgianniB@Southcoast.org

Intubation in the Field: A Critical EMS Skill

EMS field intubations are difficult, dangerous procedures, and it is difficult to stay proficient. ***Paramedics affiliated with St. Luke's have the unique privilege of scheduling time in our ORs***, to train under the guidance of our anesthesiologists. I would encourage you to take advantage of this. Contact EMS coordinator Brian Giorgianni to arrange . The greatest danger in intubations is critical hypoxia — either from prolonged attempts, or from endotracheal tubes placed by accident in the esophagus and not noticed.



To avoid these problems and their associated morbidity / mortality, paramedics performing direct laryngoscopy are encouraged not to proceed with intubation unless they have a Grade I or II Cormac-Lehane view (see graphic). Rather than blindly pass a tube in desperation, consider other options, including simple bag-valve mask ventilation with oral or NP airways. Always confirm tube placement by ETCO2 monitoring throughout the call.