

# Planning Medical Coverage for Your Convention

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# Disclosure

- ConMed Response Team is a non-profit first aid/ event medicine group that offers services in New England

# What is event medicine?

Broadly defined, Event Medicine is the planning, execution and post-event review of medical care provided during any *mass gathering*. This ever-growing part of Emergency Medicine involves working with multidisciplinary groups of professionals to predict and coordinate the response to illness and injury for event spectators and participants.

# Mass gathering

- **Mass gatherings** are events attended by a sufficient number of people to strain the planning and response resources of the host community, state/province, nation, or region where it is being held. Definitions of a mass gathering generally include the following:
  - Planned (long term or spontaneously planned) event
  - “a specified number of persons (at least >1000 persons)
  - at a specific location, for a specific purpose (e.g. social function, public event, sporting event) for a defined period of time”.
  - Requires Multi-Agency Coordination

Usually understood to be greater than 1000 attendees. One textbook mentions that greater than 25K attendees mandates Department of Homeland Security involvement, but I have not been able to verify this in any other text. Regardless of the number, any group that could overwhelm the local medical resources (police, fire, EMS, hospital), should be considered as mass gathering

# Do you need medical coverage?

- Venue may require
  - Liability insurance requirement
  - Ambulance/EMS standby
- Risk assessment – data from sporting/music events
  - Demographics – age – older (more medical problems), younger (greater risk-taking)
  - Environmental – outside / inside / hot weather
  - Lack of free drinking water

In Boston, state run buildings such as the Hynes Convention Center require a Boston EMS ambulance standby, which run ~\$100/hr for two EMT's with ambulance.

Three contributors of how many people will require medical care from a standard rate or 4-5 people/10,000.

# Why have a first aid room?

- Provides extra level of care and reassurance
  - Most require simple on-site care, but something not provided by EMS standby
  - Reduces the need for staff and guests to leave the venue and seek out care in a place they may not be familiar with
- “Quiet” rooms for people who need some space
  - Staffed by trained mental health counselors or trained psychological first aid staff, again not something that EMS can provide. Can assess if person needs more help or evaluation
- It's a nice thing to do!

Large gap between having a required ambulance crew on standby and the choice between going to the hospital or urgent care, which could be handled in a first aid room.



TakeThis.Org - started by two journalists after a colleague had committed suicide. These are quiet rooms seen at large venues such as PAX. "AFK" stands for "Away From Keyboard" - gaming term.



One AFK Room setup - comfy chairs, water available.

## Deciding to run your own first aid room

- No first aid/event group available to staff
- You prefer to use your own staff
  - People you know you can work with and trust
- “Reduced” cost
  - Questionable, giving cost of liability insurance, equipment, medical record storage requirements

# Requirements

- Trained staff – EMTs, paramedics, nurses, nurse practitioners, physician assistants, physicians, mental health workers
- Liability insurance – individual versus group
- Equipment – basic to advanced
- Medical record keeping – charts, PCR's

# Trained staff

- First responders, EMTs, paramedics
  - Better for roaming patrols, medical emergencies, retrieving people, transporting to first aid room
- Nurses, advanced practice (nurse practitioners, physician assistants), physicians
  - More training in wound care, urgent care complaints such as urinary tract infections, eye care
- Mental health counselors
  - Can help staff a 'quiet room'

# Background check

- Criminal background check
- For Massachusetts – CORI
  - A Criminal Offender Record Information (CORI) check includes criminal cases from a Massachusetts state court. It does not include criminal cases from other states or federal court cases.
  - These checks are usually completed for candidates that are applying for positions that may have contact with children, elderly, or disabled people.

Might give extra measure of assurance if first aid staff has background check, but people may hesitate to do so because of personal reasons.

# Liability/malpractice insurance

- Individual plans \$89 - \$150 for EMTs, paramedics, nurses
- Individual plans for nurse practitioners, physician assistants, physicians \$2000/yr
  - Can ask employer to extend existing malpractice insurance to cover event, but no guarantee

# Good Samaritan?

- Does not protect if you are expected to (have a duty) respond to or treat medical conditions, and does not cover treatment of non-life-threatening conditions
  - duty to a patient
  - breach of that duty
  - proximate cause
  - damages

If you ask a volunteer to staff a first aid room, or to be prepared to respond to medical emergencies as part of their responsibilities, you've created a 'duty to act', therefore Good Samaritan does not apply or protect.

# Volunteer Protection Act

- Federal and state versions
  - No requirement that an 'emergency' is declared
  - Covers the volunteer of a non-profit organization
    - Must be a non-profit organization
      - Any form of compensation – free badge, lodging, food, would potentially change the status to 'employee'
  - Does NOT cover the organization

Questions of whether a volunteer is truly a volunteer if compensated in any way, i.e., comped room, badge, food. If so, then VPA may not apply.

# Equipment

- Basic
  - Band-Aids, ACE bandages, ice packs, medical tape, antibiotic ointment, earplugs, feminine hygiene, CPR mask, blood pressure cuff, stethoscope
- Advanced
  - Medications, breathing treatments, cardiac monitor, intravenous supplies, suture material

# Equipment source

- Amazon – robust selection of pre-configured packs and bags
- Medical supply house – wider selection but more expensive

# Amazon search for "emt bag"



**Arsenal 5244 First Responder Medical Supply Backpack Bag for EMS, Police, Firefighters, and others for First Aid Kit, Jump and Trauma Bag Use**

by Ergodyne

**\$86<sup>56</sup>** ✓prime

Get it by **Tomorrow, Dec 2**

More Buying Choices  
**\$78.44** (4 used & new offers)

★★★★☆ <sup>10</sup>

**Product Features**

... holstering straps to attach AED bag, lateral transfer sheet or ...



**Lightning X Small First Responder EMT EMS Trauma Bag Stocked First Aid Fill Kit B (Navy Blue)**

by Lightning X Products

**\$119<sup>99</sup>**

✓prime

Get it by **Wednesday, Dec 6**

★★★★☆ <sup>93</sup>

**Product Description**

... This bag is perfect for a first responder, volunteer EMT, or even as a ...



**Primacare KB-RO74-B Trauma Bag, 7" Height x 17" Width x 9" Depth, Blue**

by Primacare

**\$24<sup>99</sup>**

✓prime

Get it by **Tomorrow, Dec 2**

★★★★☆ <sup>42</sup>

**Product Features**

... Blue trauma bag with medical logo for holding and transporting basic ...

Empty bags are cheap, pre-filled bags, not so much



I've used this rolling toolbox at events and it works well. Multi-level, lockable, rolling. What's not to like?

# Strongly consider AED

- Next to bystander CPR, early access to an Automatic External Defibrillator is proven to save lives
- Purchase new online, or secondary market such as Ebay
- You could make note of location of AEDs at your venue, but you lose time retrieving it from a fixed location

The one piece of equipment that I would consider absolutely essential for any level of coverage. For every minute from onset of cardiac arrest to defibrillation, there's a 10% reduction in survival. You start at 80% when you drop.

# Automatic External Defibrillator



I bought this one on ebay for \$150. Added a new batter for \$150, and viola!

# AED google search

**Show only**

- Available nearby
- New items

**Price**

- Up to \$250
- \$250 – \$600
- \$600 – \$1,000
- Over \$1,000

\$  to \$

**Category**

- Motor Vehicle Engine Parts

**Brand**

- Cardiac Science
- Defibtech
- Philips
- Physio-Control
- ZOLL

**Seller**

- AED Brands
- AED Market

 **Philips HeartStart OnSite AED Business Package**  
**\$1,199.00** from 5+ stores  
★★★★★ 1 product review  
The Philips HeartStart OnSite AED uses a combination of high current and lower energy doses. This minimizes the effects that could be harmful to a ...

 **Philips AED - Heartstart Onsite Defibrillator**  
**\$1,199.00** from 10+ stores  
★★★★★ 3 product reviews

 **Cardiac Science Powerheart G3 Plus Athletic Package - AEDs & AED Ac...**  
**\$795.00** from AED.com  
Or choose the AED Backpack for easily transporting the AED to sports fields or events. END COPY START COPY Powerheart G3 Carrying Case - The ...

 **Philips HeartStart OnSite AED Value Package**  
**\$1,199.00** from 2 stores  
AED Package featuring the Philips AED Defibrillator model Heartstart Onsite AED. This Philips AED package is ideal for all users regardless of ...

 **Defibtech Lifeline AED Value Package**  
**\$1,245.00** from Heartsmart.com

You can buy them brand new as well.

# Over the counter medications

- Okay if given or shared between two people as there is no provider-patient relationship
- Increased liability if you staff a first aid room, and have it available
  - Even if it's just 'sitting on the table – dunno who's it is, but you can have some' \*wink\* \*wink\*
  - Okay to give if you have a medical director willing to authorize it

Tough to not be able to give common, over the counter medications, but if you are a 'medical provider' then the relationship and risks are different.

# Medical documentation

- Medical records – legal documents
  - State laws generally govern how long medical records are to be retained. However, the Health Insurance Portability and Accountability Act (HIPAA) of 1996 (HIPAA) administrative simplification rules require a covered entity, such as a physician billing Medicare, to retain required documentation for six years from the date of its creation or the date when it last was in effect, whichever is later. HIPAA requirements preempt State laws if they require shorter periods. Your State may require a longer retention period. The HIPAA requirements are available at 45 CFR 164.316(b)(2) (<https://www.hhs.gov/sites/default/files/ocr/privacy/hipaa/administrative/securityrule/pprequirements.pdf>) on the Internet.

Blah, blah, blah. Bottom line - store documents in climate controlled, fireproof container for 5-6 years, then have a bonfire.

- Patient Care Reports (PCR) – Most EMS reports
- Subjective, Objective, Assessment, Plan (SOAP) format

**EMERGENCY MEDICAL SERVICES (EMS)  
PATIENT CARE WORKSHEET**

This form is for use by ambulance service providers who are unable to immediately comply with Chapters HFS 110, 111, 112 and 113, Wis. Admin. Code as they apply to documentation of ambulance runs by completing and providing patient care information to the receiving facility when the patient is delivered to the facility. Per the above administrative rules, this form becomes part of the patient's medical record.

**INSTRUCTIONS:** Print legibly. Complete all sections of this worksheet. A copy of this worksheet or the ambulance run report must be completed and left with the receiving facility when the patient is delivered. This form does not constitute the official ambulance run report / patient care report.

**Ambulance Service:** \_\_\_\_\_ **Run Number:** \_\_\_\_\_

**Incident Date:** \_\_\_\_\_ **Incident Location:** \_\_\_\_\_

**Patient Name:** \_\_\_\_\_

**DOB** \_\_\_\_\_ **Age:** \_\_\_\_\_ **Sex:**  Male  Female **Weight:** \_\_\_\_\_

**Patient Address:** \_\_\_\_\_

**Chief Complaint:** \_\_\_\_\_

**Physician:** \_\_\_\_\_

**NOI / MOI:** \_\_\_\_\_

**GCS:** Eyes 4-1 \_\_\_\_\_ Speech 5-1 \_\_\_\_\_ Motor 6-1 \_\_\_\_\_ Total \_\_\_\_\_

**LOC:** Alert  (Check one)  1  2  3 (Check all that apply)  Respond to verbal  Respond to pain  Unresponsive

Time	BP	Pulse Rate / Quality	Respiratory Rate	Oximetry	Glucometer	EKG Monitor

**Skin:** (Check all that apply)  Warm  Dry  Moist  Cold  Flush  Pale

**Eyes:** (Check all that apply)  PERRL  Constricted  Dilated  Non-reactive

**O<sub>2</sub> Given:**  Yes  No **Rate of flow:** \_\_\_\_\_ (Check one)  Mask  cannula  BVM

**Allergies:** \_\_\_\_\_ **Last Oral Intake:** \_\_\_\_\_

**Medications:** \_\_\_\_\_

**Past Medical History** (Check all that apply)  Cardiac  CHF  Hypertension  Seizure  Diabetes  COPD  Asthma

Other \_\_\_\_\_

**Treatment:** \_\_\_\_\_

**Response to Treatment:** \_\_\_\_\_

**CPR:**  Yes  No **Time Started:** \_\_\_\_\_ **Defib/Shock:**  Yes  No

**Return of Pulse?**  Yes  No **Rate** \_\_\_\_\_ **Respirations?**  Yes  No **Rate** \_\_\_\_\_

**Squad Member(s):** \_\_\_\_\_

THIS FORM DOES NOT REPLACE THE OFFICIAL AMBULANCE RUN REPORT OR THE PATIENT CARE REPORT

NPI #

SOAP NOTES

PATIENT INFORMATION

Last Name  MI  First Name  SSN #  Date of Birth

Insurance Carrier  Insurance Plan  ID #

S

O

A

P

Provider Name  Title  Date  Provider Signature

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Provider Name  Title  Date  Provider Signature

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Provider Name  Title  Date  Provider Signature

# Staffing levels

- Minimum of 2 people recommended per 10K people covered.
- Determine shift length, how many shifts, whether you need overnight coverage

# EMS coordination

- Good to set predetermined meeting point for EMS crews called to pick up patients
- Use of back hallways, freight elevators, to minimize transport time, minimize exposure of patient to crowds

Most venues have a rear delivery or 'truck stop' that will allow EMS crews to arrive and pick up patients with a minimum of gawking and disruption of show.

# Active shooter and attack scenarios

## Police foil potential gun attack on Pokemon World Championships

*Two suspects arrested in Boston with firearms and ammunition in their car*

by Amar Toor | @amartoo | Aug 24, 2015, 5:52am EDT

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### NOW TRENDING



Qualcomm is trying to ban the iPhone X used by AT&T and T-M



This brought about security changes at downstream Boston events such as Boston Comicon and Anime Boston

Parsec

Authorities believe the release of chlorine gas at a packed hotel Saturday night was "intentional."

# 19 hospitalized in chemical release at Chicago furry convention

Aja Romano—Dec 8, 2014 at 7:30AM | Last updated Dec 11, 2015 at 9:37AM



Believed to be some sort of concentrated bleach causing the evacuation of this show. Believed to be deliberate.

TELEVISION

## The Original Green Ranger Was Targeted For An Attack At Comic-Con

BY MICK JOEST 6 MONTHS AGO 0 COMMENTS



Details are coming out today after a very scary event nearly thwarted the fun had at the ongoing Phoenix Comicon. Police have arrested a man who allegedly entered the building with several weapons, targeting police officers and the original green ranger from *Power Rangers*, [Jason David Frank](#). Here's what's being reported so far regarding this shocking event.

No words. The Green Power Ranger.

# Counter-Terrorism Medicine

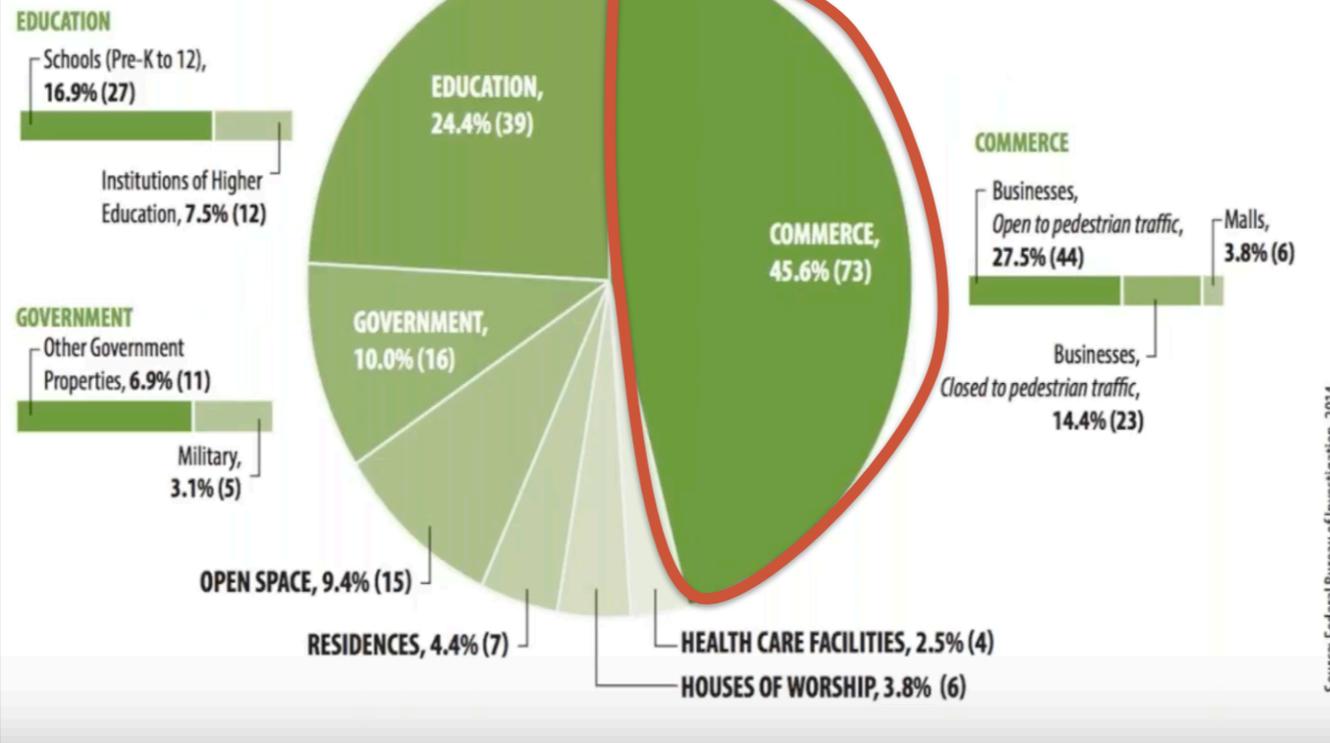
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Gregory Ciottone, MD, FACEP  
Director, BIDMC Fellowship in Disaster Medicine  
Associate Professor of Emergency Medicine  
Harvard Medical School

<https://www.youtube.com/watch?v=OrSoFyart3c&rel=false&width=640&height=480>

Recently gave talk about new concept - counter-terror medicine

## A Study of 160 Active Shooter Incidents in the United States Between 2000 - 2013: Location Categories



Attacks on 'commerce' site make up about half of all active shoot attacks. This makes sense, as these places are not as heavily guarded as other points, and a large number of unrelated, unassociated people without a clear understanding of emergency plans for that area.

# Soft Targets, Asymmetry



The idea that such places are considered 'soft targets', i.e., easier targets to plan an attack, must be considered, since venues such as convention centers and hotels fit this description.



Security staff should be trained for active shooter scenarios.

### Active Shooter Workshop Participant

[Options for Consideration Preparedness Video](#)

[Active Shooter Emergency Action Plan Video](#)

[Emergency Action Planning Trailer](#)

# Active Shooter Emergency Action Plan Video

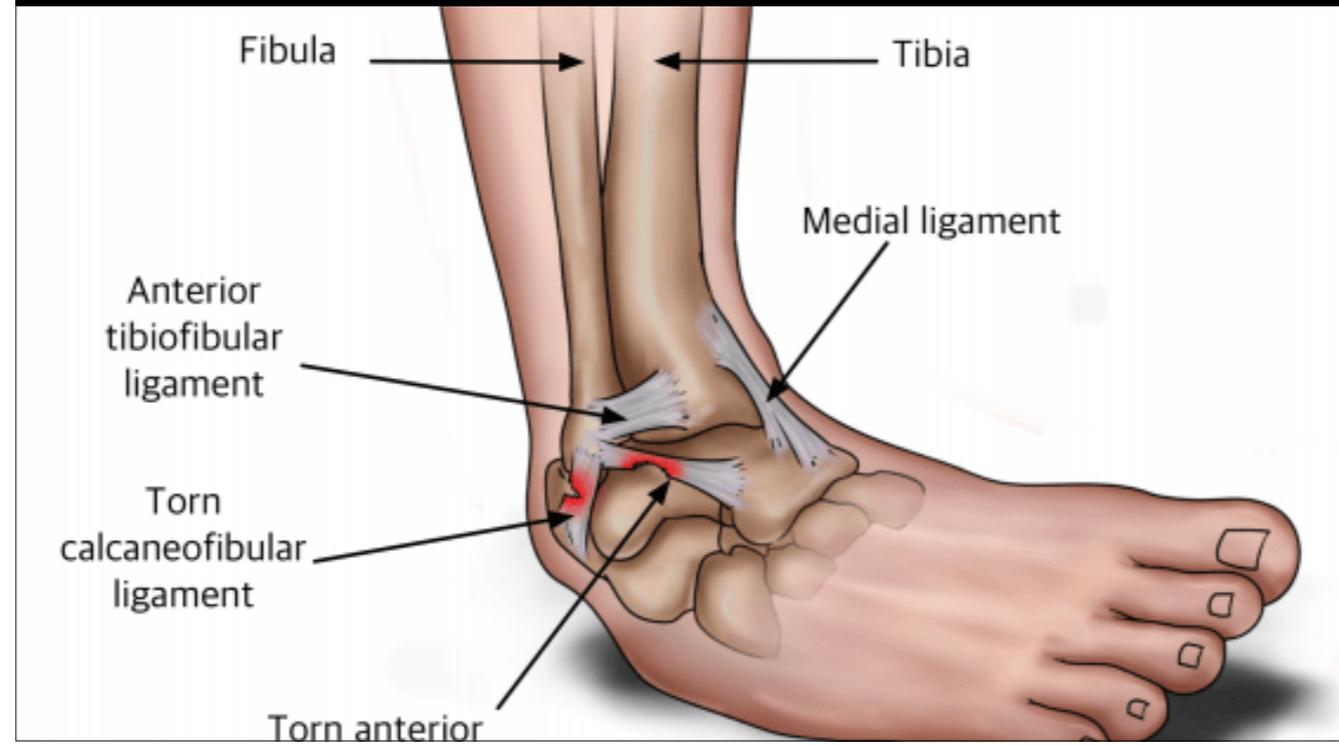
This video describes the fundamental concepts of developing an Emergency Action Plan (EAP) for an active shooter scenario. This instructive video guides viewers through important considerations of EAP development utilizing the first-hand perspectives of active shooter survivors, first responder personnel, and other subject matter experts who share their unique insight.



DHS video that is available for viewing,

# Common Injuries at conventions

# Sprains



Falls are the number one injury at any convention

# X-rays – yes or no?



## Ottawa Ankle Rule

*For Ankle Injury Radiographs*

MD+  
CALC

An ankle x-ray series is only required if there is pain in the malleolar zone AND any of these findings:

- Bone tenderness at A (posterior edge or tip of lateral malleolus), OR
- Bone tenderness at B (posterior edge or top of medial malleolus), OR
- Inability to bear weight both immediately after injury and in ED.

A foot x-ray series is only required if there is pain in the midfoot zone AND any of these findings:

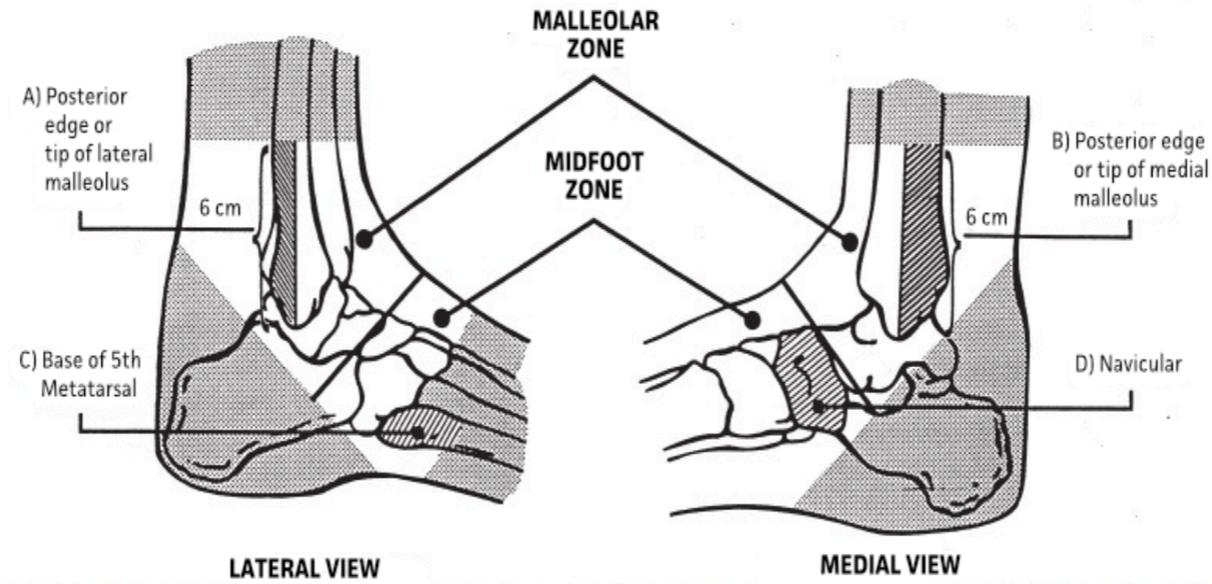
- Bone tenderness at C (base of 5th metatarsal), OR
- Bone tenderness at D (navicular), OR
- Inability to bear weight both immediately after injury and in ED.



# Ottawa Ankle Rule

MD+  
CALC

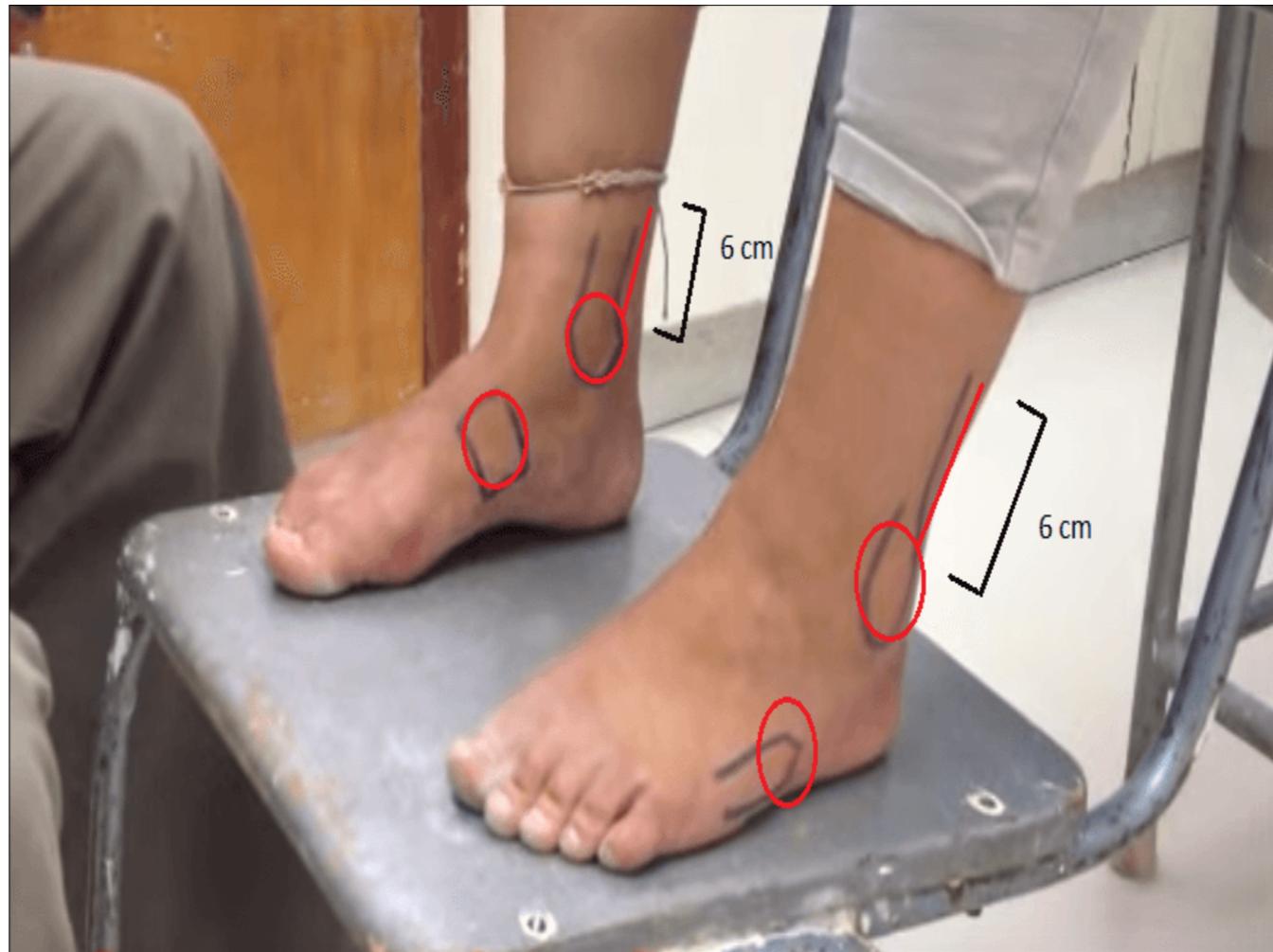
For Ankle Injury Radiographs



Stiell, I.G., R.D. McKnight, G.H. Greenberg et collab.

Implementation of the Ottawa Ankle Rules. JAMA, no 271. 1994, p. 827-832.

© Ottawa Health Research Institute



Press those four places. If they don't hurt, you don't need an x-ray. Yay.

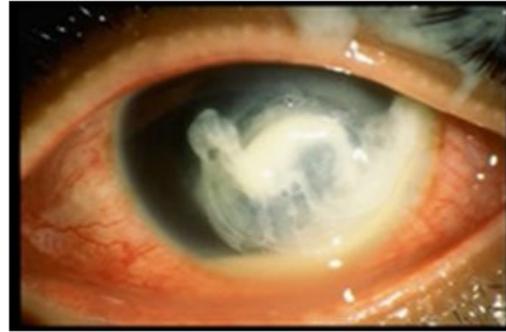
# Wall of gunky eyes



Cosmetic contact lenses used by cosplayers who may not know how to insert, remove, clean contact lenses, leads to increased risk of serious eye infection

# Bacterial Keratitis

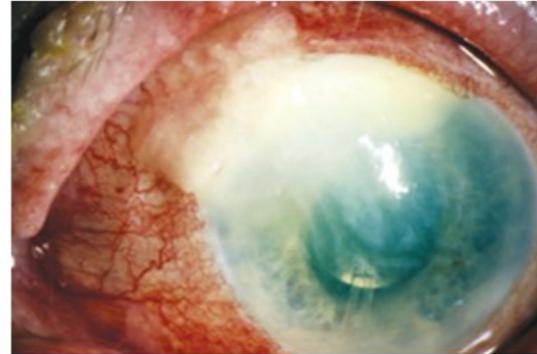
## *Pseudomonas aeruginosa*



Typical Gram-negative corneal ulcer: Rapid evolution, marked tendency to spread.

Can perforate in 48 hours.

Common in immunocompromised patients, contact lens wearers with faulty hygiene



**Treatment:** Topical tobramycin, ciprofloxacin, moxifloxacin, gatifloxacin

# Blisters



Another convention favorite from too much walking in shoes or costume shoes that don't fit.

# Blisters - unbroken

- A small, unbroken blister about the size of a pea, even a blood blister, will usually heal on its own. Use a loose bandage to protect it. Avoid the activity that caused the blister.
- If a small blister is on a weight-bearing area like the bottom of the foot, protect it with a doughnut-shaped moleskin. Leave the area over the blister open.
- It's best not to drain a blister at home. But when blisters are painful, some people do drain them. If you do decide to drain your blister, be sure to follow these steps:
  - Wipe a needle with rubbing alcohol.
  - Gently puncture the edge of the blister.
  - Press the fluid in the blister toward the hole so it can drain out.

# Blisters - open

- Gently wash the area with clean water. Don't use hydrogen peroxide or alcohol, which can slow healing.
- Don't remove the flap of skin over a blister unless it's very dirty or torn or there is pus under it. Gently smooth the flap over the tender skin.
- You may cover the blister with a thin layer of petroleum jelly, such as Vaseline, and a nonstick bandage.

# Con Flu or Crud

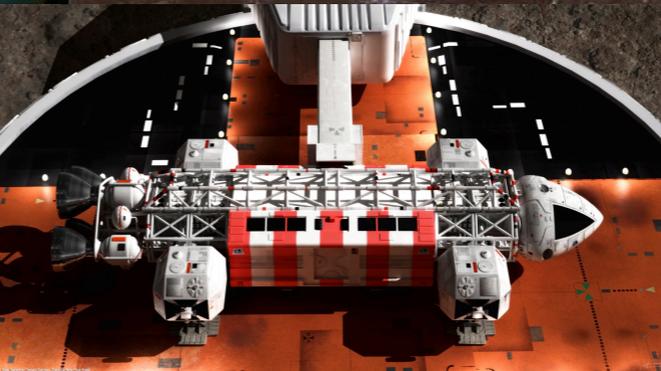
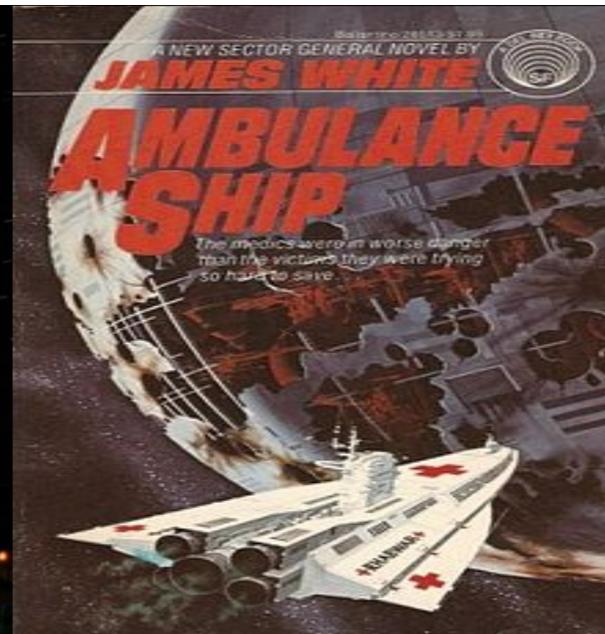


The fursuit community calls it 'the blorch'. The bandoleer of sanitary arts.

# 5 – 2 – 1 Rule



Often mentioned, never done.



Thanks for listening!

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- Questions, comments?