Overview of Mass Casualty and Triage
Public Health Nursing Webinar
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Jon Burstein, MD, FACEP
MA State EMS Medical Director

With thanks to L. Romig, C. Schultz, K. Koenig, and many others
Learning Objectives

Upon completion of this session you will be able to:

1. Describe the principles and goals of triage
2. Describe how triage may vary in different situations
**Boston Marathon finish area**

Though access in the streets near the finish line is highly controlled, many sidewalks lining them are open to the public.

- **Area restricted** to marathoners, race personnel only.
- **Medical tent**, used to treat marathoners, was used to treat the injured.
- The **post-race family meeting area** was the staging point for redirected runners.
- **T stations closed** near explosions created a bottleneck for subway users.
- **Sidewalks open** near explosions, open to pedestrian traffic.

**Runners** were redirected to the post-race family meeting area soon after the explosions.

**SOURCE:** Boston Athletic Association; Globe reports

**JAMES ABUNDIS, JAVIER ZARACINA/GLOBE STAFF**
Triage Roadmap

* What is triage?
* Triage categories
* Triage methods
* One method does NOT fit all
What is Triage?

“Triage” means “to sort”

Matches medical needs to available resources

Sorting based on limited data acquisition
Military Triage

- Dominique Larrey
- WWI
- Medical evacuation
  - Korea
  - Vietnam
Military vs. Civilian Triage

Priority is to get as many soldiers back into action as possible.

Priority is to maximize survival of the greatest number of victims.

After L Romig
Military vs. Civilian Triage

Military model
Those with the least serious wounds may be the first treatment priority

Civilian model
Those with the most serious but realistically salvageable injuries are treated first

After L Romig
Daily Emergencies

Do the best for each individual.

Disaster Settings

Do the greatest good for the greatest number.
Maximize survival.
Expectant Patients

In any triage method, victims with clearly lethal injuries or those who are unlikely to survive even with extensive resource application are treated as the lowest priority.
Triage Categories

- **Red:**
  Life-threatening but treatable injuries requiring rapid medical attention

- **Yellow:**
  Potentially serious injuries, but are stable enough to wait a short while for medical treatment
Triage Categories

- **Green:**
  Minor injuries that can wait for longer periods of time for treatment

- **Black:**
  Dead or still with life signs but injuries are incompatible with survival in austere conditions
Triage is a dynamic process and is usually done more than once.
REASSESS PATIENT CONDITION FREQUENTLY!
Triage Methods

- Based on physiology
- Quick
- Easy
- Mark or move the patient
MCI Triage: Key Points

- Resources and patient numbers and acuity are limiting factors.
- Must be dynamic, responsive to changes in both resources and patient needs.
- There is currently no civilian MCI triage system that has been validated by outcome data.
Simple Triage And Rapid Treatment

Developed jointly by Newport Beach (CA) Fire and Marine Dept. and Hoag Hospital
Utilizes the same four triage categories

Used for Primary Triage

www.start-triage.com
Starting START

Triage officer announces that all patients that can walk should get up and walk to a designated area for eventual secondary triage.

All ambulatory patients are initially tagged as Green.
START Triage

**RESPIRATIONS**

- NO
  - Position Airway
    - NO
      - Dead or Expectant
    - YES
      - Immediate

- YES
  - Over 30/min
    - Immediate
  - Under 30/min
    - Cap refill > 2 sec
  - Cap refill < 2 sec
    - Control Bleeding
      - Immediate
      - Delayed

**PERFUSION**

**MENTAL STATUS**

- Failure to follow simple commands
  - Immediate
- Can follow simple commands
  - Delayed
Mnemonic

RPM  30
2    Can do
Patients who are able to walk are assumed to have stable, well-compensated physiology, regardless of the nature of their injuries or illness.
Secondary Triage

- All green patients must be individually assessed in secondary triage.
  - Assess physiology
  - Assess injuries
  - Assess probability of deterioration
  - Assess needs vs. resource availability
Hurricane

Hurricane Katrina left the Louisiana and Mississippi coastlines in ruin.

Source: Google Images
Ice storm...
Blast Injury

Source: Google Images
Vesicants
Mass Decon Unit

Source: Google Images
• 92 Mass Decontamination Units issued to Fire Departments in Massachusetts

• One Decon company in each Fire District and One Decon Company protecting each hospital emergency department

Source: Google Images
MARK 1 Auto-Injector

Source: Google Images
On April 14, 1947, New Yorkers line up for their smallpox vaccinations.
Anthrax 2001-2002

11 pulmonic cases; 12 cutaneous cases
Personal Protective Equipment
Triage Summary

- Keep yourself safe
- Greatest good for the greatest number
- What is the scarce resource?
- How fast do you need to decide?
- Re-assess, re-assess
- Stick with the principles, not a method...but understand the methods
The Two-Line Summary

● Triage METHODS may vary
● Keep the principles in mind
  ● Greatest good
  ● Re-assess
Resources


http://www.asph.org/userfiles/PreparednessCompetencyModelWorkforce-Version1.0.pdf
Resources

FEMA Emergency Management Institute (EMI). 2013. *Independent study program (ISP).*
http://training.fema.gov/IS/NIMS.aspx

Resources


START- Simple Triage And Rapid Treatment [www.start-triage.com](http://www.start-triage.com)
Acknowledgements

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Thank You!

Questions following the webinar for Dr. Burstein can be sent to Glynnis LaRosa via email

Glynnis.LaRosa@state.ma.us