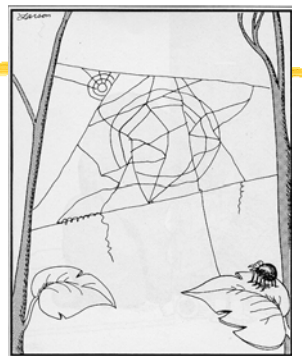
# Incident Management System

Prepared by Austin-Travis County EMS

**You Ever had an Event that went Like This ?**



**"Whoa!…That CAN'T be right!"**

## Terms:

**Incident Command System** — **ICS**

=

**Incident Management System** — **IMS**

## The Features of IMS

- ⌘Field management system.
- ⌘Can be used for both small and large situations.
- ⌘Has internal flexibility.
- ⌘It can grow or shrink.
- ⌘Can be used for single agency response or multi-agency.

## Benefits of an Incident Management System

- common goal
- communications
- decision-making
- functions and responsibilities
- predictable performance
- training is the key

## Applications

- ⌘Fires, HazMat, hostage situations, large crowd events, and multi-casualty incidents.
- ⌘Multi-jurisdiction and multi-agency disasters.
- ⌘Wide-area search and rescue missions.
- ⌘Acts of terrorism.

## Six Stages of Incident Command

- preplanning and training
- initial response
- operations
- stabilization
- de-escalation
- termination

## Primary IMS Management Functions

- Every incident or event has certain major management activities or actions that must be performed.
- Even if one or two people are involved.

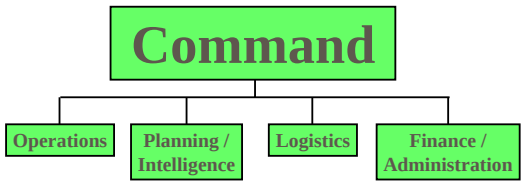
## IMS Organization

- Built around 5 major management activities
  - **C**ommand
  - **O**perations
  - **P**lanning / Intelligence
  - **L**ogistics
  - **F**inance / Administration

## Span of Control

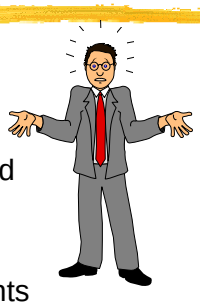
- Is a critical management concept in ICS.
- Refers to the maximum number of resources a person can effectively manage.
- Effective supervision can be provided one supervisor to 3 - 7 reporting units.
- 1 to 5 recommended.

## IMS Organization




## Who is in Command?

- fire department
- EMS
- police
- single IC or unified command
- pre-planning
- written agreements



## Responsibilities of Command

Command is responsible for:

- Rescue
- Extrication
- Treatment
- Transport
- Scene stabilization
- Personnel safety
- Risk assessment
- Containment
- Evidence preservation and gathering
- Extinguishment
- Investigation
- Locating/detaining suspects

## Interpersonal Skills

IMS forces a change from relationship behavior to task behavior

- task behavior does not allow time for discussion
- response from subordinates must be task oriented

## Remember -

The IMS only works if:

- officers supervise
- crews work **only** in their assignment
- all communication goes through the officer (except safety)
- The CP doesn't get dirty

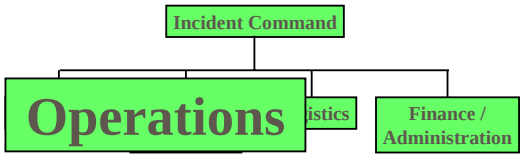
## Expanding to the Section Level

- the CP can quickly become overwhelmed
- To reduce span of control, sections should be established:
  - Operations
  - Planning
  - Logistics
  - Finance/Administration
- Operations is typically the first developed

## Role of the IC after Operations is Established:

- strategic and global issues and planning - the BIG picture.
- select priorities and communicate them to the section level officers.
- provide guidance and advice.
- review the organizational structure for needs.

## ICS Organization

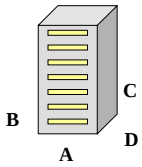


## Operations Section

- directs management of all tactical activities.
- implements the action plan.
- builds effective structure of branches, divisions, groups and sectors.
- provides for life safety.
- controls staging and Air Ops.
- determines resource needs.
- communicates to IC frequent reports.

## Operations Section

**Divisions divide incident geographically.**
**Sector divide horizontally.**



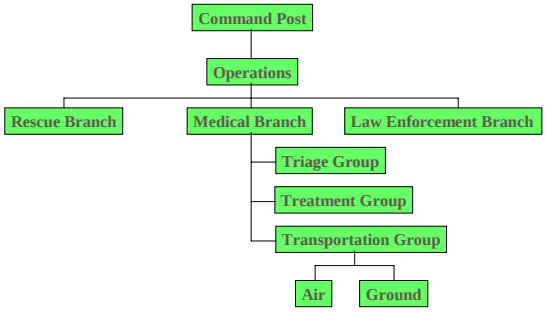

**7th floor - Division 7**
**5th floor - Division 5**
**3rd floor - Division 3**

**Front of building - Division A**
**Back of building - Division C**

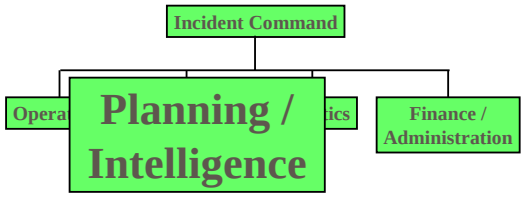
## Divisions/Groups/Sectors/Units

- Are tactical level management positions.
- Division = geographic.
- Group = functional.
- Reduces span of control.
- Facilitates communication.
- Need to be implemented early in the incident.

## Divisions/Groups/Sectors/Units



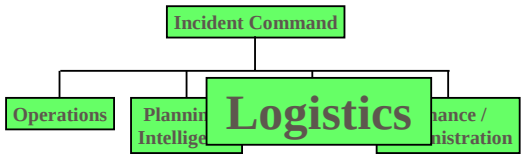

## IMS Organization




## Planning Section

- gathers, assimilates, analyzes, and processes information.
- "clearing house" for IC .
- anticipates needs for incident.
- forecasts possible outcomes.
- plans for incident de-mobilization.

## IMS Organization



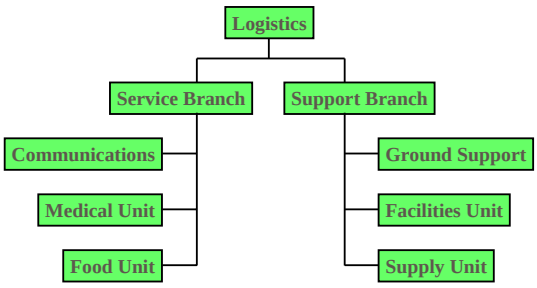

## Logistics Section

- support services for the organization
- provides rehab, medical, food, communications, fuel, CISM, repairs, shelter, clothing, etc....
- forecasts and obtains needed resources

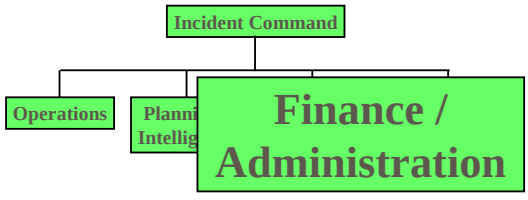
## Logistics

- Responsible for all of the services and support needs of an incident
- Obtaining and maintaining essential personnel, facilities, equipment, and supplies
- Usually determined by the size of the incident, complexity of support, and how long the incident may last

## Logistics




## IMS Organization



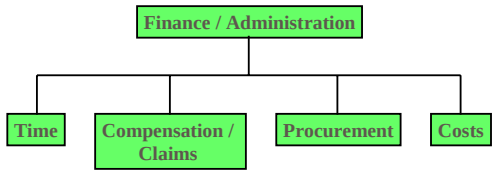

## Finance / Administration

- Monitors costs related to incident.
- Documents for cost recovery and claims for compensation.
- Procurement.
- Time recording.
- Cost analyses.

## Finance / Administration

- Set up for any incident that may require on-site financial management
- Procuring special equipment
- contracting with a Vender
- Making cost estimates of alternative strategies

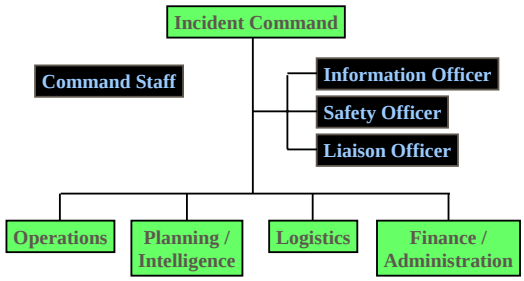
## Finance / Administration




## General Staff / Command Staff

- General Staff
  - Operations
  - Planning / Intelligence
  - Logistics
  - Finance / Administration
- Command Staff
  - Information Officer
  - Safety Officer
  - Liaison Officer

## General Staff / Command Staff




## Public Information Officer

- Point of contact for Media or other Organizations.
- Several agencies may assign “Information Officers.”
- Each agency PIO speaks in his or her area of expertise, ONLY.
- Joint Information Center - JIC

## Safety Officer

- Monitors safety conditions.
- Develops measures for assuring safety.
- Has the ability to stop any unsafe acts without the approval of Command or other supervisors.
- May have one or more deputies.
- Involved in all planning meetings.

## Liaison Officer

- Used on larger events.
- The primary contact for agency representatives.
- Filters information and keeps the Command Post from becoming too crowded.
- Acts as a “gatekeeper.”

## Incident Facilities

- Incident Command Post (ICP)
  - Location from which the Incident Commander oversees all incident operations
  - Only one ICP
  - Every incident has one

## Incident Facilities
### Staging Areas

- Resources in Staging are always in an **available** status.
- Out of Hazard area.
- Relocated if necessary.
- Have different access routes for incoming and outgoing resources.
- Have necessary security controls.

## Incident Facilities
### Staging Areas

- All Staging Areas will have a Manager.
- Given a name which describes their location.
  - “Wal-Mart Staging.”
- Staging Manager reports to:
  - Logistics

## Incident Facilities
### Staging Areas

- Units await for assignments.
- Resources can be formed into Task Forces or Strike Teams.
- Safe location for personnel.
- Prevent freelancing.
- Control and assist the check-in of personnel.
- IC will know when recourses are low.

## Incident Action Plan

## Incident Action Plan

- Every incident needs one.
- The plan may be oral or written.
- Provides all incident supervisory personnel with appropriate direction for future actions.

## Incident Action Plan

- Includes the measurable tactical operations to be achieved.
- Always prepared around a time-frame called an Operational Period.
  - Usually a 12 hour period.

## Unified Command

## Unified Command

- Is an ICS management process which allows all agencies who have jurisdictional or functional responsibility for the incident to jointly develop a common set of incident objectives and strategies.
- This is accomplished without losing or giving up agency authority, responsibility, or accountability.

## Unified Command

- The incident will function under a single coordinated Action Plan.
- Operations Section Chiefs will have responsibility for implementing the Plan.
- One Incident Command Post will be established.

## Unified Command

- Command Responsibilities
  - Identify strategic goals
  - Safety

## Unified Command
## Resources Management

- Single Resources.
- Task Forces.
- Strike Teams, Squads, Platoons.
- The use of Task Forces and Teams.
  - Maximizes effective use of resources.
  - Reduces span of control.
  - Reduces communications traffic.

## Unified Command
### Task Forces

- Any Combination of Single resources.
- Common communication.
- Common Leader.
- Defined according to the operational need.
  - One police patrol unit.
  - Three fire engines.
  - One basic life support unit.

## Unified Command
### Strike Teams, Squads, Platoons

- Same kind and type of resources.
- Pre-determined or assembled at incident.

## Unified Command
### Status Conditions

- Assigned
- Available
- Out of Service

## Develop Initial Organization

- If incident is growing, It is important to rapidly establish the organizational framework necessary to manage it.
- Filling essential General and Command staff positions first.
  - Unit level positions may be filled whenever required.
- Better to overestimate the need for a larger organization.

## Develop Initial Organization

- Initial organization development on an expanding incident at least establish:
  - Check-in
  - Resource tracking
  - Logistical support

## Common Responsibilities

- Receive your incident assignment.
- Bring supplies or equipment for assignment.
- Follow the check in procedure.
- Use clear text radio communications.
- Obtain a briefing / understand assignment.
- Brief those assigned to you and your relief.
- Refer to personnel by IMS title.

## IMS Planning Assumptions

- IMS is consistent with the standard national model (FEMA).
- All members of a Unified Command are equal partners.
- Unified Command does not call for abdication of authority or operational/legal responsibilities.
- Decision making – focus on the event: life 1st, exposures 2nd, property 3rd.
- Current communications system will NOT support an optimal IMS.

## EMS Disaster Response

### Mass Casualty Incidents

Tim Berry
L.P., B.S.
Lubbock EMS
SPEMS RRAMS Team

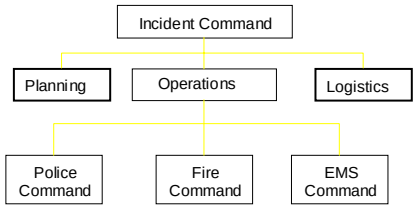
## Definitions

- What is a MCI?
  - An incident or group of incidents which overwhelms the local system
- What is a Disaster?
  - An incident or group of incidents which overwhelms the the communities medical resources

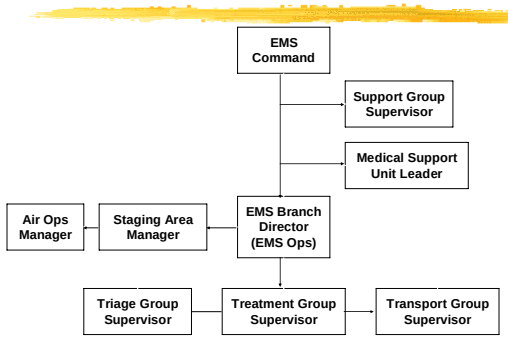
## Changes due to Terrorism

- Crime Scenes
- Responders at risk
- Psychogenic casualties prevail
- More casualties
  - World Trade Center I – 6 dead, >1,000 injured
  - Oklahoma City – 168 dead, >700 injured
  - Tokyo Sarin Attack – 12 dead, >5,000 injured
  - WTC II/Pentagon - >3,000-4,000 dead, ? injured

## Unified Command



## EMS Command Structure




## EMS Command

- Coordinate EMS
- Function in Unified Command

## EMS Branch Director (Ops)

- In Field Coordinator
- Oversees Operations

## Triage Group Supervisor

- Determine Triage Site
- Coordinate Rescue

## Staging Area Manager

- Organize and Inventory Incoming Vehicles and Personnel
- Coordinate with Support Group Supervisor
- Coordinate with Transport Group Supervisor
- Request Units as Needed from Dispatch

## Treatment Group Supervisor

- Establish Treatment Area
- Assure Retriage of Patients
- Coordinate Treatment
- Coordinate with Transport Group Supervisor

## Transport Group Supervisor

- Request Transport Units from Staging
- Coordinate with Treatment Group Supervisor
- Notify Receiving Facility of Transport

## Air Ops

- Secure Landing Zone
- Coordinate with Transport Group Supervisor

## Support Group Supervisor

- Coordinate Supplies
  - Incoming
  - Dispersing

## Safety Officer

- Determines if Areas Safe
- Monitor Workers for CIS

## Medical Unit Leader

- Establish Rehab Area
- Monitor Physical and Mental Health of Rescuers

## MCI Declaration

- Incident Occurred
- Nature
- Number Casualties
- Units Needed
- Staging Location
- Command Post
- Other Info

## Triage

- START
  - Initial
  - ABCDs
- 4 Category
  - Treatment and Transport
  - Secondary Survey
    - Life Threats
    - Disabilities

## START Triage

S.T.A.R.T

Respirations
Perfusion
Mental Status

RPM

Walking Wounded

>30

Triage Tag

Delayed

Simple Triage and Rapid Treatment

Minor

*By: Jeffery L. Finkbeiner, EMT-P, IC*

## Overview

- A simple approach
- Where to START
- One patient at a time
- START Triage Algorithm
- Patient scenarios

## A Simple Approach

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

In the early 1980's the START method was developed in California by Hoag hospital and Newport Beach Fire and Marine.

It provided rescuers with an easy, simple step-by-step approach to assessing and treating a large number of patients with varying degrees of injuries.

## A Simple Approach

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

The Initial assessment and treatment of each patient is accomplished within 30 seconds.

Initial treatment is limited to correcting immediate life-threatening conditions (i.e. opening an airway and controlling severe bleeding)

## A Simple Approach

The Triage Tag

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment


A Tag is placed on each patient once they have been assessed. The tag displays the patient's current status and advises those providing treatment with one of the four possible treatment priorities:

Minor
Delayed
Immediate
Deceased

There are a variety styles and sizes of Triage Tags

## A Simple Approach

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

The Triage Tag

Triage Tags are designed with tear-off tabs. Unused tabs are removed and the last remaining tab designates the patient's priority.


Last remaining tab indicated patient priority In this case IMMEDIATE

Unused tabs torn off

## A Simple Approach

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

The Triage Tag

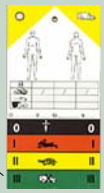
Each tab is distinctly color-coded allowing fast patient priority identification from a distance


- DECEASED
- IMMEDIATE
- DELAYED
- MINOR

## Where to START

Upon your arrival, first make sure the scene is safe. Then begin by directing the walking wounded away from the immediate scene to a pre-determined evaluation and treatment area.

Tag them as MINOR **(GREEN)**



## Where to START

Start where you stand - begin the triage process with the patient closest to you. Solicit the help of bystanders and/or uninjured victims. They can be utilized to control bleeding, help maintain an open airway or hold c-spine traction.

Do not spend too much time on any one patient. Move quickly from one patient to the next.

Assess each patient's *RPM*s

**R**espirations
**P**erfusion
**M**ental Status

## One Patient at a Time

*RPM*

ASSESS **R**ESPIRATIONS

If the patient is not breathing then *Open the Airway*

If the patient is still not breathing
then tag them as DECEASED **(BLACK)**

Move on to the next patient...

## One Patient at a Time

*RPM*

ASSESS **R**ESPIRATIONS

If breathing is present then *Assess the Rate*

If the rate is greater than >30
then tag them as IMMEDIATE **(RED)**

Move on to the next patient...

If the rate is less than <30
then assess PERFUSION

## One Patient at a Time

*RPM*

ASSESS PERFUSION

If a radial pulse is absent *(or)*
the capillary refill is greater than > 2 seconds
then tag them as IMMEDIATE **(RED)**

Move on to the next patient…

If a radial pulse is present *(or)*
the capillary refill is less than < 2 seconds
then assess MENTAL STATUS

## One Patient at a Time

*RPM*

ASSESS MENTAL STATUS

If the patient cannot follow simple commands *(or)*
has an altered mental status *(or)*
is unconscious
then tag them as IMMEDIATE **(RED)**

Move on to the next patient…

If patient is able to follow simple commands
then tag them as DELAYED (YELLOW)

Move on to the next patient…

## One Patient at a Time

*RPM*

ASSESS MENTAL STATUS

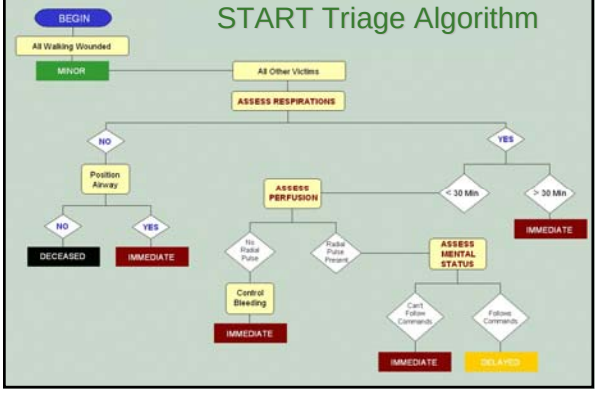
If the patient cannot follow simple commands *(or)*
has an altered mental status *(or)*
is unconscious
then tag them as IMMEDIATE **(RED)**

Move on to the next patient…

If patient is able to follow simple commands
then tag them as DELAYED (YELLOW)

Move on to the next patient…

## START Triage Algorithm




## Patient Scenario #1

**S**imple This patient states he cannot move or feel his legs
**T**riage His respirations are 24
**A**nd He has a radial pulse of 100
**R**apid He is awake are oriented
**T**reatment

How would you triage this patient?

## Patient Scenario #1

**S**imple This patient states he cannot move or feel his legs
**T**riage His respirations are 24
**A**nd He has a radial pulse of 100
**R**apid He is awake are oriented
**T**reatment

DELAYED (YELLOW)

## Patient Scenario #2

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

This patient has a blood soaked shirt on
His respirations are 36
His capillary refill is less than 2 seconds
He is awake are oriented

How would you triage this patient?

## Patient Scenario #2

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

This patient has a blood soaked shirt on
His respirations are 36
His capillary refill is less than 2 seconds
He is awake are oriented

IMMEDIATE **(RED)**

## Patient Scenario #3

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

This patient has some minor abrasions on his forehead
His respirations are 16
His capillary refill is less than 2 seconds
He is very slow in recalling his name and whereabouts

How would you triage this patient?

## Patient Scenario #3

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

This patient has some minor abrasions on his forehead
His respirations are 16
His capillary refill is less than 2 seconds
He is very slow in recalling his name and whereabouts

IMMEDIATE **(RED)**

## Patient Scenario #4

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

This patient appears to have no injuries
Her respirations are 20
Her capillary refill is less than 2 seconds
She is unconscious

How would you triage this patient?

## Patient Scenario #4

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

This patient appears to have no injuries
Her respirations are 20
Her capillary refill is less than 2 seconds
She is unconscious

IMMEDIATE **(RED)**

## Patient Scenario #5

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

This patient is lying quietly on the floor

He is not breathing

His capillary refill is more than 2 seconds

He is unconscious

What is the first thing you would do?

## Patient Scenario #5

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

This patient is lying quietly on the floor

He is not breathing

His capillary refill is more than 2 seconds

He is unconscious

REPOSITION THE AIRWAY!

## Patient Scenario #5

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

He gurgles a couple of times as you attempt to open his airway but does not resume breathing on his own

His capillary refill is still more than 2 seconds

He is still unconscious

How would you triage this patient?

## Patient Scenario #5

**S**imple
**T**riage
**A**nd
**R**apid
**T**reatment

He gurgles a couple of times as you attempt to open his airway but does not resume breathing on his own

His capillary refill is still more than 2 seconds

He is still unconscious

DECEASED **(BLACK)**

## Four Category System

- Used in Treatment Area and Transport Area
- Based on specific injuries and medical conditions

FOUR CATEGORY TRIAGE SYSTEM

Priority I (IMMEDIATE: Red)

-All airway problems or potential airway problems
-All penetrating chest trauma
-Blunt chest trauma associated with shock, significant Dyspnea, paradoxical movement of chest wall, possible pneumo/hemothorax
-All penetrating abdominal trauma
-Blunt abdominal trauma associated with shock, altered level of consciousness, guarding, rigidity or diffuse tenderness
-Uncontrolled or suspected severe hemorrhage
-All shock, regardless of cause
-All altered level of consciousness regardless of cause
-Major medical emergencies (non-traumatic chest pain, dysrhythmias, poisoning, status epilepticus, significant non-traumatic dyspnea, etc)
-Obstetrical complications
-Burns, if:
-Third Degree > 10% body surface area (BSA)
-Second Degree > 25% BSA
-Face or Neck Involved
-<11 or >50 years old
-Associated with additional major trauma or chronic illness
-Electrical

FOUR CATEGORY TRIAGE SYSTEM
Continued

Priority II (DELAYED: Yellow)
-Burns, if:
-Third Degree 2-10% BSA
-Second Degree 15-25% BSA
-Hands, Feet, or Perineum Involved
-Spinal injuries with or without spinal cord damage
-Blunt chest trauma without shock or significant dyspnea
-Blunt abdominal trauma without shock or signs of peritoneal irritation (guarding, rigidity, diffuse tenderness)
-Major orthopedic or soft tissue injuries, including open fractures, impaired neurological function, or loss of distal pulse

FOUR CATEGORY TRIAGE SYSTEM
Continued

Priority III (Minor: Green)
-Burns, if:
-Third Degree <2% BSA
-Second degree <15% BSA
-First Degree
-Minor orthopedic and soft tissue injuries, including closed fractures with distal neurovascular function intact

Priority IV (Expectant – Nonsalvageable: Blue/Black/White)
-Full arrest without adequate manpower
-Neurological death (traumatic coma with areflexia and fixed, dilated pupils)
-Third Degree burns >80% BSA
-Obvious mortal wounds (severe open skull fracture; massive crushing trauma to chest, abdomen, or pelvis, etc.)
-Obvious D.O.S. (Decapitated, burned beyond recognition, dismembered)

Triage Scenarios

## Weapons of Mass Destruction

## Factors Unique to Terrorist Events

- Secondary devices
- Crime Scene
  - FBI
  - ATF
- Federal Response
  - Presidential Decision Directive 39

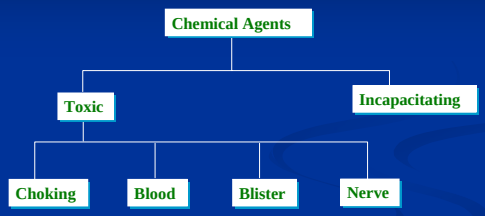
## Indicators of NBC Attack

- Primary
  - Symptoms of victims
  - Mass casualties
  - Casualty pattern
  - Dissemination device
  - Warning given or credit taken

## Indicators of NBC Attack

- Secondary
  - Dead animals or birds
  - Statements of victims
  - Things out of place
    - Unexplained liquids
    - Strange smells

## Classes of Chemical Agents




## Emergency Response Challenges

- Hazardous Materials
- Mass Casualty Incidents
- Secondary Devices
- Crime Scene

## Recognizing Suspicious Incidents

- Occupancy
- Type of Event
- Timing of Event

## Occupancy

- Symbolic/Historic
- Public Building/Assembly Areas
- Controversial Businesses
- Infrastructure Systems

## Type of Event

- Explosion/Fire
- Firearms
- Non-Traumatic MCI

## Timing of Event

- Significant Dates
- Weekend or Nights

## On Scene Warning Signs

- Unexplained patterns of Illnesses or Deaths
- Unexplained signs/symptoms, skin, eye, or airway irritation
- Containers in unusual locations

## Self Protection

- Time
  - Spend shortest time possible in hazard area
  - Protects crime scene and rescuers
- Distance
  - Maximize your distance from the hazard
- Shielding
  - Vehicles
  - Building
  - PPE

## Staying Safe

- **S** – Safety is first
- **A** – Assess before acting
- **F** – Focus on avoiding the hazard
- **E** – Evaluate the situation and report

- ***Don't*** rush in
- ***Don't*** assume anything
- ***Don't*** TEST (taste, eat, smell, or touch)
- ***Don't*** become a victim

## Remember RAIN

- **R** – Recognize a potential threat exists
- **A** – Avoid that threat, and make sure others avoid it as well
- **I** – Isolate the area and any exposed persons or materials
- **N** – Notify the appropriate authorities

## Decontamination

- All patients MUST be deconned before being placed in a transport vehicle
- Gross Decon
- Definitive Decon

## Types of Harm

- Thermal
- Radiological
- Asphyxiation
- Chemical
- Etiological
- Mechanical

## Establish Control Zones

- Obtain safe, secure area
  - Control Access
- Self-Protection #1 Priority
- Anticipate multiple hazard locations
- Recognize and Evaluate Dangers

## Determine Roles

- Fire
- Police
- EMS

## Public Protection

- Evacuation
- Protect in Place
- Combination

## Staging

- Uphill
- Upwind
- Have escape routes planned out

## Incident Command System

- Will have Federal Intervention quicker than normal
- FBI is Lead Agency

## ARE WE DONE YET???

## RRAMS Team

- Rapid Response And Medical Support
- Regional Disaster Response Team
  - Manpower
  - Equipment
  - Organizational Support
- Medical Standby Team
  - At Venues
  - Outdoor Locations

## Medical Support Trailer



## Gator Trailer

## To Apply for Membership

- rrams.org
- Go to Membership Tab
  - Copy requested information from page to an email, complete and send to rberry766@sbcglobal.net
  - MUST HAVE INSTRUCTORS RECOMMENDATION