



Continuing Education
Feb 2018



*START & JumpSTART Primary Triage
SMART Tags; Secondary Triage
Response to Multiple Patient Incidents (MPIs)
Illinois CHEMPACK Program*



Objectives

Upon completion, the participant will

- correctly differentiate EMS responses to a small, medium, and large scale multiple patient incidents (MPIs) using the NWC EMSS SOPs.
- use START and JumpStart triage and SMART tag system to accurately perform primary and secondary triage on sample patients.
- Explain the contents and ways to request the Illinois Chempack

MPIs occur from many causes & come in all sizes



Planning & practice needed for effective mitigation, preparedness, response, and recovery

Background



MPI/MCI response in the Northwest Community EMS System

See SOP – p. 51

MULTIPLE PATIENT INCIDENTS

MPIs in Region IX are governed by MABAS Divisions and County or System Multiple Patient Management (MPM) Plans. Roles may vary. Allows for scalable response. It is recommended that at least the following are designated for EMS purposes: Triage, Treatment, & Transportation groups.

	Small scale incident	Medium to large scale incident
Definition/trigger	# of pts, nature of injuries, and resources that can arrive at scene w/in 15 minutes (secondary response time) make normal level of EMS care achievable for most seriously injured. All time-sensitive patients can be transported within a 10 min scene time. "Business as usual"- within scope of normal operation	# of pts and/or nature of injuries make normal level of EMS stabilization and care unachievable; and/or # responders/ambulances that can be brought to site within secondary response times is INSUFFICIENT to manage scene and provide normal levels of care and transport under normal operating procedures and/or Stabilization capabilities of hospitals that can be reached within ground transport time of 30 min are INSUFFICIENT to handle all pts. May need to activate disaster plans.
Triage required	YES – all persons on scene, using START/Jumpstart	Mandatory
Triage tags	Optional	Mandatory
PCR/EHRs	Mandatory	Optional; may use triage tag only
Pt distribution, usual transport patterns	Apply	Do not apply; Transport times > 30 min OK
Trauma Center criteria	Apply	Do not apply
OLMC when transporting	Mandatory	Not required; Rx per SOP
# in pt compartment - EMS responder	1 ALS + 1 BLS or 2 BLS if no HIPAA violation	1 stretcher pt; 3 seated or 2 stretcher pts - all occupants must be safely secured. Attempt, may not be possible
Refusal process	Applies	

1. **Scene size up.** Determine if additional help is needed.

Who determines incident level?



- Depends on agency policy
- Often is person who assumes command
- Discuss agency policy w/ command staff

Priorities:

- Scene size up/safety
- Command and control – build resources
- On-scene operation
- Initiate National Incident Management System (NIMS)

Medical Group (EMS considerations):

- Triage
- Treatment (casualty collection point in safe area)
- Transport



Class rules of engagement

Intended to focus only on the tasks of EMS/Medical - triage, treatment, OLMC communication, transport & documentation

NOT intended to cover how to fully manage an incident (*duty of incident commander*), nor a comprehensive review of all aspects of NIMS



Emergency Management Institute
FEMA

NATIONAL INCIDENT MANAGEMENT SYSTEM

Recognize local use of terms not always consistent with NIMS (e.g., EMS, medical, unit, section, branch, group, division, unit, team, director, leader, mgr, supv).

NOT intended to be a NIMS course, but to focus on EMT and PM duties in a situation involving multiple patients

State of Illinois
National Incident Management System (NIMS)



The SMART System

Triage equipment includes tags, command board, & associated gear

Use w/ START or JumpSTART triage



SMART Triage Pack

Contains:

- 20 SMART triage tags
- 20 Contamination tags
- 10 Dead tags
- 5 mini light sticks
- 2 pencils
- Reference cards
- Adult triage/casualty count cards
- JumpSTART algorithm



SMART Triage Pack holder

Velcro strap on back attaches to a belt

Designed to open while wearing and allow access to contents without spilling

Size:
7" X 9" X 3"

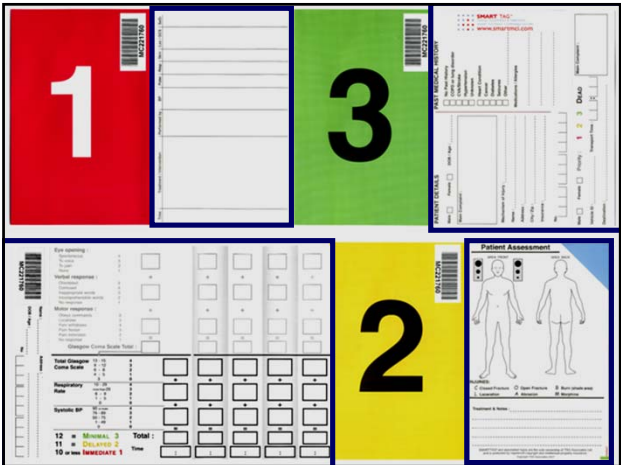


The SMART Triage Tag

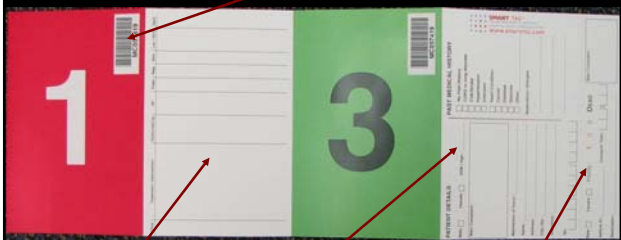
Made of water and rip-proof material; tag is water, chemical, and body fluid-proof

Can withstand a decontamination shower

Dynamic design allows for upgrading and downgrading acuity rating



Total card size when unfolded: 15.4 X 6 inches
Individually numbered & bar coded

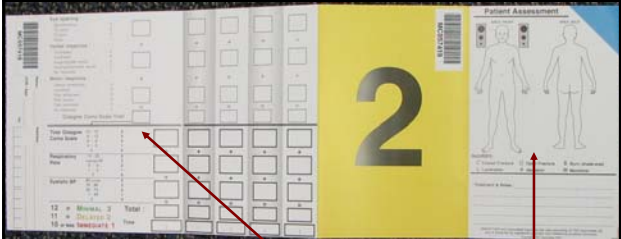


Vitals and treatment section

Patient information section

Transport tag (tears off)

The SMART Tag cont.



Secondary Triage section

Patient Assessment section

SMART Tag

Instead of tearing a strip, tag has high visibility color panels

Fold tag so appropriate triage color is visible in plastic envelope

Separate black "DEAD" tag

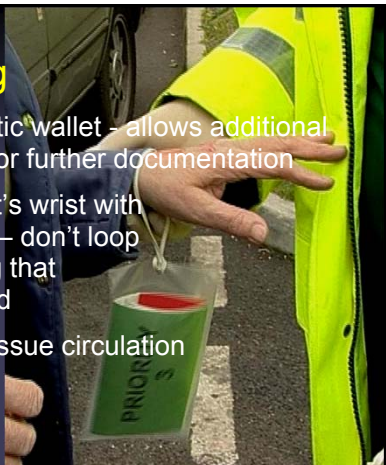


SMART Tag

Place tag in plastic wallet - allows additional storage space for further documentation

Secure to patient's wrist with latex-free band - don't loop through clothing that may be removed

Will not restrict tissue circulation



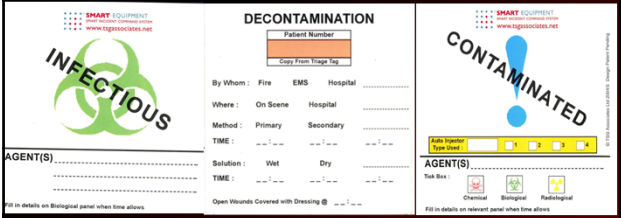
SMART Contamination Tag

Separate tag to be put in outside pocket of plastic envelope if patient is contaminated

Ensure **CONTAMINATED** side is visible



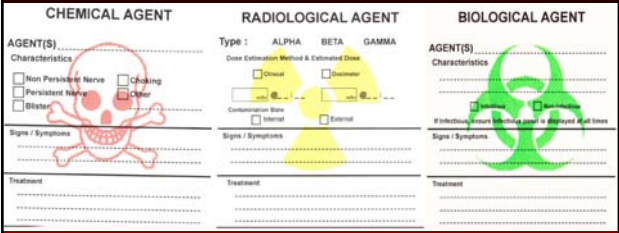
SMART Contamination Tag



Decontamination panel completed after decon

Ensure that side shows through envelope

CHEMICAL AGENT RADIOLOGICAL AGENT BIOLOGICAL AGENT



Filled out as additional info becomes available re:
chemical, radiological or biological agents involved

Casualty counts

Tracking system on back of adult triage reference card allows triage officer to cross off next number as each new pt is prioritized

Each card can account for 20 reds, 20 yellows, 20 greens, & 10 dead



SMART Commander

Briefcase sized command board

Designed for use by IC or Medical Group Supervisor

Size: 20 X 14.5 X 2"



SMART Commander

Contains:

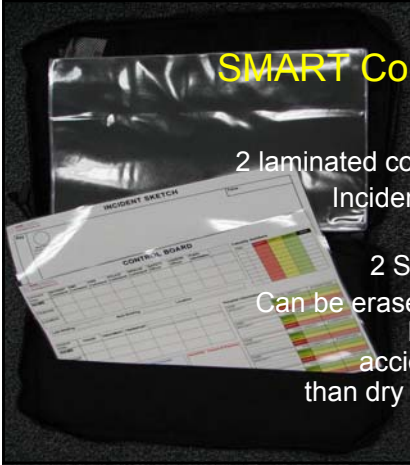
2 laminated command sheets

Incident Sketch sheet

Control Board

2 Sharpie markers

Can be erased with alcohol; less likely to be accidentally erased than dry erase markers!



SMART Commander

Incident Command sheets
Velcro to either side of
SMART Commander

Useful for briefing
incoming units

Medical or
Transportation officers

The image shows two components of the SMART Commander. The top component is a 'CONTROL BOARD' with various sections for incident management, including 'Incident', 'Resources', 'Status', and 'Log'. The bottom component is an 'INCIDENT SKETCH' pad with a grid for drawing and a section for notes.

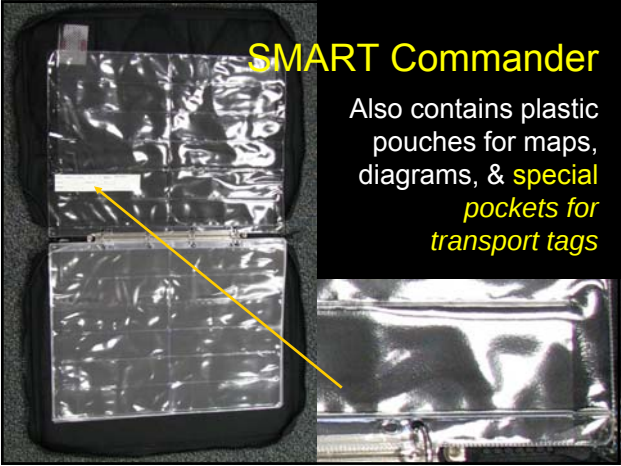
SMART Commander

Has pockets for
vests,
extra tags, or
anything else
an agency
may want to
have
immediately
available

A person wearing a high-visibility yellow vest is shown holding a SMART Commander bag. The bag is open, revealing several incident command sheets and other documents inside.

SMART Commander

Also contains plastic
pouches for maps,
diagrams, & **special
pockets for
transport tags**

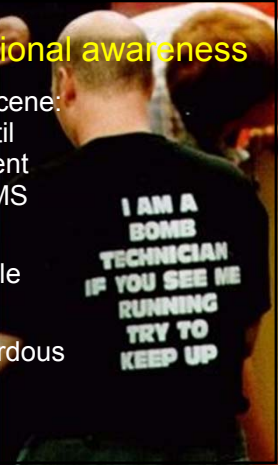
The image shows the interior of a SMART Commander bag. It contains several plastic pouches, some of which are labeled. A yellow arrow points to one of the pouches, highlighting the special pockets for transport tags.

Scene safety – situational awareness

If active assailant, crime scene:
EMS should not enter until
cleared by law enforcement
unless embedded w/ TEMS

Stage out of killing zone if
active assailant or possible
explosive device

Stage upwind of any hazardous
materials leak

A person is shown from the back, wearing a black vest with the text 'I AM A BOMB TECHNICIAN IF YOU SEE ME RUNNING TRY TO KEEP UP' printed on it.

Wear vests

Sooner rather than later
Help facilitate effective communication

A person is shown wearing a high-visibility vest with several labels. The labels include 'EMS COMMAND', 'TRANSPORTATION OFFICER', 'TRIAGE OFFICER', and 'STAGING OFFICER'. The person is standing next to a red fire truck.

Privacy considerations

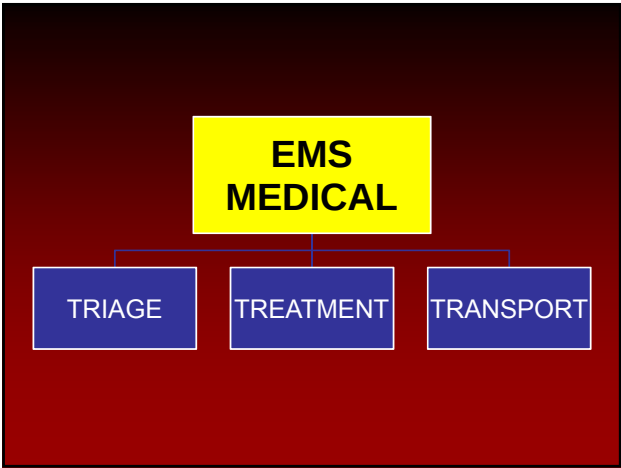
How can pts be screened from onlookers/media?

How should requests for information be handled?

PIO: During & after incident

- Who serves that role for their agency?
- How are they requested to scene?
- Who briefs them?
- Who will provide on camera media briefings?

Short-term event; long-term event?



Triage

Assigned by & reports to EMS/Medical

Overall goals

1. Locate all victims
2. Triage (& tag if Med-Lg/MCI)
3. Notify EMS/med of #'s
4. Move pts (reds 1st) to treatment



Approach to triage

START (Simple Triage And Rapid Treatment): basic system used for adult primary or initial triage

JumpSTART: Used for pediatric initial triage

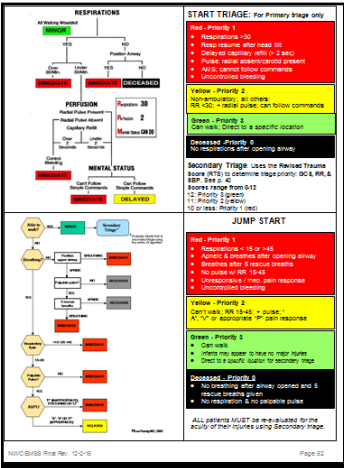
SMART system has a **primary triage tag** & adds a **secondary triage** process



TRIAGE steps

See SOP p. 52 Briefing on Start & Jumpstart

< 30 sec / pt



START TRIAGE: For Primary triage only
Red - Priority 1 - Respirations < 10 - Resp require after head tilt - Control external bleeding (if > 1.5 sec) - Pulse: radial/brachial/central present - All 4: distal femur/compartment - Unconscious/bleeding
Yellow - Priority 2 - Respirations 10-20 - NR - ASD - radial pulse; can follow commands
Green - Priority 3 Can walk: Direct to a specific location
Deceased - Priority 4 No respirations after opening airway
Secondary Triage: Uses the Revised Trauma Score (RTS) to determine triage priority: GCS, RR, SBP, GEP, GEP, GEP

JUMP START
Red - Priority 1 - Respirations < 10 or 10-15 - Apnea & cyanosis after opening airway - Respirations after 1 minute pause - No pulse at RR 10-45 - Unconscious & no carotid response - Uncontrolled bleeding
Yellow - Priority 2 - Can walk: RR 10-20 & pulse 1-2 sec - NR - ASD - radial pulse; can follow commands
Green - Priority 3 - Can walk - Respirations > 20 - Direct to a specific location for secondary triage
Deceased - Priority 4 - No breathing after airway opened and 5 rescue breaths given - No response & no carotid pulse

All patients MUST be re-evaluated for the acuity of their injuries using Secondary triage

START: Primary Triage

Step 1: Direct anyone who can, to **walk** away from immediate scene - BUT

Direct them to a **specific** location

Assign someone to coordinate walkers

Initially tag "Green"



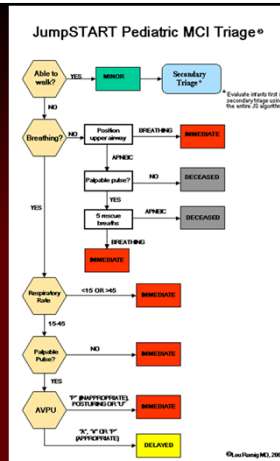
Still no breathing:
check pulse

Pulse present:

Breathing resume

tag "Red"

No breathing:

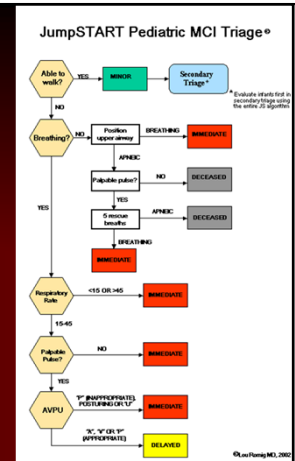


Breathing present:

tag "Red"

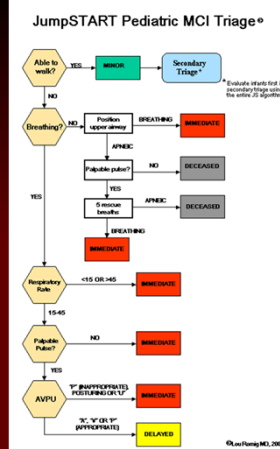
Check palpable pulse
(not cap refill)

No palpable pulse w/
RR <15 or >45:
tag "Red"

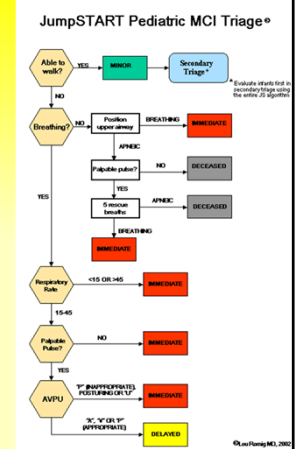


Assess **mental status** using “AVPU” scale

If posturing (abnormal non-purposeful flexion or extension) to pain or unresponsive:
tag **"Red"**



All others:
RR 15-45;
palpable pulse,
mental status
"A", "V" or "P":
tag "**Yellow**"



Assigned by & reports to EMS/Medical

- Establish & manage tx areas, incl. supplies
- Re-triage all pts using Secondary triage
- Determine priority for transport
- Provide treatment as able



Don't bake patients in direct sunlight or over asphalt if possible
Try to establish in an area protected from the elements

May need to take equipment off arriving vehicles for treatment area
Do not wait for MABAS trailers



Most important function of Treatment Area
Transport order determined by **secondary triage score**; must be a continual process
SMART tags have 5 columns to track trends

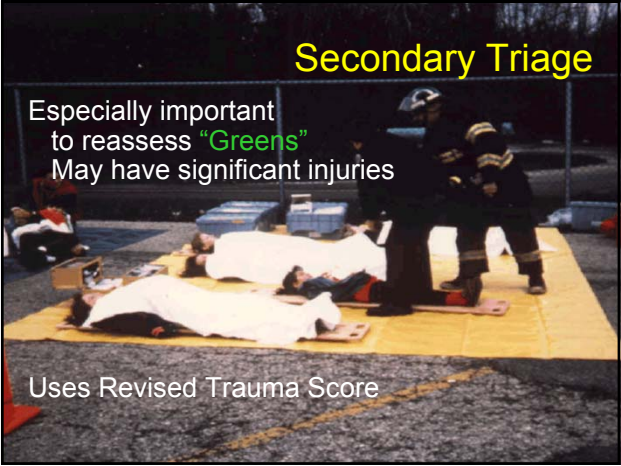
Secondary Triage



Secondary Triage

Especially important to reassess **"Greens"**
May have significant injuries

Uses Revised Trauma Score



Revised Trauma Score (RTS)

Glasgow Coma Scale conversion points
Respiratory rate
Systolic BP (*Need cuffs!*)

Priority for transport:
RTS 12 = **Green (3)**
RTS 11 = **Yellow (2)**
RTS ≤ 10 = **Red (1)**

Eye opening :		
Spontaneous	4	
To voice	3	
To pain	2	
None	1	
Verbal response :		
Oriented	5	+
Disoriented	4	
Incomprehensible words	1	
Motor response :		
Obeys commands	6	+
Localizes	5	
Pushes/pulls	4	
Flexion	3	
Extension	2	
No response	1	
Glasgow Coma Scale Total :		
Total Glasgow Coma Scale		
13 - 15	4	+
12	3	
11	2	
10 or less	1	
Respiratory Rate		
10 - 20	4	+
6 - 9	3	
0 - 5	1	
Systolic BP		
90 mmHg	4	+
70 - 89	3	
50 - 69	2	
1 - 49	1	
0	0	
12 = PRIORITY 3 Total :		
11 = PRIORITY 2 Time :		
10 or less PRIORITY 1		

Treatment – Transport?

If resources (personnel/equip) not available to provide tx at scene - and transport resources (amb) are available - better to transport than wait for additional tx resources at scene



Ambulance staging

Transportation officer or scene commander should stage for easy access/egress from treatment area



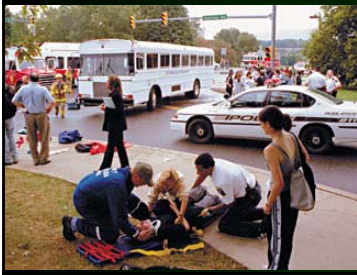
What triage category should be transported first?



Reds
Yellows
Greens
Deceased

Transport order determined by secondary triage score

Where should the 1st patients be transported?



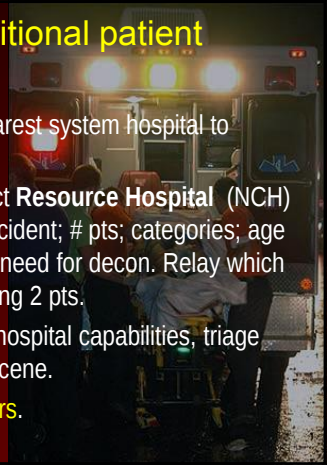
2

2

2



Who decides additional patient destinations?



If small-scale: Contact nearest system hospital to distribute remaining pts

If med-large scale: Contact **Resource Hospital** (NCH) ASAP: Relay nature of incident; # pts; categories; age groups, functional needs; need for decon. Relay which hospitals are already getting 2 pts.

NCH will assess receiving hospital capabilities, triage locations, & relay info to scene.

Exchange call back numbers.

Receiving hospitals will re-triage



You've been called to a MVC with 8 pts.
On scene now: 1 ALS ambulance and an ALS engine with a total of 3 PMs & 2 EMTs
Pts: 2 red (1 in cardiac arrest; 1 unconscious with severe head & chest trauma); 3 yellow with possible internal injuries and limb fractures; 3 greens
4 hospitals can be reached within 30 mins (1 Level I TC, 2 Level II TC; 1 non-trauma center) but it is unlikely that the scene can be cleared in 10 minutes

How should this incident be categorized?



Medium scale

What kind of help do you need?

Depends on how incident is categorized

If **Small scale:** Enough staff and vehicles to care for and transport 1 ALS + 1 BLS or 2 BLS pts if no HIPAA violation

If **Medium Scale:** 1 stretcher pt; 3 seated or 2 stretcher pts - all occupants must be safely secured



Do you work the cardiac arrest?

Depends on how incident is categorized

If **Small scale**: Yes (business as usual) - however, this would be almost impossible to do with immediate resources and still care for all pts

If **Medium Scale**: Likely no if insufficient resources to implement pit crew approach immediately and still care for other patients. Triage DEAD.

Cover; unless access issue, don't move

Coordinate pt movement w/ coroner/ME/PD



Where and in what order should pts be transported?

Depends on how incident is categorized

If declared **Small scale**: Business as usual; must adhere to Trauma Guidelines for Level I & II transports

If **Medium Scale**: Do not need to follow Level I and II guidelines; Transport times > 30 min OK

Reds go first, but should not go to same hospital if possible



Tags, no tags? PCR, no PCR?

Depends on how incident is categorized

If **Small scale**: Tags optional; PCR mandatory

If **Medium Scale**: Tags mandatory; PCR optional; tags may serve as documentation



What hospital should be called to help coordinate pt distribution?

Depends on how incident is categorized

If **Small scale**: Nearest System Hospital

If **Medium Scale**: NCH



Is it necessary to call OLMC report to receiving hospitals?

Depends on how incident is categorized

If **Small scale**: Yes

If **Medium Scale**: No



All possible pts involved in a small scale incident must be:

- (1) triaged to the extent allowed *and*
- (2) treated & transported, *OR*
- (3) sign a refusal of service form

MOVE EVERYONE TO SAFETY

Refusals may be attempted but not be practical or possible in a medium to large scale incident

MPI Refusals





Is it necessary to keep families together at same receiving hospital?

You are called to a local nursing home and are told that they have 18 residents who have become very ill over the past 48 hrs.

Some have high fevers, headache, muscle aches shaking chills, pleuritic chest pain, and productive cough of thick yellow-green mucus. *Suspected diagnosis?*

Others have nausea, acute-onset vomiting, and watery, non-bloody diarrhea with abdominal cramps, myalgia, malaise, headache, low grade fever and dehydration. *Suspected diagnosis?*

What steps should you take before launching into a facility-wide triage sweep?

Droplet & contact precautions



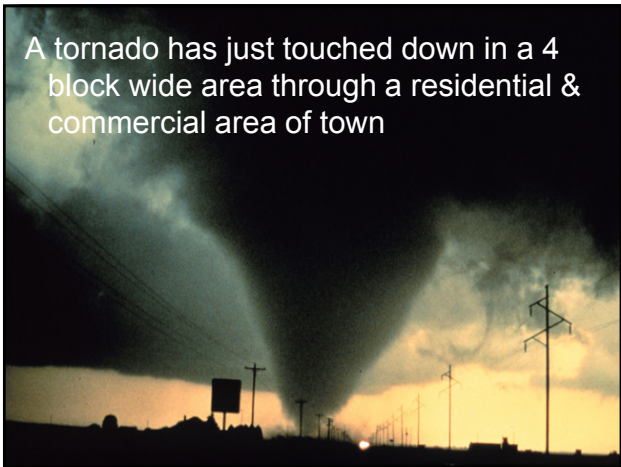
Does the initial approach to triage and medical incident management change when multiple pts are ill in one location rather than injured?

Not really; principles are much the same and incident categorization should be made based on assessment of available resources and time to clear scene

In this instance; multiple ambulances and ALS teams will be needed as these patients need appropriate medical care to the extent possible

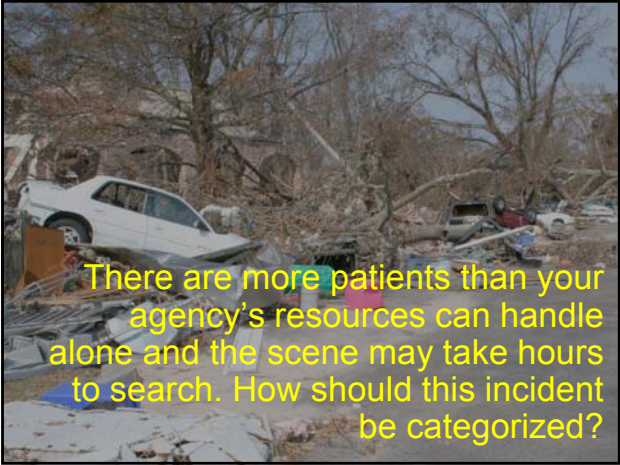
Those with similar S&S can cohort in 1 amb for transport if needed

A tornado has just touched down in a 4 block wide area through a residential & commercial area of town



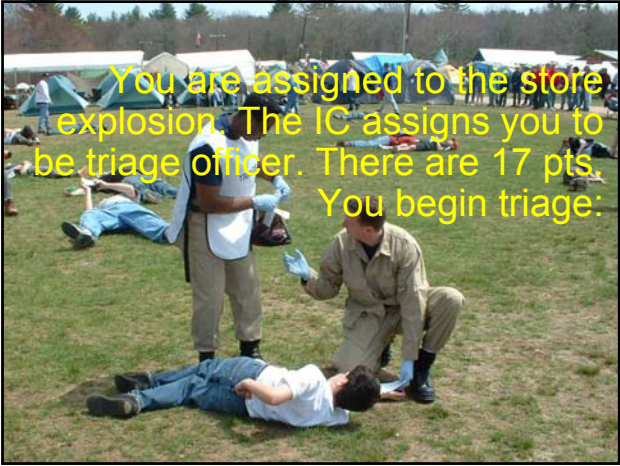
First on scene, you see widespread property damage and people are just starting to come outside. *What is your first duty?*





START practice

Move the Walking Wounded	▶	MINOR
No Respirations After Head Tilt	▶	MORGUE
☐ Respirations - Over 30	▶	IMMEDIATE
☐ Perfusion - Capillary Refill Over 2 Seconds	▶	IMMEDIATE
☐ Mental Status - Unable to Follow Simple Commands	▶	IMMEDIATE
Otherwise	▶	DELAYED



You ask “everyone who can get up and walk” to go to a specific area. Six pts go to the area. What is their initial triage category?

- A. Red
- B. Yellow
- C. Green
- D. Dead

Patient #7

An adult is severely burned and not moving. You open the airway and find no respiratory effort. Which of these is indicated under START?

- A. Triage as dead
- B. Begin ventilating w/ a BVM
- C. Triage red; move on to the next pt
- D. Delegate someone to ventilate w/ BVM

Patient #8

An adult has a broken leg & can't walk. He's conscious, c/o severe pain. RR 24; radial pulses present, & follows commands. Which of these is indicated under START?

- A. Tag red; move on to next pt.
- B. Tag yellow; move on to next pt.
- C. Apply a Hare splint; move to next pt.
- D. Manually immobilize the leg; ask someone else to continue triage

Patient #9

Supine adult can't walk; RR 26; carotid pulse present, no radial pulse; cap refill 3 sec; large laceration to upper leg w/ severe bleeding. Which of these is indicated?

- A. Tag green
- B. Tag black; he will die
- C. Control bleeding, tag red; move to next pt.
- D. Control bleeding, tag yellow; move to next pt.

Patient #10

Conscious adult; confused; RR 16, radial pulses present; does not follow commands. Which triage color should be assigned under START?

- A. Green
- B. Yellow
- C. Red
- D. Dead

Patient #11

Conscious adult c/o difficulty breathing; RR: 36. Which of these is indicated next under START?

- A. Assess perfusion
- B. Give 15 L O₂/NRM
- C. Tag red; move to next pt.
- D. Tag yellow; move to next pt.

Patient #12

Adult can't walk; is c/o neck pain; RR 20; radial pulse present; follows commands. Which of these is indicated under START?

- A. Apply a cervical collar
- B. Tag red; move to next pt.
- C. Tag yellow; move to next pt.
- D. Get help to apply spine motion restriction

Patient #13

Unconscious adult is not moving and has loud noisy respirations. You reposition the head & he now breathes quietly, RR 24. Which of these is indicated next under START?

- A. Assess perfusion
- B. Tag yellow; move to next pt.
- C. Stay with pt and maintain his airway
- D. Delegate airway maintenance, tag red, and move to next pt.

Patient #14

Pregnant pt at 34 weeks can't walk c/o abdominal pain; RR 18; radial pulse present; follows commands. Which of these is indicated under START?

- A. Assess for crowning
- B. Tag red; move to next pt
- C. Tag yellow; move to next pt
- D. Check fetal heart tones & time contractions

Patient #15

Adult is c/o dizziness and light headedness; RR 18; radial pulse present. Which of these is indicated next under START?

- A. Tag yellow
- B. Check her BP
- C. Assess mental status
- D. Place in a shock position, tag red

Patient #16

3 y/o is not walking but moves all limbs; looks at you. Small cut on head, bleeding is controlled. Is telling her mother that her head and tummy hurts. RR 27; brachial pulse + and rapid. Which of these is indicated under JumpSTART?

- A. Assess the pupils
- B. Tag red; move to next pt
- C. Assess head & abdomen
- D. Tag yellow; move to next pt

Patient #17

5 y/o boy with chest trauma; RR 38, radial pulse absent, carotid present; withdraws from pain. Which of these is indicated under JumpSTART?

- A. Start CPR
- B. Tag red; move to next pt
- C. Tag yellow; move to next pt
- D. Listen to bilateral breath sounds

Secondary Triage Practical

Refer to the Revised Trauma Score Chart in the SOPs or SMART card



Patient #1

Female 30, lying on a tarp. Breathing quickly, RR 25; BP 100/80. Eyes open, talking with confused speech (thinks she's at the seaside); moves spontaneously to command. What is the secondary triage score?

Priority:

GCS	Eye opening	Speech	Motor
GCS pts	RR	SBP	Total RTS

Patient #2

Male 27, walking around with partial thickness burns to his arms. Crying, RR 32, BP 120/80. Eyes are open. He is asking for help and something for the pain. What is the secondary triage score?

Priority:

GCS	Eye opening	Speech	Motor
GCS pts	RR	SBP	Total RTS

Patient #3

Male 50, lying on the ground. Breathing with gasping sounds. RR 8; BP 100/60. No eye opening, groaning occasionally, withdraws to pain. What is the secondary triage score? Priority:

GCS	Eye opening	Speech	Motor
GCS pts	RR	SBP	Total RTS

Patient #4

Female 20, lying on the ground. Soot on face and around the mouth. Asking for help with a hoarse voice. RR 34; BP 150/110. Eyes open, moving spontaneously to command. What is the secondary triage score?

Priority:

GCS	Eye opening	Speech	Motor
GCS pts	RR	SBP	Total RTS

Patient #5

Male 30. Some blood is draining from the ear. Breathing normally (RR 20); BP 130/80. Eyes are open and he is heard comforting his colleague and patting her shoulder. Moving all 4 extremities. Secondary triage score? Priority:

GCS	Eye opening	Speech	Motor
GCS pts	RR	SBP	Total RTS



Illinois CHEMPACK
Training Program

Module 1:
Overview of CHEMPACK Program &
State of Illinois CHEMPACK Plan

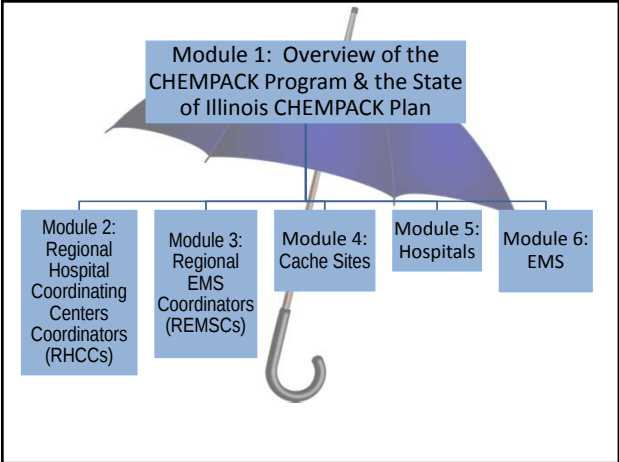
Module 1: CHEMPACK Overview

Part 1: CHEMPACK Program



Part 2: Illinois CHEMPACK Plan





Part 1:CHEMPACK Program

- Background
- Overview
- Content

Background

Threat posed since 9/11/2001 attacks on World Trade Center and Pentagon

Need to develop strategies and resources to address potential of chemical, biological, radiological, and nuclear weapons

What is the CHEMPACK Program?

Program of the CDC Division of Strategic National Stockpile (DSNS)

Managed at the State-level by the Illinois DPH Office of Preparedness and Response Medical Countermeasures Program

“Forward” placement of nerve agent antidotes where they can be available rapidly for treatment of affected people

Highly poisonous chemicals that prevent nervous system from working properly

Chemical warfare agents or organophosphate agricultural pesticides

Immediate Rx with drugs required, followed by long-term care

What are nerve agents?

Nerve agents / Cholinergic poisons

Pesticides/Herbicides

- Parathion; Malathion
- Chlorpyrifos
- Diazinon

Chemical Weapons

- Sarin
- Tabun
- Soman
- Cyclosarin

What happens when people are exposed to nerve agents?

In very small amounts, are highly toxic when inhaled, swallowed, or come in contact with skin or eyes
All routes of exposure cause extreme side effects

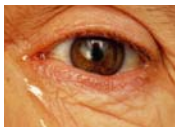
Range of symptoms:

- Mild: salivation, tearing, tightness of chest
- Moderate: difficulty breathing, nausea
- Severe: involuntary salivation, urination, defecation, vomiting, muscle twitching, miosis (pinpoint pupils)

(Source: The Massachusetts CHEMPACK Training Program, Module 2, Slide 57.)

“SLUDGEMM”

- Salivation
- Lacrimation (tear secretion)
- Urination
- Defecation
- Gastrointestinal upset
- Emesis (vomiting)
- Muscle twitching
- Miosis (pinpoint pupils)



(Source: Massachusetts CHEMPACK Training Program, Module 2, Slide 52)

What drugs are effective antidotes against chemical nerve agents?

Atropine

- Blocks excess acetylcholine
- Reduces runny nose
- Reduces salivation
- Relieves chest tightness
- Eases vomiting and diarrhea



Pralidoxime (2-PAM)

- Reactivates cholinesterase, thereby reducing levels of acetylcholine
- Reduces muscle weakness and paralysis

Diazepam (or midazolam)

- Reduces severity of agitation and convulsions



What is a CHEMPACK?

Containers of nerve agent antidotes & other supplies.



- Limited antidotes at local pharmacies and hospitals; are inadequate for a large-scale incident
- Special packaging of CHEMPACK assets for quick use in the field or in the hospital ED

What do the CHEMPACK containers look like?



- Design: Wire-Lexan mesh containers on wheels
- Size: 60.5" long X 32.5" wide X 60.5" high
- Weight: 600lbs (800lbs full)
- Door: Panel slides out

Types of Containers

EMS Container

- Meds used in field; 85% packaged in auto-injectors
- Intended for 454 casualties

Hospital Container

- Meds used in ED
- 85% packaged in multi-dose vials for IVs
- Intended for 1,000 casualties



CHEMPACK CONTAINER CONTENTS			
Product	Unit Pack	Cases/ EMS Container	Cases/Hospital Container
Mark 1 auto-injector	240	5	2
Atropine Sulfate 0.4 mg/mL 20 mL	100	1	9
Pralidoxime 1gm inj 20 mL	276	1	10
Atropen 0.5 mg	144	1	1
Atropen 1.0 mg	144	1	1
Diazepam 5mg/ml auto-injector	150	2	1
Diazepam 5mg/mL, 10mL	50	1	13
Sterile water for injection 20 cc vials	100	2	28
~Treatment Capacity (depending on the severity of event)		454	1000

Part 1 CHEMPACK Program: Summary

CHEMPACK Program

Administered by CDC
DSNS & IDPH OPR
Forward placement of
chemical nerve agent
antidotes

Two types of containers

- EMS: single-dose auto injectors
- Hospital: multi-use vials

Chemical Nerve Agent Antidotes

- Designed to mitigate effects of chemical weapons such as Sarin gas & organophosphates
- 3 meds: atropine, pralidoxime (2-PAM), and diazepam, help to restore nerve functioning by blocking and reducing effects of acetylcholine

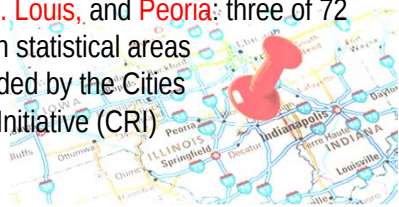
Part 2: State of Illinois CHEMPACK Plan

- Context of Plan
- Format of Plan
- Purpose of Plan
- Stakeholders Roles and Responsibilities
- Integration of Illinois Plan/State, Regional, Local Tiers
- Annual Plan Review



The State of Illinois CHEMPACK Program

- Illinois: one of 62 project areas
- City of Chicago: one of 4 directly funded cities with CHEMPACK Programs.
- Chicago, St. Louis, and Peoria: three of 72 metropolitan statistical areas (MSAs) funded by the Cities Readiness Initiative (CRI)



The State of Illinois CHEMPACK Program



- CHEMPACK assets are forward placed in geographically dispersed locations: Cache Sites
- 1 EMS and 1 Hospital container stored at each site
- Program managed by IDPH Office of Preparedness and Response MCM Program
- Stakeholder roles & responsibilities defined in Illinois CHEMPACK Preparedness and Response Plan

Illinois CHEMPACK Plan: Overview

Context

- Hazard Annex of Ill Strategic National Stockpile Plan; referenced in State's EOP
- Plan developed/maintained by IDPH OPR MCM Program Mgr
- CHEMPACK site in Comprehensive Emergency Management Program (CEMP) for communication among partners at state, regional and local tiers

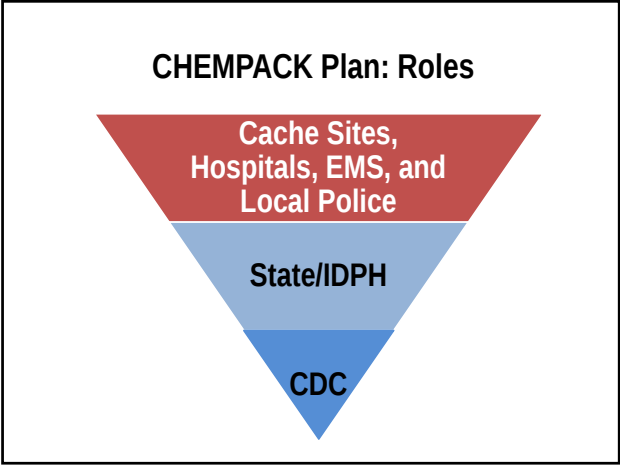
Format

- Follows format of Illinois Emergency Ops Plan
- Divided in sections with Table of Contents
- Includes appendices of forms and SOP template
- Places hospital distribution matrix and contact lists in appendices shared in CEMP

State of Illinois CHEMPACK Plan: Purpose

"The purpose of the CHEMPACK Plan is to provide **operational guidance** to State and local authorities for the **storage, maintenance, and use** of chemical/nerve agent antidotes during a chemical agent event when local resources have been depleted." (Section 1.1.2)

- Operational guidance:**
Roles & responsibilities of partners in the state, regional and local tiers
- Storage, maintenance and use** of nerve agent antidotes:
Location of antidotes, facility requirements and activation



Integration Across Tiers

- Description of state, regional and local partners' roles and responsibilities
- Context for REMSCs' work on CDC site visits
- Description of location requirements
- Description of activation and transport of EMS and hospital containers

CHEMPACK Plan: Roles

CDC

- Owns assets.
- Provides guidance to manage program.
- Evaluates and approves site locations.
- Monitors sites 24/7.
- Conducts periodic inspections.
- Administers Shelf Life Extension Program (SLEP) through the DOD/FDA.

State/Illinois DPH

- Coordinates distribution of assets throughout state.
- Oversees receipt, storage, maintenance, monitoring, reporting, and activation.
- Schedules CDC site visits with cache sites, in conjunction with REMSCs.
- Maintains/updates the Plan.
- Ensures availability of annual training.

Illinois DPH: Roles & Responsibilities

- Overall management of the Illinois CHEMPACK Program through IDPH MCM Program
- Coordination with RHCC Coordinators (Sherman) for optimal geographic coverage
- Oversight of receipt, storage, maintenance, monitoring, reporting, activation of assets
- Coordination of / participation in CDC site visits

Illinois DPH: Roles and Responsibilities

- Coordination of temporary positioning of assets
- Coordination of permanent relocation
- Execution of annual review of CHEMPACK Plan
- Assurance of **annual training** and evaluation requirements

```
graph TD; A[Coordination of temporary positioning of assets] --- B[Coordination of permanent relocation] --- C[Execution of annual review of CHEMPACK Plan] --- D[Assurance of annual training and evaluation requirements]
```

CHEMPACK Plan: Roles

Cache Sites

- Provide secure & controlled environment for storage
- Maintain protocols for distributing assets when local resources are gone
- Maintain current contact list in CEMP
- Ensure annual training for appropriate hospital staff

Hospitals

- Maintain protocols for requesting assets from regional cache sites
- Maintain current contact list
- **Ensure annual training** for appropriate hospital staff

CHEMPACK Plan: Roles

Emergency Medical Services (EMS)

- Maintain protocols for requesting assets from regional cache sites
- Maintain current contact list
- Request CHEMPACK assets as necessary during an emergency based on protocol
- Administer CHEMPACK assets in the field according to treatment protocols (SOPs)
- **Ensure annual program and clinical training for appropriate staff**

CHEMPACK Plan: Roles

Local Police

- Maintain protocols for **transporting assets** from regional cache sites
- Transport assets from cache site to the site of the incident or from cache site to a hospital
- Complete appropriate paperwork, including Transfer of Custody Form
- Participate in local training/drills as requested

Logistics at Cache Sites

- Accessibility
- Security
- Environment – temperature & humidity
- Electrical power
- Fire protection system
- Authorized personnel



Region IX CHEMPACK Sites

- Advocate Sherman Hospital
- **Advocate Lutheran General Hospital**
- **Alexian Brothers Medical Center**
- **Northwest Community Hospital**
- Rush-Copley Medical Center

Activation:

CHEMPACK assets are activated when:

- Local supplies exhausted quickly
- >50 people are affected
- Health of community threatened

Determination made by EMS or a hospital

Cache sites notifies IDPH Duty Officer via the IEMA Communications Center



Activation:

- Based on protocol for requesting, transferring and transporting assets
- Requires involvement of authorized, trained personnel at local level
- Depends on specific flow of communication at all levels



Your Role

Overall Roles and Responsibilities

- Where do you fit in?
- What training might you need given your role & responsibilities?
 - Preparedness competencies
 - Other competencies

Your Tier

- Who are your key partners?
 - Develop relationships
 - Evaluate agreements with local partners
- How do you maintain plans?
 - Interpret procedures
 - Make improvements as needed based on changes in local context

Review Question 1

Which of the following statements about the CHEMPACK Program **IS TRUE**?

- A. All hospitals provide secure and controlled environments for storage of CHEMPACK assets
- B. EMS maintains protocols for requesting assets from regional cache sites
- C. All hospitals store 1 EMS and 1 hospital CHEMPACK container
- D. EMS coordinates distribution of CHEMPACK assets throughout the State

Review Question 2

Which of the following **IS NOT** a feature of the CHEMPACK Program?

- A. The federal government owns the CHEMPACK assets
- B. Cache sites assure 24/7 monitoring of CHEMPACK assets
- C. Authority to activate CHEMPACK assets rests with the CDC
- D. CDC conducts periodic site visits to cache sites for routine inspections of containers and equipment

Review Question 3

The Illinois CHEMPACK Preparedness and Response Plan provides instructions prepared by CDC on how IDPH should manage the CHEMPACK Program if a chemical event occurs anywhere in the State.

- A. True
- B. False



START Summary

Can walk – “Green”
No respirations after opening airway
Respirations resume after airway opening or RR > 30/min
Pulse: radial absent/carotid present;
Cap refill > 2 sec
AMS; cannot follow commands
Non-Ambulatory – all others

JumpSTART Summary

Can walk – “Walking Wounded”
Breathes after repositioning airway
Breathes after 5 rescue breaths
Respirations <15 or > 45
No palpable pulse w/ RR 15-45
Unresponsive or inappropriate to pain
Can't walk; RR 15-45; Pulse +; “A”, “V”, or “P”
No respirations after 5 rescue breaths
No respirations AND no palpable pulse



Important SOP differences

Small scale incident

Tags optional
Call nearest System hospital to coordinate remaining pts
Must call receiving hospital w report
ePCR required

Med-Lg scale incident

Tags mandatory
Call NCH to determine receiving hospital capabilities
No radio reports
No ePCR; triage tag serves as report



Any questions?
e-mail Connie Mattera
cmattera@nch.org

