

# TRIAGE

รัตติยา บรรจุงาม

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# Outline

- What is triage?
- When is triage carried out?
- Where is triage carried out?
- What priorities should be used?
- What casualty labels should be applied?



## History

- First described in modern times by **Baron Dominique Jean Larrey**
- Napoleon's surgeon marshal
- Military > medical
- Aim : give the minor wounded who could be return quickly to the battle



Baron Dominique Jean Larrey

1766-1842



## History

MINOR WOUNDED is the FIRST PRIORITY



World war I triage

## What is Triage?

- มีรากศัพท์มาจากภาษาฝรั่งเศส 'Trier' ที่แปลว่า **การแยก (sort)** การคัดเลือก (choose)
- เป็นระบบการคัดแยกผู้ป่วย โดยแบ่งตามความรุนแรงของการเจ็บป่วย หรือการบาดเจ็บ
- โดยมีวัตถุประสงค์เพื่อให้ผู้ป่วยได้รับการรักษาอย่างรวดเร็ว และเหมาะสมตามสภาพของการเจ็บป่วย ในระยะเวลาที่เหมาะสม



## Triage Principle

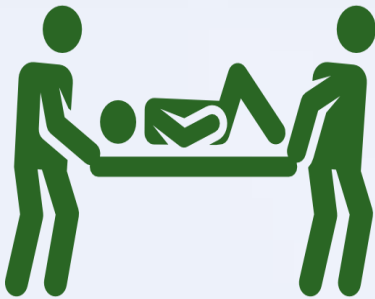
- Should be used wherever  
'needs of casualty > capacity of the skilled rescuers available'

‘ DO THE MOST TO THE MOST ’

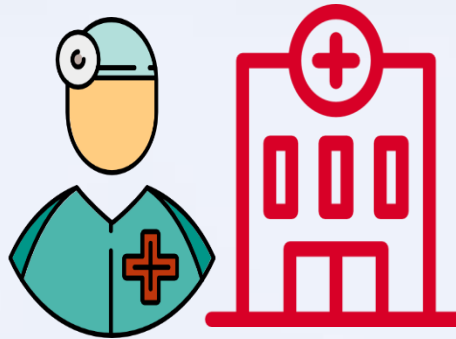




## AIM OF TRIAGE



patient



Resources

place



Time

## Timing



scene



Casualty  
Clearing  
Station



Prior to  
evacuation



Receiving  
hospital

“Dynamic process”



## Site

Primary triage

**'Sieve'**



scene

Secondary triage

**'Sort'**

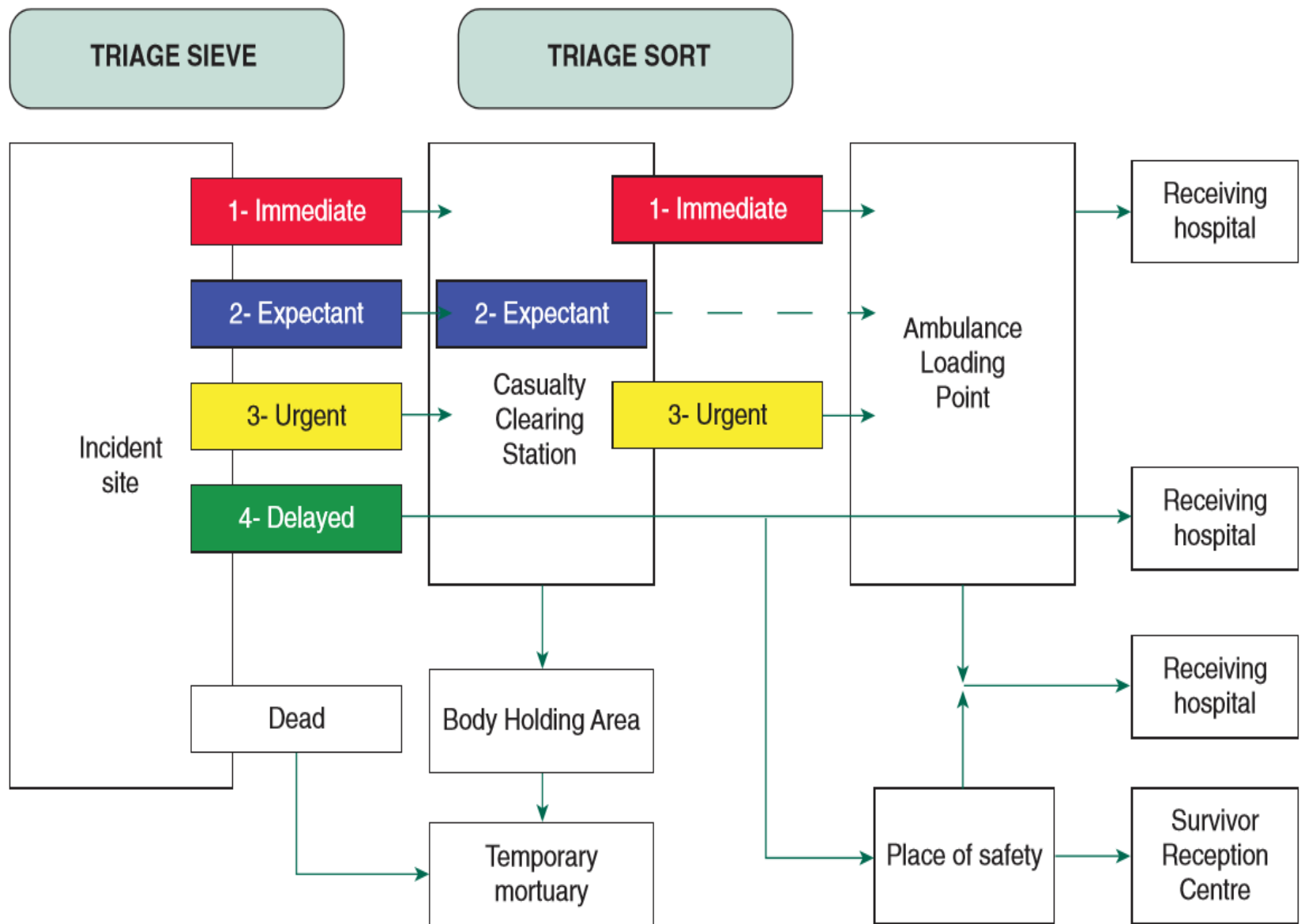


Casualty Clearing Station

## Priority

Priority	Treatment	Description	Color
1	1	immediate	Red
2	2	Urgent	yellow
3	3	delayed	Green
1 hold	4	Expectant	Blue (not standard)
Dead	Dead	Dead	White or black





Triage and evacuation map





# PRIORITY



T1 immediate

T2 urgent

T3 delayed

T4 expectant

## Triage method

- Primary triage – sieve
- Secondary triage – sort



Rapid, Simple, Safe,  
and Reproducible

## Triage method

‘Physiological method’

Vital signs

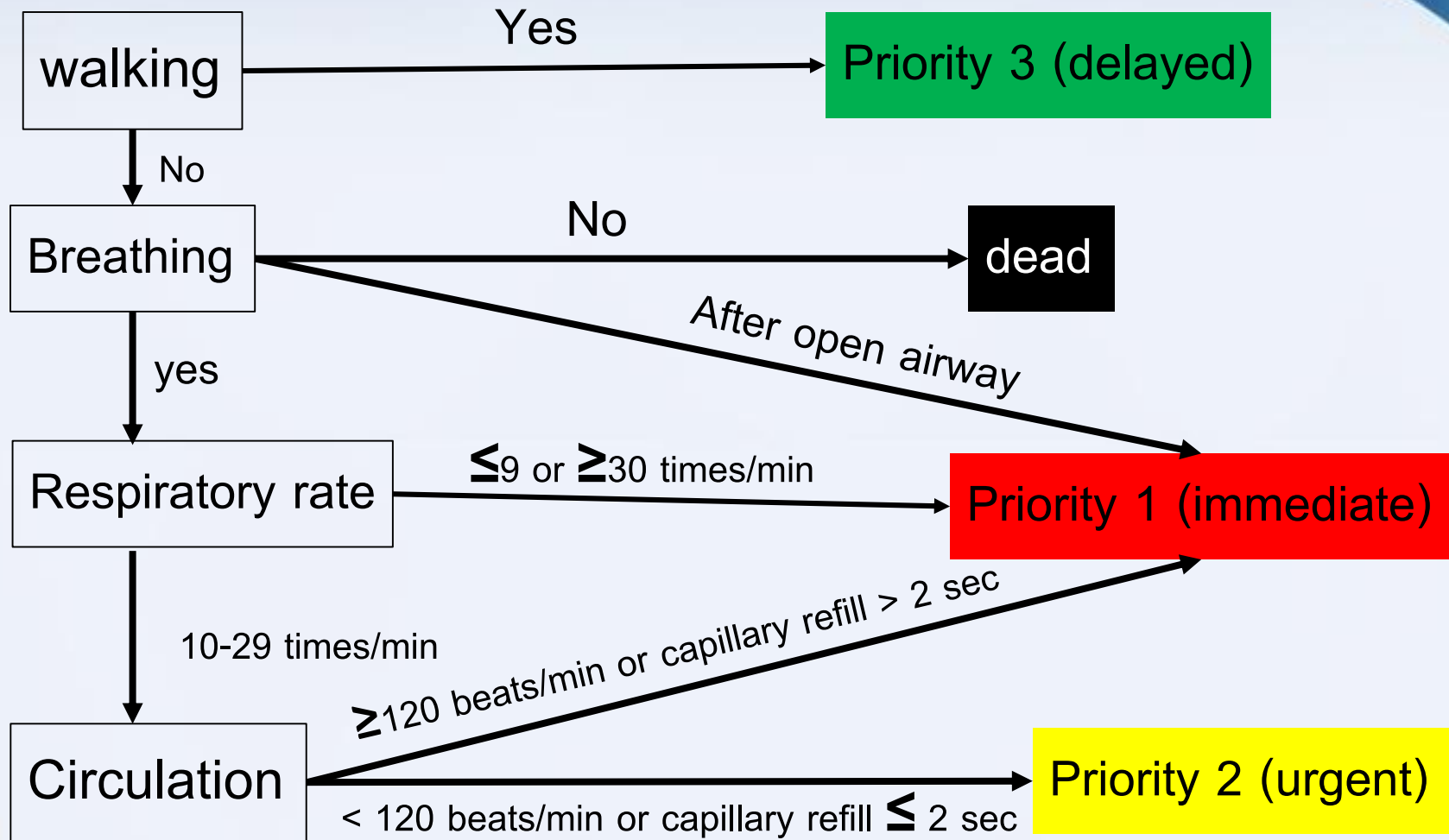


‘Anatomical method’

Part of injury







T1 immediate priority

Require life-saving procedures



TRIAGE TAG	
NAME	
<b>IMMEDIATE</b> LIFE THREATENING	
PERSON NEEDS CARE AT ONCE OR WITHIN 1 HOUR	
INJURIES	

## T2 urgent priority

Require surgical or medical intervention within 2-4 hours



TRIAGE TAG	
NAME	
<b>DELAYED</b>	
SERIOUS, NOT LIFE THREATENING	
Attention not needed until all IMMEDIATE persons have been evacuated	
INJURIES	



## T3 delayed priority

Less serious, Treatment can safely be delayed beyond 4 hours



TRIAGE TAG	
NAME	
<b>MINOR</b>	
WALKING WOUNDED	
Attention not needed until all IMMEDIATE and DELAYED persons have been evacuated	
INJURIES	

## T4 expectant priority

Condition is **so severe**

They cannot survive despite the best available care

- Expectant priority **will rarely be activated**

‘Uncompensated situation’



If more resource available **T4 >> T1**



# Dead





## Management in triage sieve

- Only

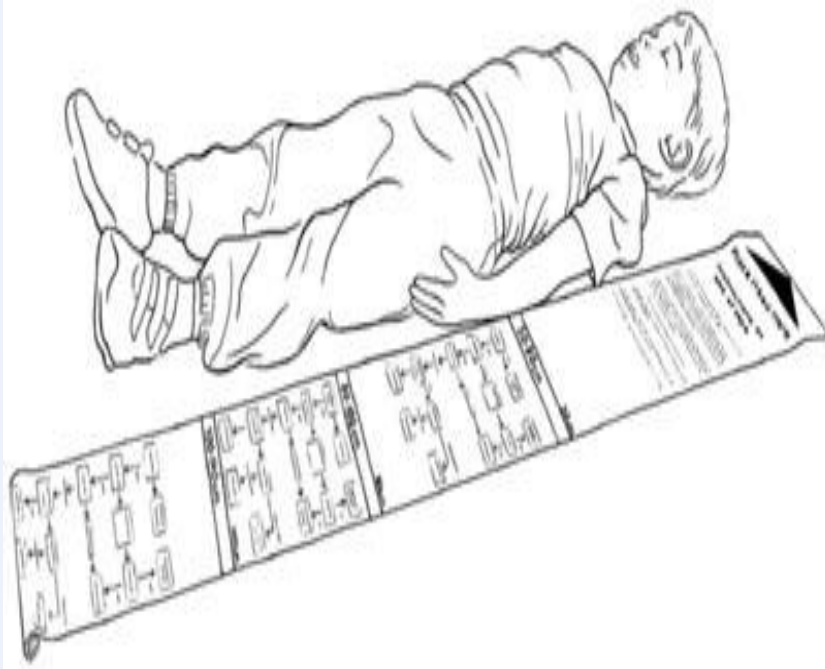
Open Airway



Stop Bleeding



## Pediatric triage sieve





- ชาย 35 ปี มีเศษกระจกปักคาแขนซ้ายมีเลือดออกมาก RR 12 tpm, PR 120 bpm **Priority 1**
- ชาย 29 ปี แผลฉีกขาดเล็กน้อยที่ใบหน้า เดินได้ **Priority 3**
- ชาย 16 ปี หายใจเร็ว ตื่นเต้น รู้สึกตัวดี มีแผลไหม้ที่แขนซ้าย RR 28 tpm, PR 110 tpm **Priority 2**
- หญิง 26 ปี กระจกเข้าตาขวา เลือดออกมาก RR 32 tpm, PR 110 tpm **Priority 1**
- หญิง 18 ปี กระจกบาดขาซ้าย มีแผลที่ขาซ้าย RR 16 tpm, capillary refill 2 s **Priority 3**





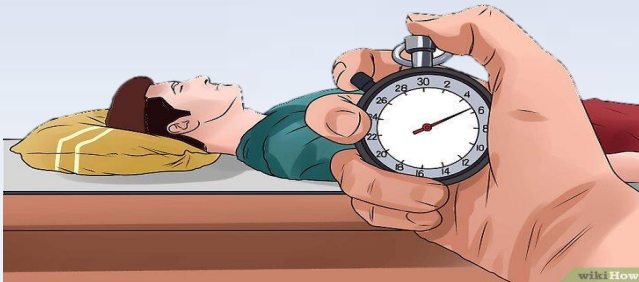
## Triage sort

- Casualty Clearing Station
- Physiological method
  - Triage Revised Trauma Score (TRTS)

RR + SBP + GCS



# AEC-MIMMs



Physiologic variable	Measure value	score
Respiratory Rate (bpm)	10-29	4
	>29	3
	6-9	2
	1-5	1
	0	0
Systolic Blood Pressure (mmHg)	$\geq 90$	4
	76-89	3
	50-75	2
	1-49	1
	0	0
Glasgow Coma Scale score	13-15	4
	9-12	3
	6-8	2
	4-5	1
	3	0

## Triage Revised Trauma and priority



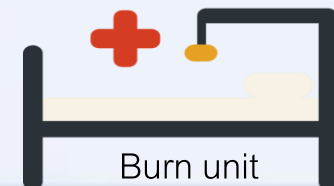
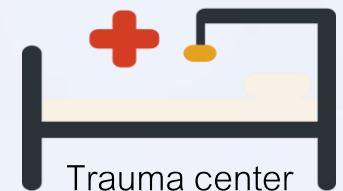
Priority	TRTS
T1	1-10
T2	11
T3	12
Dead	0

Expectant priority : TRTS 1-3




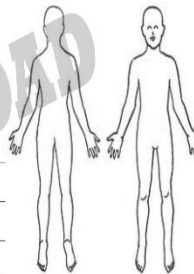


## Triage Sort

- Physiological method should be used first
- Anatomical method – determine destination



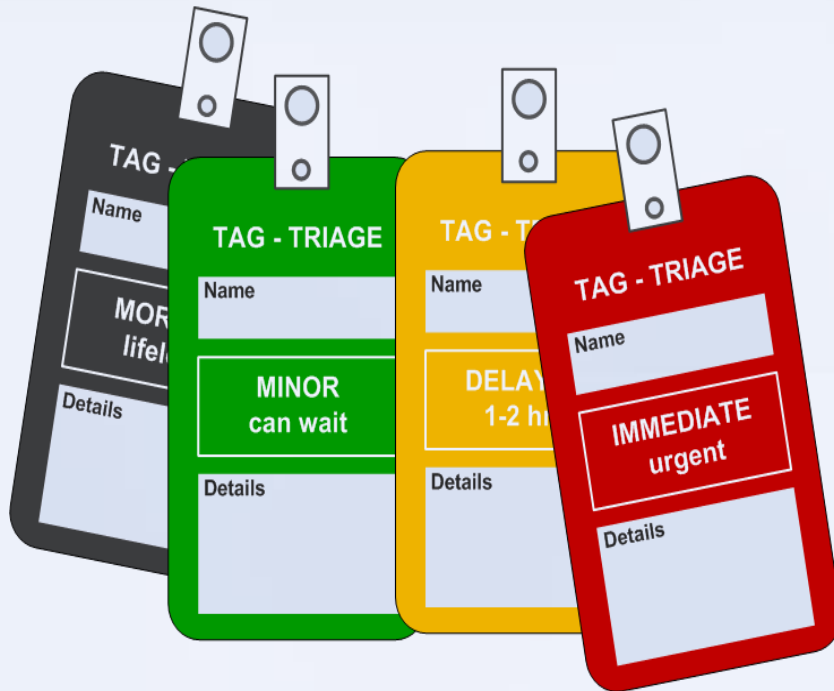
## Triage labelling

<b>TRIAGE TAG</b> <b>TAG NO: 0001</b>		<b>TRIAGE TAG</b> <b>TAG NO: 0001</b>	
<b>Contamination</b> <b>Yes / No</b>  Corrosive  Biological Hazard  Radiation		<b>Triage Tags</b> 	
<b>Respiration</b> ___ Yes ___ No		<b>Signs &amp; Symptoms:</b> _____ <b>Allergies:</b> _____ <b>Medication:</b> _____ <b>Previous Medical History:</b> _____ <b>Last time you ate or drank:</b> _____ <b>Events leading up to the incident:</b> _____	
<b>Pulse</b> ___ Yes ___ No		<b>Name:</b> _____ <b>Age:</b> _____ <b>Contact Number:</b> _____ <b>Emergency Contact person:</b> _____ (P)	
<b>Mental Status</b> ___ Can Do ___ Can't			
<b>DECEASED</b>		<b>DECEASED</b>	
<b>IMMEDIATE</b>		<b>IMMEDIATE</b>	
<b>DELAYED</b>		<b>DELAYED</b>	
<b>MINOR</b>		<b>MINOR</b>	

- ✓ Highly Visible
- ✓ Secure Attached
- ✓ Allow for priority changed
- ✓ Area for clinical note



## Single card



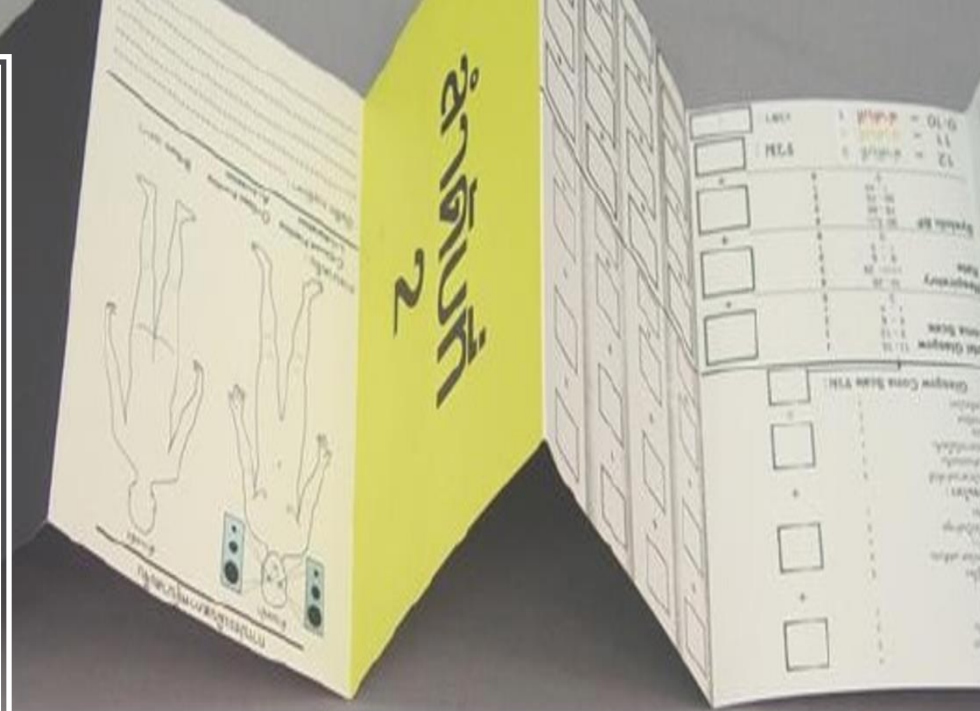
Front

Back



## Folding Card

- Can be used from
  - Scene
  - Casualty Clearing Station
  - Receiving Hospital



## Alternative labelling



Wristband

## Personnel

Triage Sieve : EMS personnel

Triage Sort : trained medical personnel





## Summary

- Triage is the first step in the hierarchy of medical support at a major incident
- Triage is 'Dynamic Process' >> need to be repeated
- Primary Triage : sieve
- Secondary triage : sort
- Use physiologic method → anatomical method
- Folding labels are the best labels available for dynamic triage



# ขอบคุณค่ะ



**Advanced** **EMERGENCY TEAM**