Mass burn casualty incidents

Draft guidelines for specialized in-hospital triage

The following guidelines address delayed specialized in-hospital triage in the setting of the European response plan to mass burn casualty incidents.

This triage is performed by burn assessment teams in order to select burned patients to be transferred to foreign burn centres, and to prioritise their transfer.

- Triage should be based on burned surface area and patient age, but not on inhalation injury.
- Only patients likely to benefit from specialised in-hospital burn care should be transferred to foreign burn centres, excluding patients who can be treated as outpatients and patients who are bound to die of their burns whichever level of care they receive.
- Patient selection and prioritization for transfer should aim at providing all casualties with the same probability of recovery as in a non-mass casualty situation.
- For patients selected to be transferred, priority level should be rated between 1 (high) and 3 (low), with higher priority nominally given to patients of greater severity.
- More restrictive triage rules, adding a “4 – very low” category, should be used only in degraded situations where even international capacities cannot meet the needs of the affected population. Disruption with general triage rules should then remain minimal.
- When burns are not the most threatening condition, usual trauma triage rules should be preferred.
- Triage rules should be mitigated with clinical judgement, especially regarding compatibility of actual patient condition with transportation.

The EBA disaster committee proposes the following 3-step triage procedure.

1. Assess patient probability on survival (table 1)
2. Assign priority level (table 2)
3. Reassess, at least when triage is completed, and when the logistical situation evolves.

Table 1: Probability of survival

according to burned surface area and age

(adapted from Taylor S et al., J Burn Care Res 2014:35(1):41–5)

Age (yr)	Body surface area burned (%TBSA)									
	0-9,9	10-19,9	20-29,9	30-39,9	40-49,9	50-59,9	60-69,9	70-79.9	80-89,9	90-100
0-1,99	Very high	Very high	High	High	High	Medium	Medium	Medium	Low	Low
2-4,99	Outpatient	Very high	High	High	High	Medium	Medium	Medium	Low	Low
5-19,9	Outpatient	Very high	High	High	High	High	Medium	Medium	Low	Low
20-29,9	Outpatient	Very high	High	High	High	Medium	Medium	Medium	Low	Low
30-39.9	Outpatient	Very high	High	High	Medium	Medium	Medium	Low	Low	Expectant
40-49,9	Outpatient	Very high	High	Medium	Medium	Medium	Medium	Low	Low	Expectant
50-59,9	Outpatient	Very high	High	Medium	Medium	Low	Low	Expectant	Expectant	Expectant
60-69,9	Outpatient	High	Medium	Medium	Low	Low	Low	Expectant	Expectant	Expectant
≥ 70	Very high	Medium	Low	Low	Low	Expectant	Expectant	Expectant	Expectant	Expectant

Table 2: Priority level for patient evacuation

depending on adequacy between needs and available international assets (burn beds & MEDEVAC)

Probability of survival	**Priority level**	
	No international saturation *(target situation)*	International saturation *(degraded situation)*
Outpatient	No EVAC	No EVAC
Very high	**3**	3
High	**2**	2
Medium	**1**	1
Low	**1**	**4**
Expectant	No EVAC	No EVAC