



ACEM 2011

Centara Grand & Bangkok Convention Centre
at CentralWorld



Bangkok, Thailand

PAROS MEETING

“Pre-Hospital System in Indonesia”

ALI HAEDAR

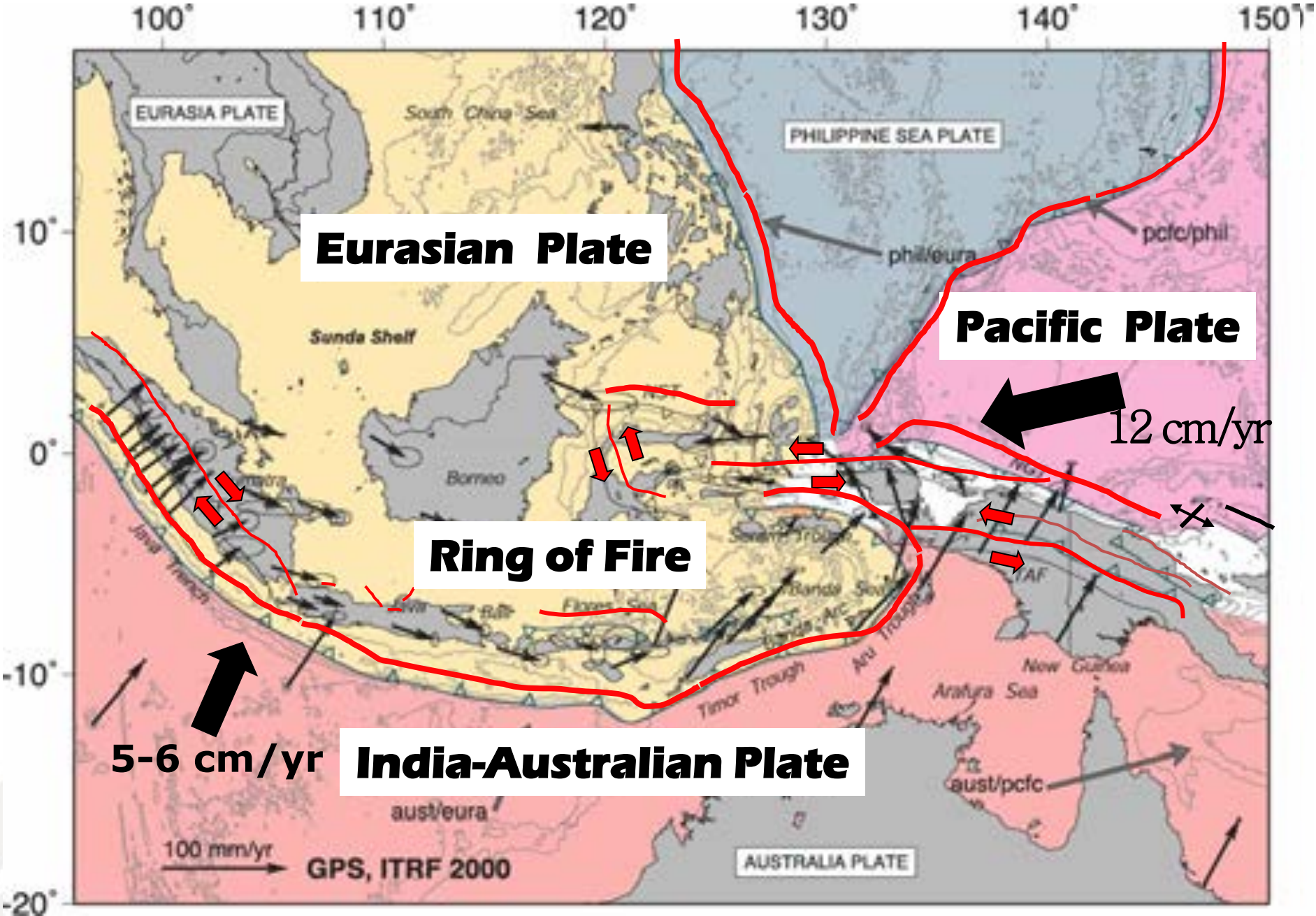
BRIEF BIOGRAPY



Junior Lecturer & Emergency Medicine Specialist | International Representative of Indonesian Society for Emergency Medicine (ISEM) | Curriculum Workgroup for Emergency Medicine Specialty Training Committee Indonesia | Board member of Rapid Response Team for Eastern Indonesia Region of National Disaster Relief Agency (BNPB) | Board member of International Training Consortium on Disaster Risk Reduction, WHO Indonesia

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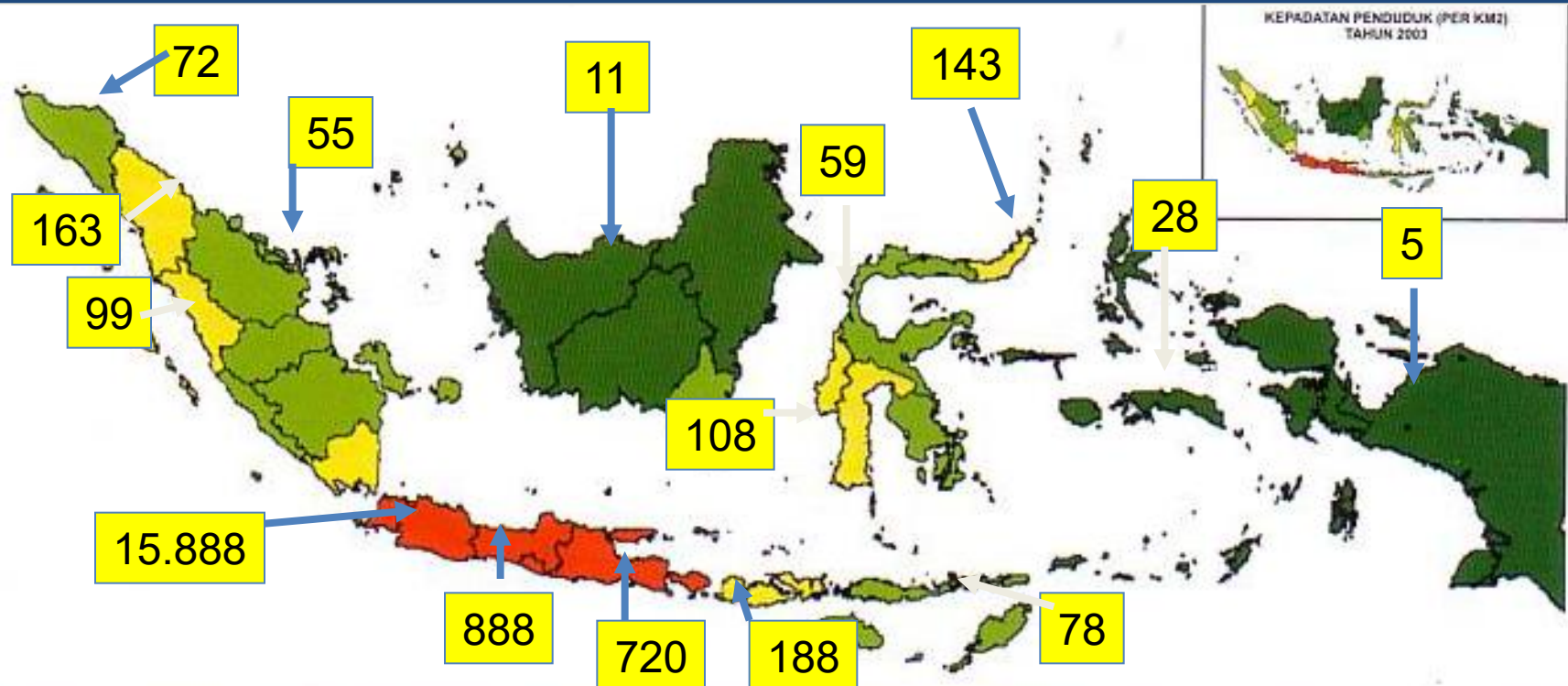
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Indonesia; The Hypermarket of Disaster

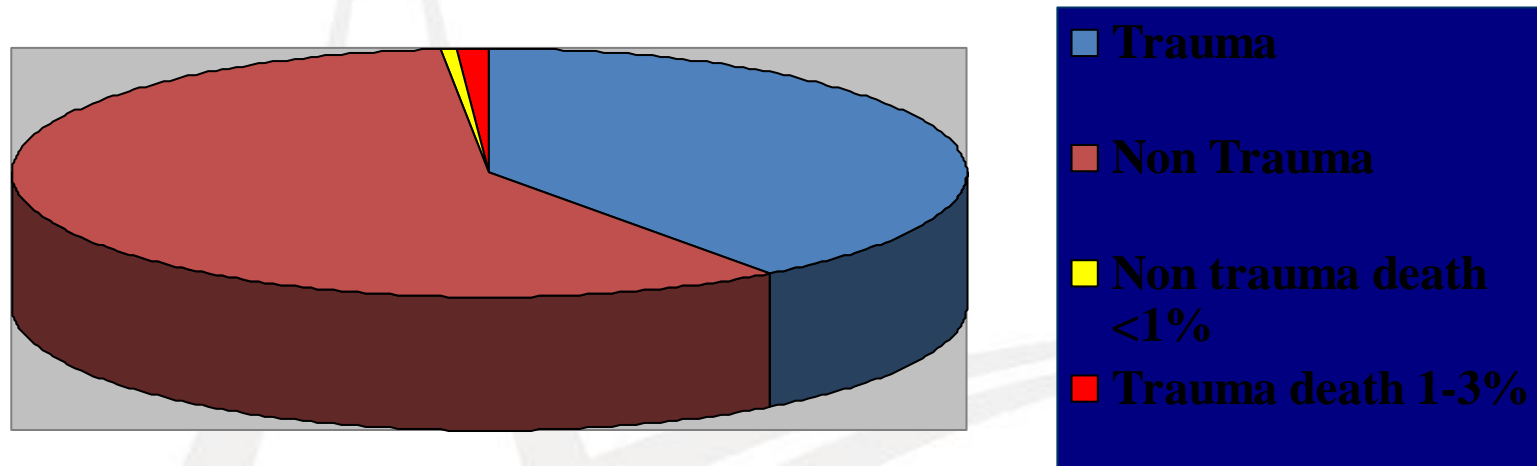
POPULATION DENSITY/ KM2 in INDONESIA

Total population 221.41 million in the year 2005



<30		30 - 100		100 - 500		>500	
Maluku Utara	28	NTT	87	Riau	60	DKI Jakarta	13.141
Kalimantan Barat	27	NAD	78	Sulawesi Tenggara	50	Jawa Barat	1.112
Maluku	26	Bengkulu	78	Jambi	49	Banten	1.050
Kalimantan Timur	12	Kalimantan Selatan	74	Sulawesi Tengah	35	DI Yogyakarta	1.011
Kalimantan Tengah	12	Gorontalo	73			Jawa Tengah	995
Papua	7	Sumatera Selatan	71			Jawa Timur	759
		Bangka Belitung	63			Bali	602
				NTB	202		
				Lampung	199		
				Sumatera Utara	164		
				Sulawesi Utara	141		
				Sulawesi Selatan	134		
				Sumatera Barat	106		

Emergency cases in Malang (Haedar, 2007)



Trauma = 13,383 (49.7%) out of 26,907 total annual attendance

Trauma cases = 36 persons/day

Men = 9758 (72.92%), women = 3625 (27.08%)

The mortality rate of the period was 2.8%

Saiful Anwar General Hospital Malang:

- 23747 (89%) were brought by other vehicles
- 3160 (11%) were brought by ambulance:
 - 348 (11%) died < 3hrs

Probability of Survival for Trauma Pts

(Haedar, 2007)

Trauma and Injury Severity Scoring (TRISS) and Patients' Outcome
(mean = 0,86482; standard deviation = 0,32259)

Probability of survival (Ps)	Survived		Died		Total	
	> 0.5	10745	97.97%	223	2.03%	10968
	Expected survivals		Unexpected deaths			
< 0.5	1471	92.28%	123	7.72%	1594	100%
	Unexpected survivals		Expected deaths			
Total	12216	97.25%	346	2.75%	12562	
	Actual number of survivals		Actual number of deaths			

The actual mortality was lower than what was predicted based on TRISS norms – that is, W score of 9.93, the number of excess survivals per 100 patients

disaster management cycle

Prevention and Mitigation

- Risk assessment
- Spatial Planning
- Eco-structural measures
- Public Awareness
- Education..

Preparedness

- Risk forecasting
- Organization
- Planning of resources
- Emergency Planning
- Training
- Public awareness..

Disaster

Response

- Alarm
- Life, property saving
- Reduction of impact of disaster
- Information dissemination
- Communication

Rehabilitation

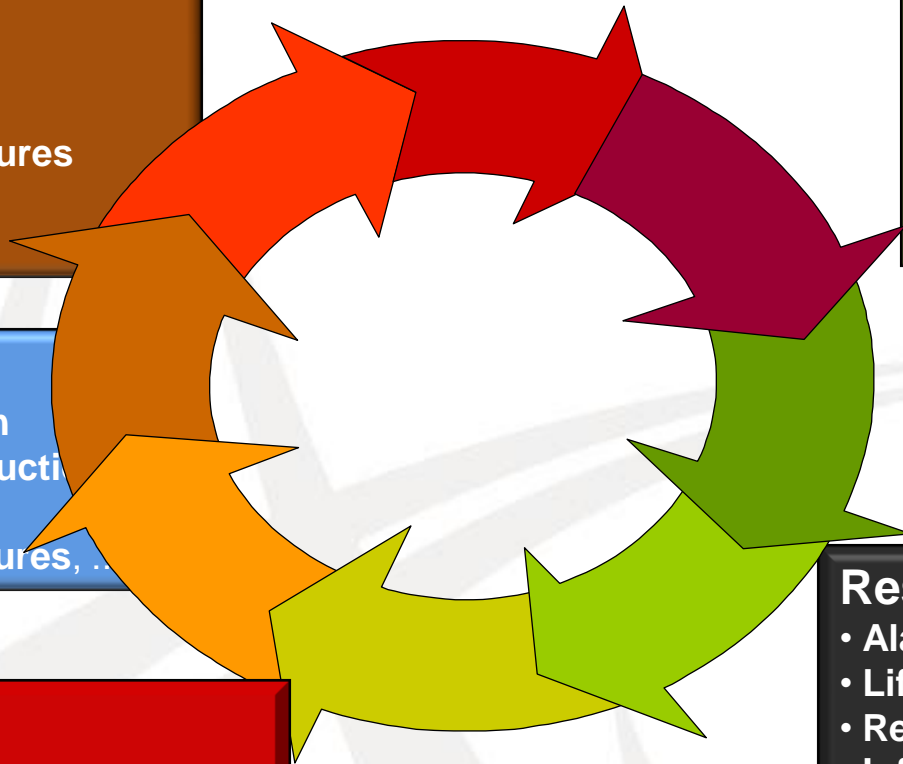
- Temporary rehabilitation
- Re-establishing Transport systems
- Re-establishing communication routes..

Post-Disaster

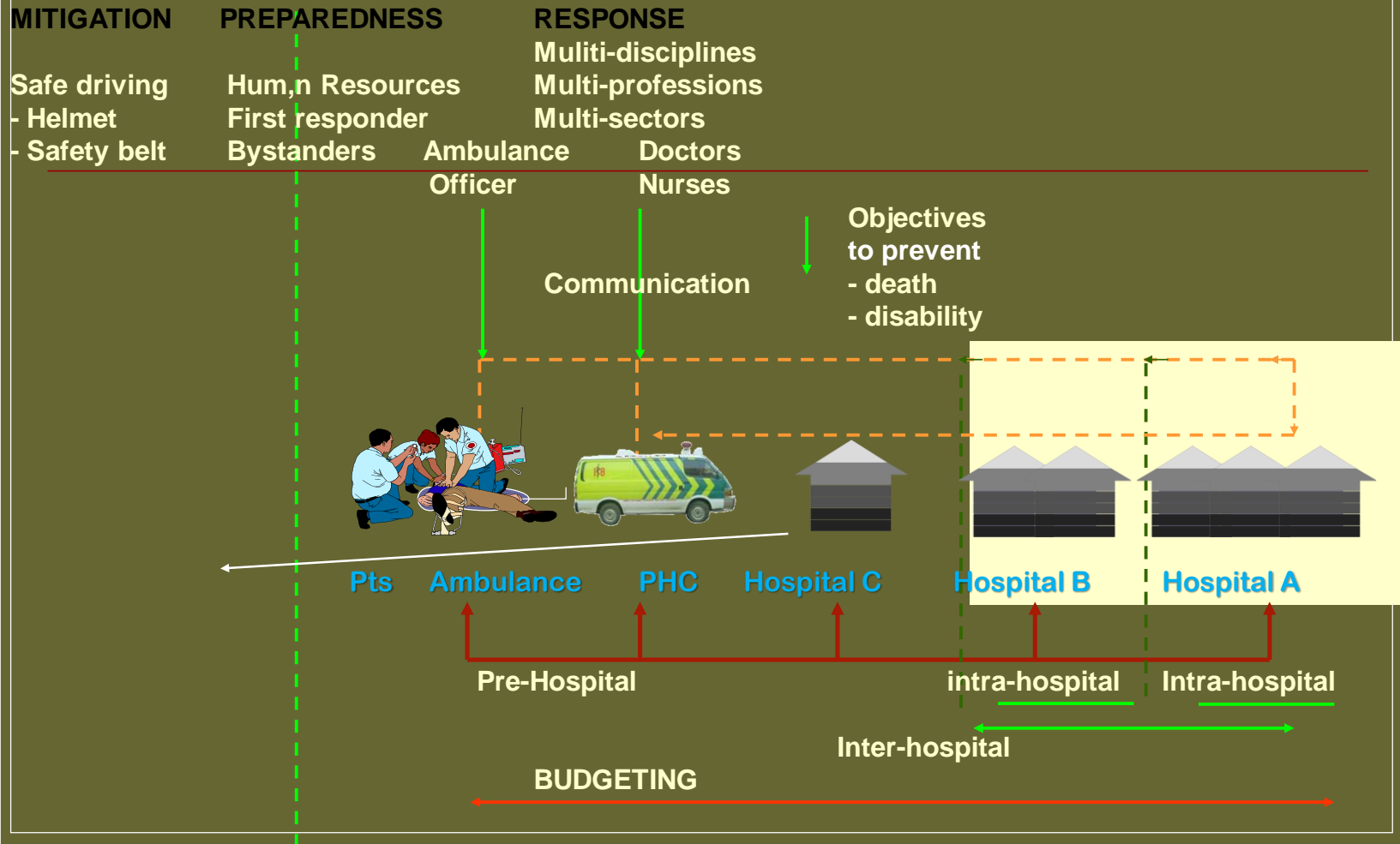
- Damage Assessment
- Follow-up of rehabilitation measures, ..

Reconstruction

- Permanent rehabilitation
- Infrastructures reconstruction
- Building reconstruction
- Reinforcement of structures, ..



SPGDT-S (Daily Integrated Emergency Care System)



TIME SAVING IS LIFE SAVING
SHORTEN RESPONSE TIME
REFER THE RIGHT PATIENT, TO THE RIGHT PLACE AT THE RIGHT TIME



SAFE COMMUNITY **PUBLIC SAFETY CENTER**



PUBLIC SAFETY CENTRE (PSC) in INDONESIA

1. Yogyakarta (Yogyakarta Emergency Service – YES 118)
2. Medan (PSC)
3. Palembang (PSC)
4. Bandar Lampung (Pusat Panggilan Gawat Darurat - PPGD)
5. DKI Jakarta (PSC)
6. Makassar (PSC)
7. Denpasar (PSC)
8. Badung (Emergency Service Centre – ESC)
9. Banjarmasin (PSC)
10. Bangka (PSC)
- 11. Malang (MTS)**



Malang Trauma Service (MTS)

MTS is a spearheading of safe community project, fuses the elements of emergency ambulance service 118, police, and rescue services (e.g., firefighters, SAR)





SAFE COMMUNITY

CARE

- Preparedness
- Prevention
- Mitigation

CURE

- Quick Response SPGDT
(Life Saving & Limb Saving)
- Rehabilitation

MTS has a main responsible to perform emergency first aid, in order to improve pre-hospital care by ensuring rapid and correct response in saving live and limbs before advance care at the referred hospital.



WHAT DO WE DO?



Integrated Call & Dispatch System



All **118** calls will be directed to the nearest hospital with trauma centre

Training for health care providers and community



MTS has trained BLS for more than 30,000 personnel

Disaster Drill



Yearly joint exercise with multi-disciplines, multi-profession, multi-sectors

First Liner in Disaster



Thank You

Terima Kasih

ขอบคุณ

شكرا

