

# **WHO Conference on Health Aspects of Tsunami Disaster in Asia**

**Phuket, Thailand  
4–6 May 2005**



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# RECOVERY & REPAIR IN ACEH AFTER THE EARTHQUAKE & TSUNAMI

## Indonesian Disaster Medical Relief Committee

**Aryono D.Pusponegoro**

**President: Indonesian College of Surgeons**

**Chairman: 118 Emerg.Amb.Service Foundation**



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# ACEH Recovery & Repair :

Aceh EQ & Tsunami →

\* Disaster Response → Late.

\* Management Support → Chaos.

\* Medical Support → Makassar, Bali,  
Surabaya, Malang, Yogyakarta, Jakarta,  
Bandung, Palembang → 118 IEMSS.

→→→ Predictable !!!

\* Our Day To Day Emerg. Care → Bad



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# ACEH Recovery & Repair :

→→→→ Disaster Management

\* Day to Day Emergencies.

\* Disaster / Mass Casualties.

→ It Is Impossible To Manage Disasters Properly If The Day To Day Emergency Care Is Bad !!!



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# *Disasters & Mass Casualties In Indonesia 1980 – 2005 :*

- |                                       |      |  |      |
|---------------------------------------|------|--|------|
| 1. Mt Galunggung                      | 1980 | 8. Toll RD Crash                                 | 1985 |
| 2. Food Poisoning West Jakarta        | 1981 | 9. Jakarta Atmajaya Hosp. Flood                  | 1986 |
| 3. Harbor Fire Tg Priok North Jakarta | 1981 | 10. JKT Fatmawati Hosp. Evac. Muniton Explosion. | 1987 |
| 4. Gas Leak Tg Proik Jakarta          | 1982 | 11. JKT Bintaro Train Crash                      | 1987 |
| 5. EQ West Java                       | 1983 | 12. JKT Koja Hosp. Isolation (Tg Priok Riots)    | 1987 |
| 6. Hotel Fire Jkt                     | 1985 | 13. Food Poisoning JKT Factory                   | 1988 |
| 7. Plane Crash Krawang West Java      | 1985 |  |      |



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# *Disasters & Mass Casualties In Indonesia 1980 – 2005 :*

- |                                |           |                                       |      |
|--------------------------------|-----------|---------------------------------------|------|
| 14.EQ Flores                   | 1991      | 21.Riots PDI-P Political<br>Party Jkt | 1996 |
| 15.JKT Riots                   | 1992      | 22.EQ & Tsunami Biak                  | 1997 |
| 16.Jkt Floods                  | 1991&1992 | 23.EQ South Sulawesi                  | 1997 |
| 17.Tsunami Lombok              | 1993      | 24.Ethnic Riots Pontianak             | 1997 |
| 18.EQ Liwa                     | 1993      | 25.EQ Bengkulu                        | 1997 |
| 19.Mt Merapi Eruption<br>Jogya | 1995      | 26.Ethnic Riots Sampit                | 2001 |
| 20.EQ Kerinci                  | 1995      |                                       |      |



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# ***Bencana & Korban Masal Di Indonesia 1980 – 2004 :***

- 27. Displaced Persons in Madura, Poso, West & East Nusa Tenggara, Papua, West Java, Middle Java, Molucus, North Molucus, North Sulawesi 2001
- 28. Drought In Sampang Borneo 2001
- 29. Mt Papandayan Erruption 2002
- 30. Train Crash Brebes Middle Java 2002
- 31. Land Slide East Java 2002
- 32. Flood North Sumatra 2002
- 32. Floods Pekalongan & Semarang Middle Java 2002
- 33. Releigious Conflict / Riots Ambon 1999–2002
- 34. Releigious Conflict / Riots Palu South East Sulawesi 1999 –2002
- 35. Papua Riots 1999–2002
- 36. Terrorist Bombings (32x) Jkt 1998-2002
- 37. Political Riots Jkt 1998-2002



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# *Bencana & Korban Masal Di Indonesia 1980 – 2004 :*

- |   |      |                                  |      |
|---|------|----------------------------------|------|
| 38. Jkt 3 weeks Floodings                       | 2002 | 45. EQ Nabire Papua (2X)         |      |
| 39. Nunukan <i>Displaced Migrant Worker</i>     | 2002 |                                  | 2004 |
| 40. Bali Terrorist Bombing                      | 2002 | 46. Aceh EQ & Tsunami            |      |
| 41. Htl Marriott Jkt Terrorist Bombing          | 2003 |                                  | 2004 |
| 42. Gresik East Java Chemical Factory Explosion | 2004 | 46. EQ Palu South East Sulawesi  |      |
| 43. Australian Emb. JKT Terrorist Bombing       | 2004 |                                  | 2005 |
| 44. Gempa Karang Asem Bali                      | 2004 | 47. Drought East Nusa Tenggara   |      |
|   |      |                                  | 2005 |
|   |      | 48. EQ West Java                 | 2005 |
|   |      | 49. Trash Dump Landslide Bandung | 2005 |
|   |      | 50. EQ Nias & Simulue            |      |
|   |      |                                  | 2005 |



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# Response Time :

➤ Bintaro (Jkt) Train Crash	1987	→	8 – 10 min
➤ Liwa EQ	1993	→	24 hrs.
➤ Kerinci EQ	1995	→	48 hrs.
➤ 1 <sup>st</sup> Mt.Merapi Erupt.	1995	→	--
➤ 2 <sup>nd</sup> & 3 <sup>rd</sup> Merapi Erupt.	1996	→	30 min.
➤ Biak EQ / Tsunami	1997	→	7 days.
➤ Bengkulu EQ	2000	→	12 hrs.
➤ Nunukan	2002	→	5 days.
➤ Bali Bomb	2002	→	12 hrs.
➤ Marriott & Aus Emb	2004	→	10 – 30'
➤ Aceh	2004	→	24 hrs
➤ Nias	2005	→	? hrs



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# IEMSS & Safe Community :

- All Kind of Disaster : → Man Made.  
→ Natural.
- Jakarta → Western Part of Indonesia.
- Surabaya → Eastern Part.
- Makassar.  
→ → WE ARE ALWAYS TOO LATE !!!
- Bengkulu / Nunukan.



# Aceh Response → Medical Support :

- 1<sup>st</sup> Medical Team :  
Prof Aryono D.Pusponegoro &  
Prof Idrus Paturusi & Med.Team →→ 24 Hrs
- Med. Teams from
  - Makassar, Denpasar, Malang, Jakarta, Palembang, ( B Aceh, Aceh Jaya, Aceh Besar, West Coast)
  - Bandung &Jogyakarta (Meulaboh),
  - Surabaya & North Sumatra (EastCoast)  
→→ 48 – 72 Hrs.
- Foreign Med.Teams →→ 72 Hrs & > Hrs.
- Ind & Foreign NGO Med Teams →→ ???



# Aceh Response → Management Support :

- Chaos → No Coordination.
- Indonesian Disaster Medical Relief Team → WHO
- Management Support
- Unofficial Command & Control Center ( EAS 118) → Logistics from Pharmaceutical Companies.
- Coorditanions →→→
- Medical Teams.
- Military, Faqinah & Zaenal Abidin Hospitals, Meulaboh, East Coast, Swiss & Danish Field Hosp.
- 3<sup>rd</sup> day Faqinqah Hosp. Reopened & Zaenal Abidin Started Cleaning Up 4<sup>th</sup> day.
- 118 Emergency Ambulance Service from Jakarta
- Refugee Camps, Inter Hosp Transport, Medevac, Aero Medevac



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# NIAS & SIMULUE :

## Nias →

- North Sumatra
- IDMRC (Prof Idrus), Bdnng, TNI, Asing, WHO

## Simulue → NAD, WHO

- ❖ Sibolga → Medical Support ?  
Management Support ?
- ❖ Medan Air Force Base →
  - \* Medical Support / Triage Officer (-)
  - \* Management Support (-).
- ❖ RS Pirngadi & H Adam Malik



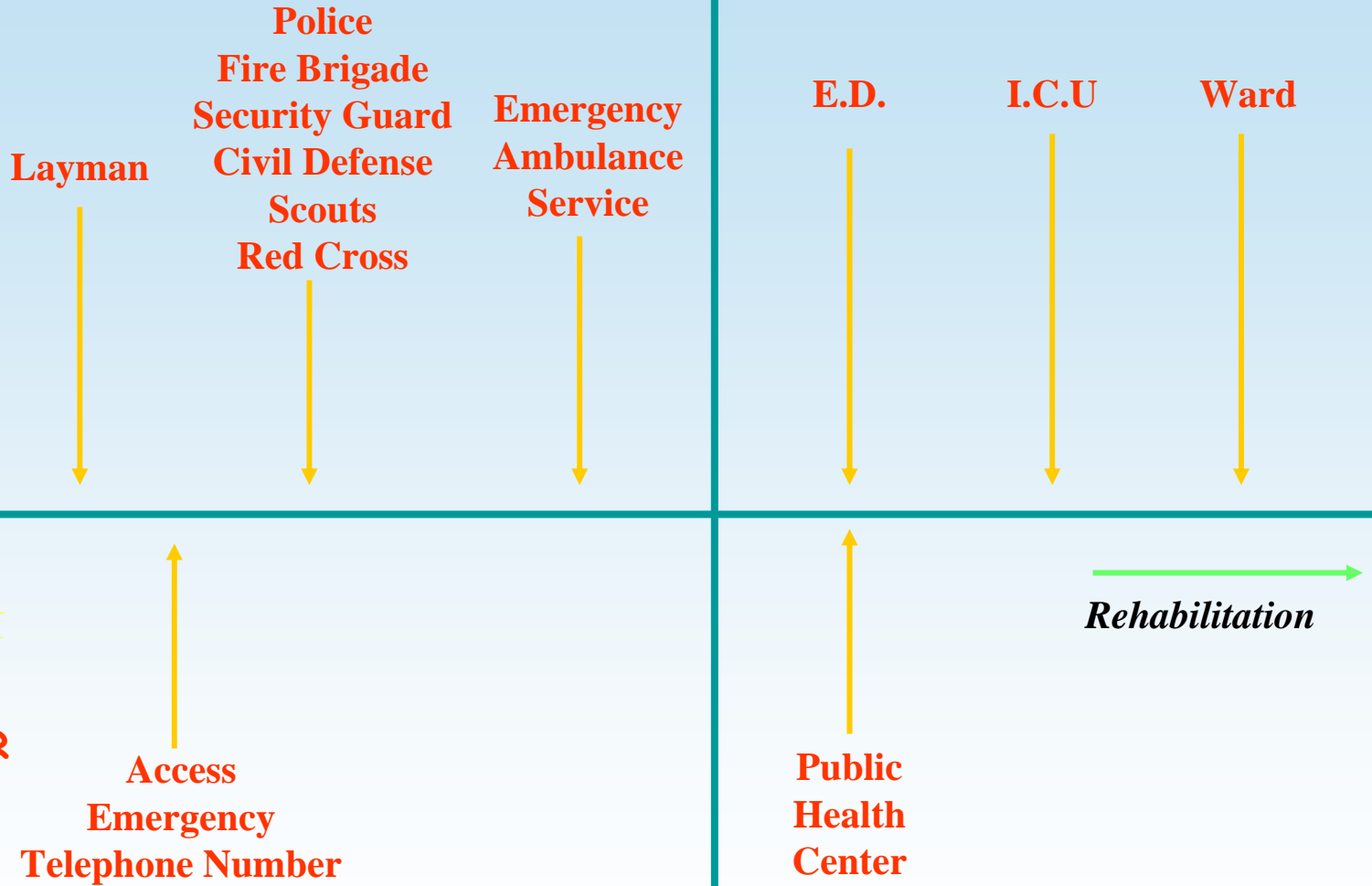
# IEMSS & Safe Community :

- \*Indonesia → No EMS / System.
- \*Committee on Trauma (1997 SBY) → Integrated Emergency Medical Service System (IEMSS) (Pre Hosp & Hosp Phase)
- \*Comm.on Trauma, MOH, Other Proff. Org. → Makassar 2000 Declaration : Safe Community → Safe & Healthy in Urban / Rural Areas.





**DISASTER**



**Pre-Hospital Phase**

**Hospital Phase**



# Post Grad. Educ. Course :

ATLS (1995) → Comm. On  
Trauma Ind. Surg. Ass. →  
PHTLS, BTLS

- ▶ ACLS (1996) → PHCLS,  
BCLS.
- ▶ APRC / APLS (1999) → PET /  
NET, BPLS.
- ▶ ANLS (2002) → PHNLS,  
BNLS.
- ▶ Medical First Responder  
(MFR) → USAID / OFDA  
(2000).
- ▶ Urban / Rural Emergencies →  
Spain (2002).

- ▶ Collapsed Structure  
Search & Rescue  
(CSSR) → USAID /  
OFDA (2002).
- ▶ Major Incident Medical  
& Management Support  
(MIMMS) 2001.
- ▶ Hosp. Emerg. Incident  
Command System  
(HEICS).
- ▶ Hospital Preparedness  
For Emergencies  
(HOPE) & Disasters →  
USAID / OFDA (2003).



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# IEMSS & Safe Community :

## TRAINING :

- BLS (Layman)
- MFR (Paramedic EMT Basic).
- Paramedic I, II, III = EMT Basic, Intermediate, Paramedic.
- “Emergency Nurse” (BTLS, BCLS, BNLS, BPLS & Disaster Management).
- “Emergency Physician” (ATLS, ACLS, ANLS, APLS & Disaster Management).
- HOPE → For Hospital Managers :
  - ❑ Risk Assessment & Management
  - ❑ Structural & Functional Collapse
  - ❑ Management & Medical Support



# Medical Resources & Geo Mapping :

1999 → Indonesia :

- 6020 Public Health Centers.
- 4280 Public Health Center Ambulances
- 7267 Doctors in Public Health Centers.
- 12602 Doctors in Hospitals.
- 1145 Hospitals.



# Medical Resources & Geo Mapping :

**2005 Jakarta :**

- **331 Public Health Centers.**
- **45 Public health Center Ambulances.**
- **591 General Physicians.**
- **109 Hospitals.**
- **50 118 Emerg. Ambulances & 10 Motorcycle Ambulances**



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# Post Grad. Educ. Course :

➤ Post Grad. Educ. Courses

&

➤ Medical Resources

▶▶▶▶ IEMSS & Safe Community



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# ACEH Recovery & Repair :

## Current Situation :

- ❑ 14 Functioning Hospital.
  - 6 Hospitals in Banda Aceh.
  - Sigli, Bireun, Langsa, Takengon, Meulaboh, each 1 Hospital.
  - Lokseumawe 3 Hospitals.
- ❑ Red Cross Facilities.
- ❑ 52 Refugee Camps with 5000 – 10.000 Inhabitants
  - ➔ Primary Health Care Only,  
No Specialistic Care.



# Safe Community, IEMSS, 118 IEAS →

City → City ← International  
(Safe Community)



District



Province



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# Phases of Disaster Response

I. Acute phase → Surgical Cases

→ Rapid Response Disaster Ambulance.

II. Non Surgical Cases → Field Hospital

III. Chronic phase → Chronic Cases,  
Refugees Camps → Mobile Clinic



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# Indonesian Disaster Medical Relief Committee (IDMRC):

- ❑ Supported by 20 Indonesian Medical Professional Association / Colleges
- ❑ Organ of the Ind.Doctors Assc.
- ❑ Programme :  
**SHORT TERM → ACEH**
  - Mobile Clinic.
  - Training.
  - Planning for the rebuilding of hospitals & Teaching Hospital in Aceh.
  - Safe Community for Aceh (118 IEMSS & Emerg. Departments Network)
- LONG TERM :**
  - Preparedness for future disasters.



# Short Term Programme → ACEH

## 1. Mobile Clinic Personnel :

- 118 Emergency Ambulance & Nurse Paramedics.
- Pediatrician.
- Obgyn.
- Medical.
- Dermatologist.
- Psychiatrist.
- Surgery.
- Public Health.
- Rehabilitation Medicine.
- Drugs & Vaccines



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# Mobile Clinic :

- Six Wheeler.
- Double Cabin → 7 – 9 personel.
- Back Cabin → Minor Surg. & Obgyn.
- Medical Equipment Storage.
- Drugs Compartment → Dispensary.
- Foldable Tents on the Right, Left & Back → Examinations.
- Generator.



# Short Term Programme → ACEH

## 2. Safe Community:

- 118 IEMS.
- Emergency Dept (Banda Aceh 8 Hospitals) / Public Health Centers
- Radio Communication.
- 110 → Security (Police).
- 113 → Rescue (Fire Brigade).
- 118 → 118 Emergency Amb. Service.



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# Short Term Programme → ACEH

## 3. Training :

- BLS → Layman (8 Hrs).
- Paramedic Basic → MFR (1 week).
- “Emergency Nurse” → BTLS, BCLS, BNLS, BPLS & Disaster Management (14 days).
- “Emergency Physician” → ATLS, ACLS, ANLS, APLS & Disaster Management (14 days).
- HOPE → Hospital Management (4 days).



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# Long Term Programme : → Future Disasters

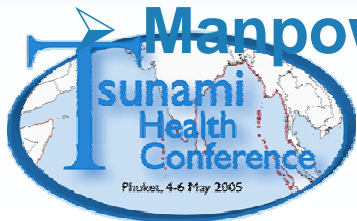
- Medical Support :

(Makassar, Denpasar, Surabaya, Malang, Jogjakarta, Jakarta, Bandung, Palembang)

- Rapid Response Disaster Ambulance.
- Field Hospital.
- Mobile Clinic

- Management Support :

- Coordination.
- Logistics.
- Manpower. Etc.



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# Thank You

