



Disaster Response

From Scene to Hospitals

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Hong Kong “The Asia’s world city” stands out as a safe city.

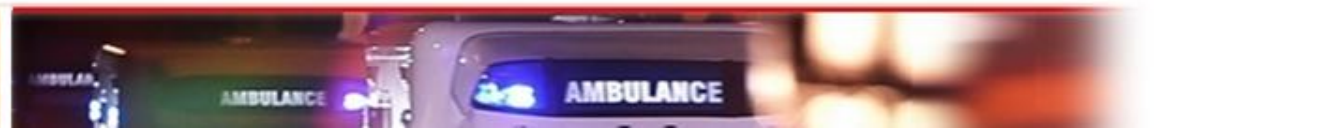


*However,
Disasters are often unexpected, sudden and
happened on and off at all times.*





“Lamma IV” and “Sea Smooth” ferry collision disaster
1 October 2012 at about 0820 PM
39 died and 101 injured

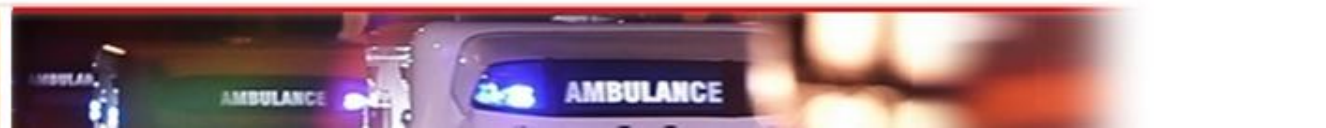




“A Kung Ngam Road” fatal traffic accident
19 November 2012 at about 1140 AM
3 died and 56 injured

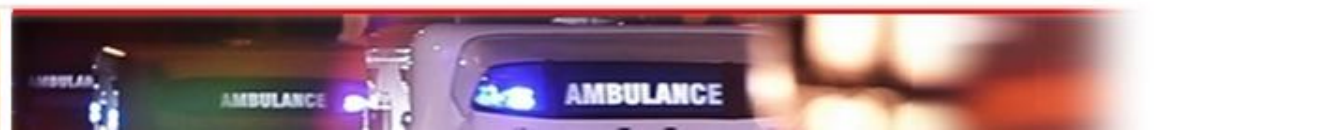


“Ma Tau Wai Road” building collapse
29 January 2010 at about 0130 PM
4 died and 2 injured





“Fa Yuen Street” No.4 alarm fire incident
30 November 2011 at about 0609 AM
9 died and 34 injured

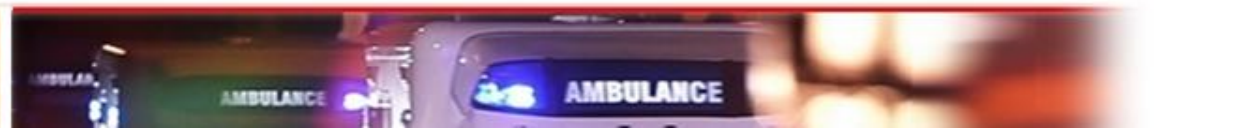




Aircraft Crash Incident



Infectious Disease



Coming Major Infrastructure

- Express Rail Link (高鐵)
- Hong Kong–Zhuhai–Macau Bridge
- Kai Tak Cruise Terminal
- HK Airport third runway



Existing Major Infrastructure



Highly congested city
Nuclear power-plant adjacent



Risk always around



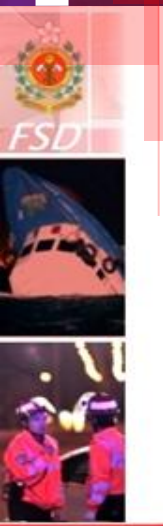


HKFSD Ambulance Command will remain vigilant for any Disaster/Major incident challenge



Presentation Outline

1. Disaster Management
2. Preparedness
3. Response Mechanism
4. MCI Multipliers





Disaster Management

Disaster Management

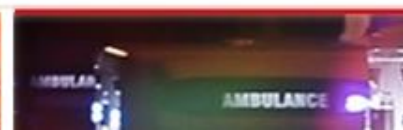
- Disaster management plans should be risk based and comprehensive across the spectrum of **PPRR**:

- **P**revention

- ➔ – **P**reparedness

- ➔ – **R**esponse

- **R**ecovery





Preparedness

Prepare for Emergency

Preparedness (① 2 3)

1. Planning and arrangements

- ✓ Contingency plans:
 - Aircraft crash
 - Daya Bay nuclear power-plant
 - Infectious disease
- ✓ Regular joint departmental meetings (with HA, DH and etc.)
- ✓ Strengthen ambulance depot and resources coverage



Prepare for Emergency

Preparedness (1 **2** 3)

2. Exercise and Briefing

- ✓ Intra-departmental drills, training, table-top communication exercise, within department and required less resources.
- ✓ Inter-departmental exercise, familiar with the laid-down instructions and protocols.
- ✓ Post disaster briefing (How to do it better and experience sharing with attending officers).



Prepare for Emergency

Preparedness (1 2 3)

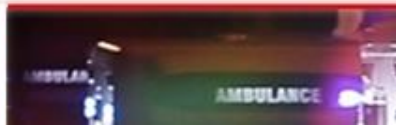
3. Equipments and tools

- ✓ Triage Mat
- ✓ New digital trunk radio communication equipments (replacement to previous analogue type)
- ✓ Paramedic Equipment Tender (1.9.2012 put into commission)



Paramedic Equipment Tender

Long Spinal Board 16, KED 3
AED 4, Vacuum Splint 5
Oxygen Cylinder 20, Entonox 10,
Scoop Stretcher 10, Stretcher 10,
Medical Consumables etc



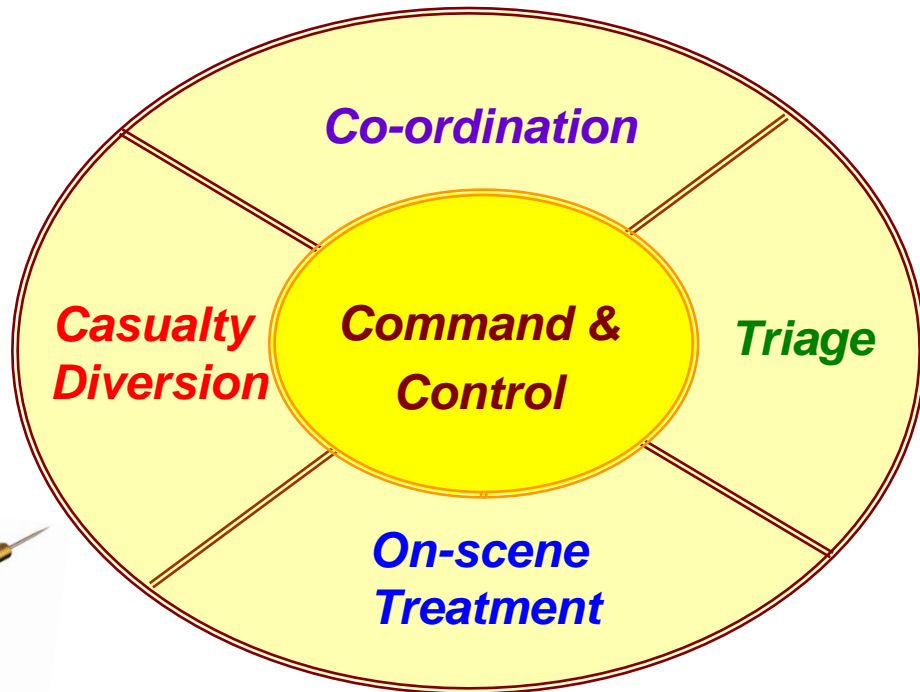


Response Mechanism

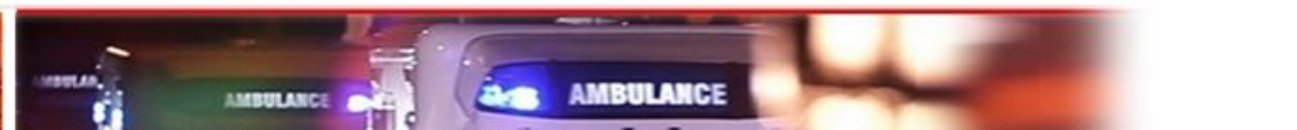
Response for Disaster

The response phase of disaster management involves a number of actions simultaneously:

1. **Command and Control**
2. **Triage**
3. **On-scene Treatment**
4. **Co-ordination**
5. **Casualty Diversion**



Command and Control



- **Ambulance Incident Officer (AIO)** Command / Control and related activities
- **Mobile Communication Unit (MCU)** On-scene Communication
- **Fire Service Communication Centre (FSCC)** Overall Communication Base



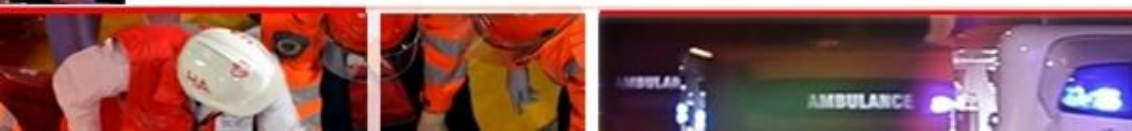
Ambulance Incident Officer (AIO)

- Concept adopted by FSD: 1st arrival ambulance supervisor on disaster/MCI scene.
- Take charge for command and control of all EMS activities.
- 3 or more ambulance attended is required attendance of AIO (Holding a rank of Ambulance Officer or above)



Role and Position of AIO

- **Singular** command
 - One person coordinates the incident.
 - Most useful in smaller, single-jurisdictional incidents.
- **Unified** command
 - Officers from different jurisdictions share command (Fire, EMS, HA, Police, Public Works)



Role and Position of AIO

- Assumes command & control.
- Establish communication with stakeholders.
- Request additional resources.
- Accomplish the incident and ensure life safety, accountability, and welfare of personnel.
- Ensure that all casualties are extricated, triage (S.T.A.R.T.), treated, and transported to appropriate medical facilities.

Simple **T**riage **A**nd **R**apid **T**reatment



Triage

- AIO or Triage Officer perform initial triage refers to the categorization & allocation of priority for the injuries.
 - Do as **little** as possible
 - Do as **fast** as possible
 - Do as **many** as possible.
- Maximum target time for each in initial triage: less than 1 min. or best within 15 to 30.



Triage

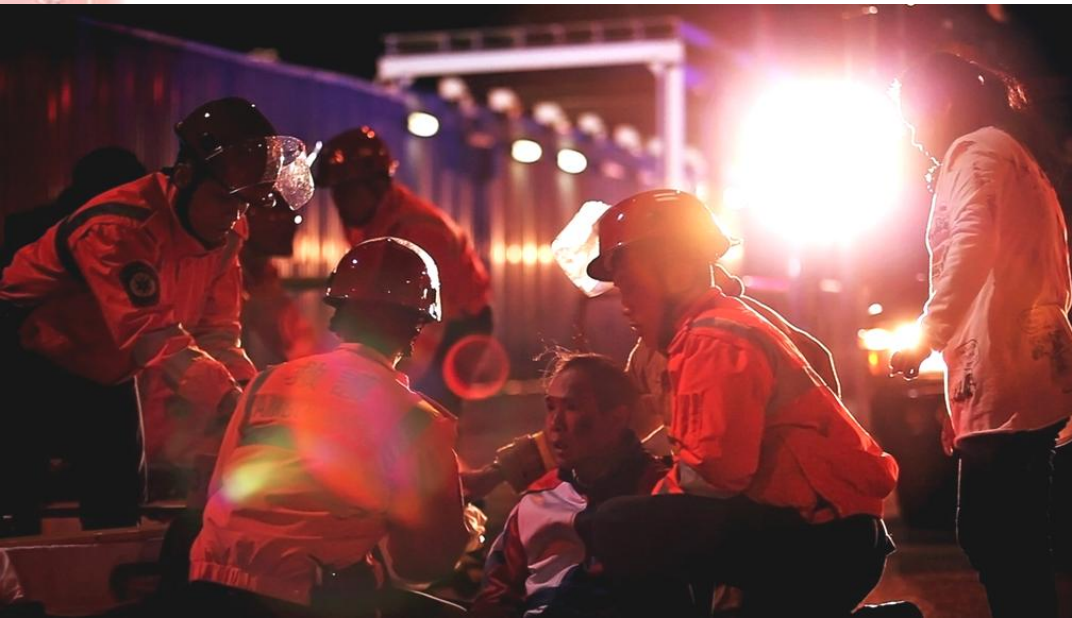
- Determined priority for Rx
 - **Red** - Life / limb threatening condition, require immediate life saving procedures.
 - **Yellow** – Require intervention within 4-6 hrs.
 - **Green** – Less serious, do not require treatment within the times given above.
 - **Black** – Dead



On-scene Treatment

Principles:

- Life saving
- Limb saving
- Just enough to make the transport save



On-scene Treatment

- Ambulance Aid by Auxiliary Services – St. John & AMS
- Paramedic (EMA II) Provider – HKFSD
- Medical Team – A&E Doctor/Nurse
- Multiple Casualties Treatment Centre (MCTC)



Mobile Casualty Treatment Center

- Disaster and Major Incident
- Casualty Treatment Centre
- Immediate Emergency Treatment by Medical Team



Co-ordination

Not Alone in Disaster



Police



FSD Ambulance

Volunteers



Firefighter



GFS

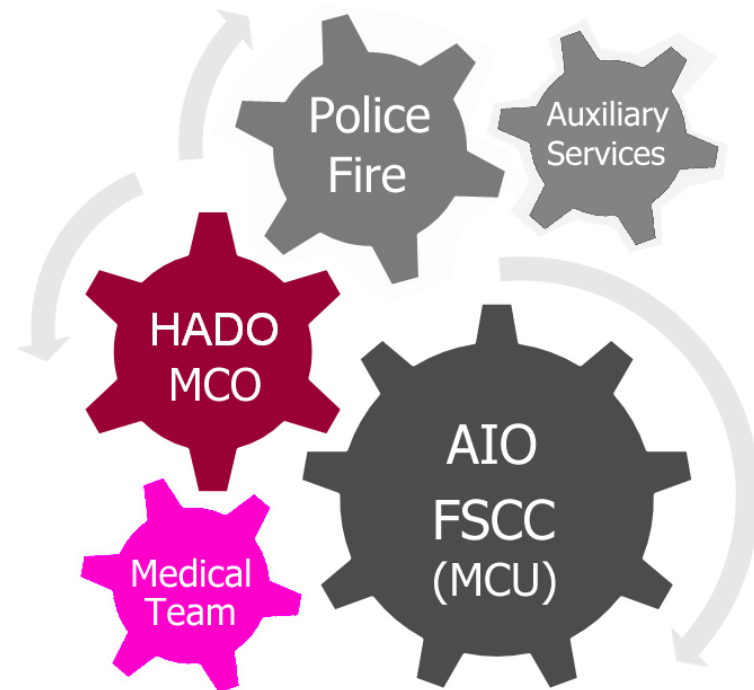
Medical Team



Co-ordination

Hospital Authority:

- **Head Office Duty Officer**
 - Overall medical co-ordination
- **Medical Control Officer**
 - Capacity of Hospitals
 - Stakeholders' Liaison
- **Medical Team**
 - Prolonged rescue period
 - Advanced Medical Care



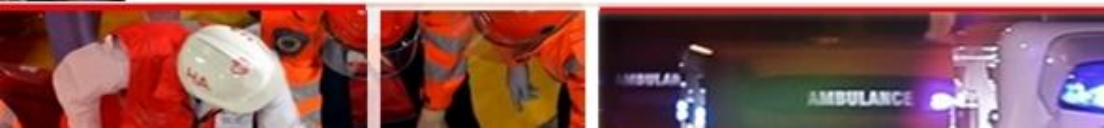
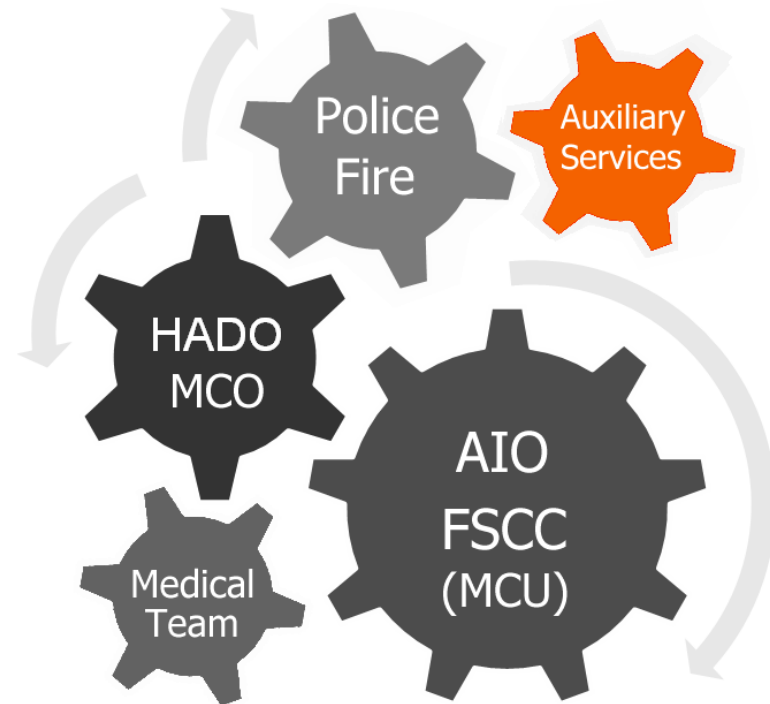
Co-ordination

- **Volunteers of Auxilliary Services:**

- Auxilliary Medical Service
- St. John Ambulance

Provide support:

- Logistic
Conveyance of less serious casualties to hospital
- Care and Treatment
Provide ambulance aid and attention to green casualties



Casualty Diversion

- Take the **RIGHT patient** to the **RIGHT place** at the **RIGHT time**.
- Casualties Diversion according to the hospital:
 - Resources
 - Capacity
- Golden hour



Casualty Diversion





MCI Multipliers

MCI Multipliers

Factors that can complicate an incident:

1. Communication gaps

- ✓ FSCC
- ✓ AIO
- ✓ HODO
- ✓ MCO
- ✓ Medical Team
- ✓ Receiving hospitals

COMMUNICATION **GAP**



MCI Multipliers

2. Time of day

- ✓ Hospital staff
- ✓ Ambulance resources

3. Roadway condition

- ✓ Access/egress complications

4. Hospital backlogs and capabilities



Building a partnership to make H.K. a safe place to live & work



Every unit is an essential ring of the Rescue Chain



With the mission to protect Hong Kong people



We are tasked with providing efficient emergency services to save those in distress and making Hong Kong a better place to live and work in.

Thank you!