Emergency Medical Services

(EMS) Protocols for the Maldives

Ministry of Health
Republic of Maldives

ADB

Japan Fund for Poverty Reduction

From the People of Japan

World Health Organization
Maldives

Contents

Acronyms

ADK	ADK Hospital
AED	Automatic Emergency Defibrillator
ALS	Advanced Life Support
BLS	Basic Life Support
CAD	Computer-Assisted Dispatch
CBRNE	Chemical, Biological, Radiological, Nuclear, and high yield Explosives
CPR	Cardiopulmonary Resuscitation
ED	Emergency Department
EMA	Emergency Medical Assistant
EMCC	EMS Command and Communication Centre
EMS	Emergency Medical Services
EMR	Emergency Medical Responder
EMT	Emergency Medical Technician
ER	Emergency Room
FRS	Fire and Rescue Services
HAZMAT	Hazardous Materials
HMH	HulhuMale' Hospital
IGMH	Indira Gandhi Memorial Hospital
IV	Intravenous
MNDF	Maldives National Defense Force
MPDS	Medical Priority Dispatch System
MPS	Maldives Police Services
MWSC	Maldives Water and Sanitation Company
Senahiya	SenaHiya Hospital
STELCO	State Electricity Company
Treetop	Treetop Hospital

Foreword by Director General of Health Services

DR. AHMED ASHRAF

Director General of Health Services

The state of emergency care affects everyone, when illness or injury strikes, we count on the emergency care system to respond with timely and high-quality care. Yet today, the emergency and trauma care that we receive can fall short of what we expect and deserve. Emergency care is a window on health care, revealing both what is right and what is wrong with the care delivery system. In the Maldives, people rely on hospital emergency departments because of the lack of a unified system for delivering prehospital care emergency medical services.

The demand for emergency care services has been steadily rising in recent years, due to various factors such as rapid urbanization, an ageing population, and an increase in chronic diseases, the resulting demands on the system can degrade the quality of emergency care and hinder the ability to provide urgent and lifesaving care to seriously ill and injured patients wherever and whenever they need it.

The Ministry of Health of Maldives recognized the need for a pre-hospital care system to address the fragmented Emergency Medical Service (EMS), currently in place. The COVID-19 pandemic further emphasized the significance of EMS and exposed the shortcomings in the existing system in the country. To have unified, harmonized, efficient and safe EMS, the Ministry of Health has established Maldives Emergency Medical Services (MEMS) providing land, sea and air ambulance operations. Though the current scope of MEMS is limited to the greater male area, MEMS aims to provide comprehensive pre-hospital care services across all islands in the Maldives, in the future with well-equipped ambulances operating in all healthcare facilities with the number 100 as the designated number for Maldives Emergency Medical Services Command and Communication Center, supported by an internationally accredited call Centre, serving as the first point of contact for medical emergencies.

EMS is a highly complex and crucial function that involves the provision of prompt and effective medical care to those in need. It requires seamless coordination and collaboration among all the stakeholders involved, including Aasandha (the government's healthcare financing services to all Maldivians), public and private hospitals, Maldives National Defense Force, Fire and Rescue Services, paramedics, dispatch centers, and emergency responders. Therefore, having a well-defined response protocol is vital for providing efficient and safe emergency medical services.

We are extremely grateful to the WHO, for their support in developing this comprehensive EMS guideline for the MEMS. This document outlines the specific steps and procedures that need to be followed during an emergency, ensuring that all parties involved are on the same page and can work together seamlessly to provide timely and effective care. It also helps to minimize confusion, optimize resources, and ultimately save lives. Without a clear response protocol, the delivery of EMS would be disorganized and chaotic, leading to delays and potentially harmful consequences. Thus, this document plays a vital role in ensuring efficient and safe emergency medical services for those in need.

Foreword by WHO Representative

DR NAZNEEN ANWAR

WHO Representative

The beautiful Maldivian archipelago, with its scattered islands and stunning scenery, presents distinctive obstacles when it comes to delivering timely and efficient emergency medical care. Acknowledging these challenges, World Health Organization Maldives committed to supporting the Government of Maldives in developing the Emergency Medical Services (EMS) Guidelines, customized to the unique context of the island nation.

This is a product of collaboration with the Ministry of Health, aligning with their initiative to establish a robust pre-hospital care system aimed at addressing the gaps in ambulatory and Emergency Medical Services across the nation. The COVID-19 response in the Maldives has highlighted the fragmented nature of the health emergency system, underscoring the urgent need to bridge these gaps. It is our aspiration that the protocols outlined in these guidelines will serve as a crucial step toward achieving this objective.

The Emergency Medical Services Guidelines represent a significant step forward in strengthening the country's capacity to respond to medical emergencies. They provide a clear framework for the coordination of ambulance services across the islands, ensuring that people in need receive the right care, at the right time, and in the right place. It will complement the Ministry of Health's pre-hospital care initiative by ensuring all ambulances (land and sea) are operational and coordinated.

The development of these guidelines stands as a testament to the unwavering commitment of the Government of Maldives, encompassing the Ministry of Health and all stakeholders engaged in the process. By outlining best practices for dispatch, pre-hospital care, and patient transport, these guidelines will equip healthcare professionals with the knowledge and skills they need to save lives.

The pivotal success of implementing these guidelines cannot be overstated. We urge all stakeholders - policymakers, healthcare providers, ambulance services, and communities alike - to join forces in fostering their comprehensive adoption.

WHO stands steadfast in its commitment to aiding the Maldives in establishing a resilient and effective Emergency Medical Services system. We firmly believe that the integration of these guidelines will be instrumental in realizing this objective, ultimately culminating in enhanced health outcomes for the entire nation.

EXECUTIVE SUMMARY

The Ministry of Health initiated development of a pre-hospitalized care system while considering the gap in providing Emergency Medical Service (EMS) in the Maldives. While combating COVID-19 the importance of an EMS was re-emphasized. It also shed light into the much fragmented health emergency system which is currently functioning. MoH aims to develop a system, by which pre-hospital care is provided in all the islands (Health facilities) in the Maldives, with fully equipped ambulances (Land and Sea) operated in all the facilities, with the establishment of internationally accredited call center (EMS call centre) that performs as the first medical responder in providing a fully comprehensive pre-hospital care service.

The purpose of this document is standardize pre-hospital response by the multiple agencies involved in medical emergencies. The scope of this document is limited to the response in Greater Male' area. Maldives' EMS system is based on the Anglo-American model and is planned on a hospital-based paramedic service, choosing, and dispatching the proper response by a Computer Assister Dispatch system for a phone call request to the EMS Command and Communication Center (EMCC), coordinated among all the hospitals with an Emergency Department in the Greater Male Area. The number allocated for Maldives EMS Command and Communication Centre is 100.

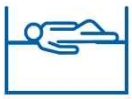
This document provides Standard Operating Procedures (SoPs) for EMS prehospital care response for five scenarios.

1. 
Minor Road Crash Response

2. 
Underwater Accident Response (Diving and Drowning Accident)

3. 
Major Road Crash Involving spinal Injury Response

4. 
Acute Chest Pain Response

5. 
Unconscious patient at high-rise building Response

The lessons from implementation of these SoPs will inform revisions and development of further scenarios for EMS prehospital care response.

INTRODUCTION

EMS RESPONSE PROTOCOLS

EMS response protocols are formulated to keep the EMS response smooth and consistent. These documents will be reviewed regularly and revised according to new assessment tools and audits. When protocols are revised, updated, and amended, they are to be published and distributed to all emergency medical services providers within the Greater Male area. It is the ongoing responsibility of the EMS Command and Communication Centre to train all of their providers on the protocols. EMS providers must also attend training sessions to stay up to date on EMS Response protocols.

The purpose of EMS response protocols is to standardize response by the multiple agencies involved in medical emergencies.

The response time required for an ambulance's arrival at the scene following a call to a universal number is an important performance indicator in determining the quality of the EMS response system since this may be directly related to the patient's survival.

Maldives' EMS system is based on the Anglo-American model and is planned on a hospital-based paramedic service, choosing, and dispatching the proper response by a Computer Assister Dispatch system for a phone call request to the EMS Command and Communication Center (EMCC). The number allocated for Maldives EMS Command and Communication Centre is 100. The call-taking algorithm will generate an "Event Code" that will then be fed into the CAD system for the recommended response plan. The response to each call depends on the patient's need: it can be simple care advice over the phone or a prompt dispatch of the most appropriate mobile care resource available from the nearest or most appropriate hospital Emergency Department. The main objective of the EMS response is to give prompt pre-hospital Emergency care at the site and transport the patient to the respective ED as soon as possible in a safe way.

Emergency Medical Responder (EMR)

Emergency Medical Responders responding to these emergencies must recognize the condition, notify the EMS system when appropriate, and provide basic emergency care until EMS providers arrive.

Emergency Medical Responders must know the general principles for all emergencies, such as how to ensure scene safety, how to assess responsiveness, how to use personal protective equipment when in contact with blood or other body fluids, when and how to phone the EMS system, and when it is acceptable to move a victim.
In the proposed EMS system in the Greater Male Area, the role of EMR is planned to be done by the Maldives Police Services (MPS). MPS beats (a two-man MPS team patrolling different parts of the Greater Male area) is proposed to be the main Emergency Medical Responders. However other personnel trained for EMR may also act as EMRs in situations where they are available. This MPS beats usually respond within 2-3 minutes as they are usually posted to patrol specified areas in their eight-hour shifts. They will be using motorcycles with or without sirens to reach the incident site. These motorcycles will carry instruments needed for basic Emergency care.

In addition, trained EMRs of MPS will be able to carry out basic Emergency care procedures including controlling bleeding, recognizing, and treating shock, immobilizing the spine, warming hypothermia victims, cooling heatstroke victims, detecting and treating hypoglycemia, supporting the airway, providing CPR and using an AED when needed.

PARAMEDICS / EMTs and EMAs

Some important functions of EMAs, EMTs, and paramedics:

1. 

   Obtaining a patient's history following a standardized primary and secondary assessment process is the starting point of any protocol. Life-threatening problems such as cardiac arrest are treated as they are found. However, most patients are awake and can be fully assessed before a treatment plan is initiated.

2. 

   The cause of the patient's problem may dictate the protocol that is used to treat the patient. For example, traumatic cardiac arrest will not respond to the treatments used for cardiac arrest secondary to myocardial infarction.

3. 

   Use a procedure to accomplish the treatment goal. If the patient assessment determines a patient needs fluid replacement many protocols will direct paramedics to start I/V fluids.

4. 

   Patient transportation is a treatment and should be prioritized based on patient severity and need. Definitive care for penetrating chest trauma is surgical care and protocols rarely delay transport for IV insertion or endotracheal intubation. Instead, those procedures are either performed enroute to the hospital or BLS airway management techniques are used.

5. 

   Online medical direction from the EMS Command and Communication Centre, or the on-call physician of the attending hospital is a resource that EMTs and paramedics may consult during patient assessment and care. Not every protocol needs verbal orders, but when medical control orders are needed it is a good habit to repeat all orders received before the orders are initiated.

6. 

   Patient assessment is a continuous process. Continue to monitor a patient's vital signs and chief complaint throughout assessment, treatment, and transport. For patients with severe complaints, use a cardiac monitor for continuous patient monitoring. Use changes in the patient's vital signs, chief complaint, and pain rating to adjust the patient's treatment plan.

7. 

   If the patient's condition does not conform to standard protocol, contact medical control with the patient's findings and instructions.

PARAMEDIC RESPONSE TIME

Paramedic response time to the scene of a call for emergency medical assistance has become a benchmark measure of the quality of the service provided by emergency medical services (EMS).
The target Paramedic response time proposed to be implemented in the Greater Male Area in the Maldives EMS system is 8 minutes.

RESOURCES

Ambulances and Level of Care

1	Ambulance BLS
2	Ambulance ALS

Sea Ambulance services, Helicopter services, Coast Guard, Private speedboat and Private Airplane for airlifting will be added to different levels of care when the EMS services are extended to the atolls and Regional levels.

Public Safety Partners / Emergency Medical Responders

1	Maldives Police Services
2	Maldives National Defense Force Fire and Rescue Services

Coast Guard / Sea Ambulance / Helicopter services will be added as EMR when the EMS services are extended to Atolls and regional levels.

Internal Resources

1	Call center Manager
2	Medical Director
3	Supervisor
4	EMS Manager

Coast Guard / Sea Ambulance / Helicopter services will be added as EMR when the EMS services are extended to Atolls and regional levels.

Specialty Resources

1	IGMH
2	ADK Hospital
3	Tree Top Hospital
4	Hulhumale' Hospital
5	SenaHiya Hospital

System Protocols

1	Stroke Alert
2	Cardiac arrest Alert
3	Trauma Alert
4	HAZMAT

System Protocols

1	Stroke Alert
2	Cardiac arrest Alert
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DEFAULT RESPONSE PLANS

The default response criteria are depicted in Fig 1b. below

FIG 1b : EMS DEFAULT RESPONSE CRITERIA

	CLINICAL STATUS	CODE	DESCRIPTION	ESSENTIAL RESPONSE	RESPONSE TO SCENE	VEHICLE TYPE	PREFERRED HOSPITAL	FURTHER RESPONSE	OTHER NOTIFICATIONS
01	Life threatening	ECHO	Life-threatening other than cardiac or respiratory arrest	Ambulance with EMT / Paramedic	Lights & siren	Ambulance	IGMH ADK Treetop	Medical oversight will decide further response	MPS /FRS Coast guard
		Delta	Life-threatening other than cardiac or respiratory arrest	Ambulance with EMT / Paramedic	Lights & siren	Ambulance	IGMH ADK Treetop	Medical oversight will decide further response	MPS /FRS Coast guard
02	Serious not life threatening	Charlie	Serious not life-threatening Immediate	Ambulance with EMT	Lights & siren	Ambulance	IGMH ADK Treetop HMH	Medical oversight will decide further response	MPS /FRS Coast guard
		Bravo	Serious not life-threatening urgent	Ambulance with EMT	Lights & siren	Ambulance	IGMH ADK Treetop HMH	Medical oversight will decide further response	MPS / Coast guard
03	Non serious	Alpha	Non-serious or life-threatening	Ambulance	Lights and /or siren discretion	Ambulance or other vehicles	IGMH ADK Treetop HMH	Medical oversight will decide further response	MPS / Coast guard
		Omega	Minor illness or injury	Ambulance	Lights and /or siren discretion	Ambulance or other vehicles	IGMH ADK Treetop HMH	Medical oversight will decide further response	MPS / Coast guard

STANDARD OPERATING PROCEDURE **EMS RESPONSE FOR THE SICK AND/ OR INJURED**	1A	Effective date: Revision Date: Policy No:

SCOPE

This SOP covers responses to all EMS incidents and should be followed unless otherwise directed by the EMS Command and Communication Centre.

SCENE SAFETY

Every effort should be made to gather information from the caller relating to the type of call to determine if the scene is safe for entry by the EMS response team. If the scene becomes unsafe after arrival, EMS personnel should evacuate to a safe area as quickly as possible and request law enforcement authorities, MPS/ MNDF. The EMS team should not reenter until the scene is secured by the MPS/ MNDF.

DISPATCH

When an emergency call is received, the Dispatch team will be alerted through the CAD system. All members that are responding must check in via the CAD system to notify the other responding members of expected staffing levels. Dispatch is medically trained, provides pre-arrival instructions, and classifies EMS calls based on their acuity level through the Medical Priority Dispatch System (MPDS).
Medical calls have the following acuity level, listed from the highest acuity level to the lowest: Rescue 1 (Echo), Rescue 2 (Delta), Rescue 3 (Charlie), Rescue 4 (Bravo), and Rescue 5 (Alpha). For Omega, no calls on-scene are needed. Dispatch will include the call acuity level.

AMBULANCE STAFFING

The minimum staffing required for each ambulance shall be based on the acuity level provided by Dispatch through MPDS.
EMS crews can upgrade the acuity of any call and request a paramedic/ EMT to respond if one is not currently on the call. The ER of the dispatching hospital regularly staffs an EMT on every call, no matter its acuity level, and should be done whenever staffing levels allow.

RESPONSE

The first unit responding to a medical call shall respond emergently to the scene unless specifically requested otherwise by the MPS units (beats) already on the scene. Additional units shall respond emergently to the scene of a medical call unless told otherwise by on-scene MPS beats, or if only responding as a support unit that is needed non-emergent. If EMS Paramedic / EMT team is needed it will be arranged by the EMS Command and Communication Centre.

RESPONSE CANCELLATION

Upon notification of the request for cancellation from Dispatch or MPS units on scene, consider cancellation to be advisory. Downgrade emergent response and respond no-lights and sirens to the scene to make an evaluation. If the MPS officer on scene advises EMS response can be canceled due to no patient being located on the scene to be transported to Hospital ED, the responding ambulance may terminate the response and return to the dispatch station prior to arrival on the scene.

REFUSAL OF CARE

If a patient is refusing care or transport, contact the online Medical Director at the EMS command and Communication Centre.

HOSPITAL DESTINATION DETERMINATION

In case of non-Emergencies, the EMS will make every effort to accommodate the patient's wishes for destination however the following priority list should be used to determine the most appropriate facility:

1

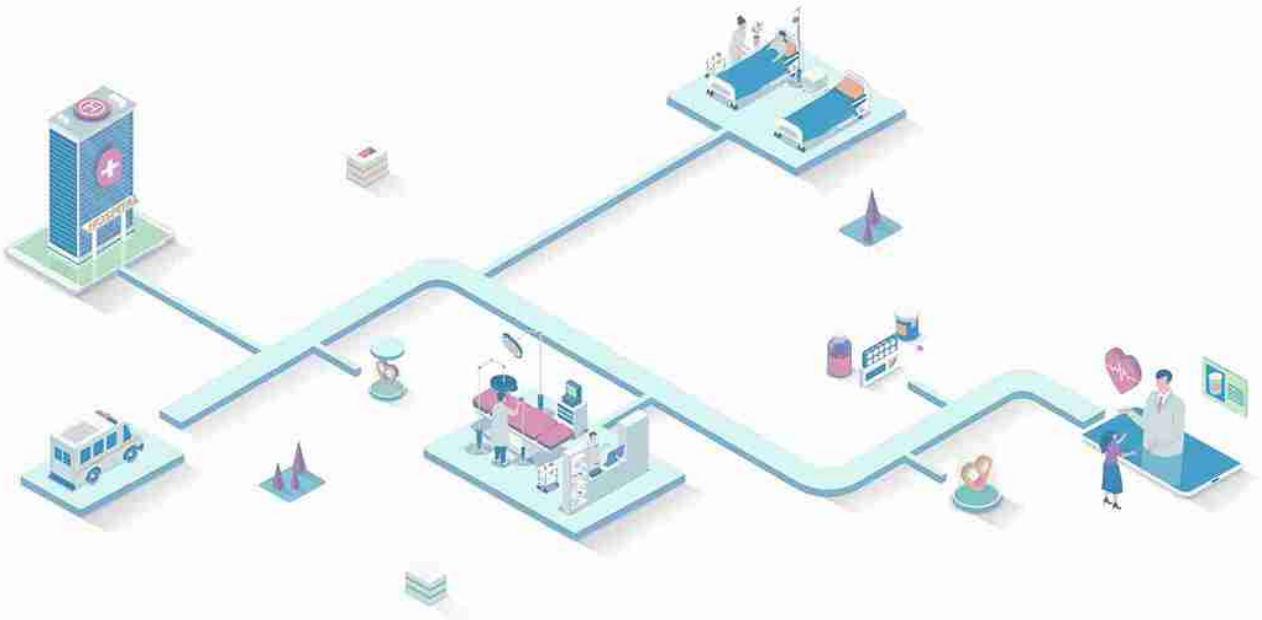
Patient and crew safety (inclement weather/ road conditions)

2

Patient Needs depending on the condition (Closest facility vs. Specialty center)

3

Patient choice depends on the payment status after admission.



STANDARD OPERATING PROCEDURE SCENE SAFETY (DANGER and RESPONSE)	1B	Effective date: Revision Date: Policy No:

SCOPE

This SOP covers safety response to all EMS incidents and should be followed unless otherwise directed by the EMS Command and Communication Centre.

SCENE SAFETY

When providing first aid by the MPS beats, your first and most important priority must always be your personal safety. Should you become injured while treating a casualty, not only will you be unable to provide further aid, but you will also become a burden for other first responders. Scene safety includes the D (Danger) and R (Response) steps of DR. ABC for first aid steps.

D (DANGER) STEPS

1	Ask someone to call for help if professional emergency medical services are available.
2	Protect yourself from potential infection or disease by putting on gloves and a mask. If you do not have access to gloves, use plastic bags.
3	Ensure it is safe to approach by blocking traffic and staying six meters away from any leaking fluid (petrol).
4	Make use of other bystanders to protect yourself and the casualty from any potential hazards that may arise.

R (RESPONSE) STEPS

1	Ask the casualty, "Are you ok? What is your name?"
2	Identify yourself as a first responder and ask for permission to help. Obtaining permission from a conscious patient is necessary before performing first aid is required (consent). If the patient is unconscious consent is assumed (implied consent) and you may provide first aid.
3	Quickly assess if the casualty is in immediate danger and needs to be moved.
4	If the casualty needs to be moved, request help from bystanders to move the casualty to safety.

ASSUMPTIONS

ASSUMPTION 1:

Minimum equipment requirements available in ambulance e.g.: BLS (Basic Life Support: A level of prehospital care involving non-invasive life support measures.)
The list of equipment available at present in a BLS Ambulance at IGMH is shown in Table 3A.
The proposed minimum requirement suggested in a BLS Ambulance is shown in Appendix Document 3a
The proposed minimum requirement suggested in an ALS Ambulance is shown in Appendix Document 3b

TABLE 3A Equipment available in a BLS Ambulance in IGMH at present.

#	ITEMS/EQUIPMENTS
1	PATIENT MONITOR
2	CHARGING CABLE
3	BP CUFF
4	SPO2 PROBE
5	LEADS CABLE
6	MANUAL BP APPARATUS
7	PORTABLE VENTILATOR WITH TUBINGS
8	AED WITH PADS
9	STETHOSCOPE
10	SPO2 PROBE (PORTABLE)
11	SUCTION MACHINE
12	O2 CYLINDER
13	O2 FLOWMETER
14	SPINE BOARD
15	O2 MASK (ADULT)
16	O2 MASK (PAEDS)
17	NASAL PRONG (ADULT)
18	NASAL PRONG (PAEDS)
19	BVM (ADULT)
20	BVM (CHILD)
21	HEAD IMMOBILIZER
22	AMBULANCE STRETCHER
23	CARRY-CHAIR
24	SPLINT SET
25	SHARP CONTAINER
26	GLOVES BOX

ASSUMPTION 2

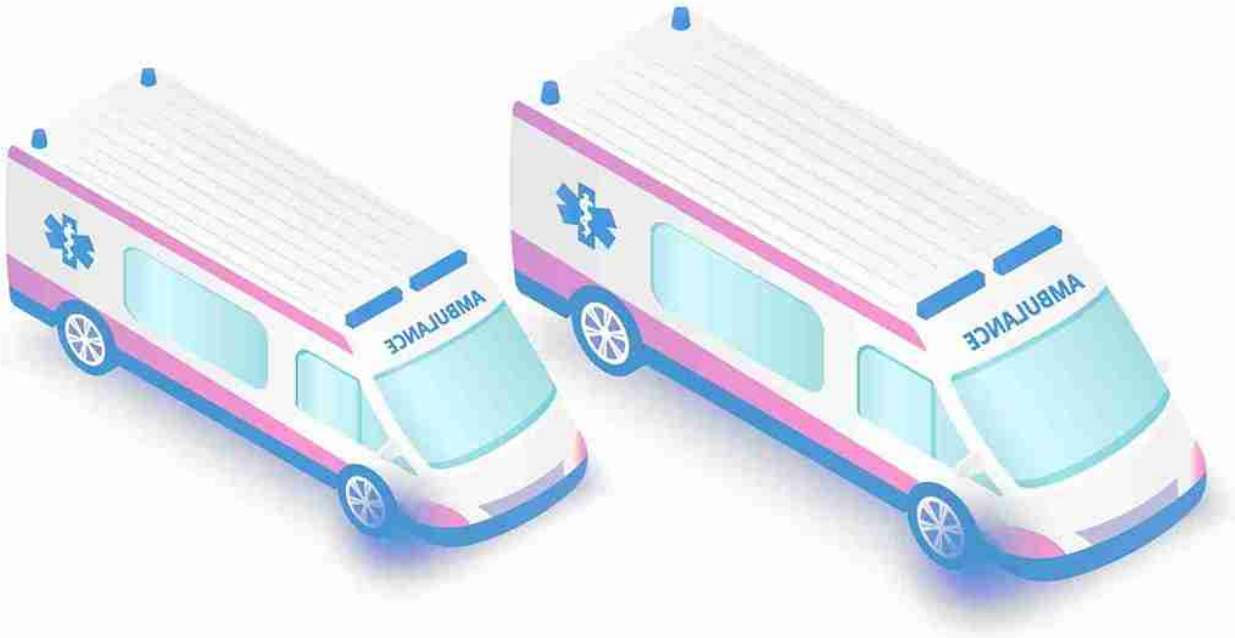
Trained staff available in ambulances: EMAs/ EMTs and Paramedics.
The level of training at the inception of EMS services is not yet determined. It is recommended to have staff in EMS Ambulances with the training of at least BLS / EMT training.
Proposed training requirements for the EMS staff are shown in Appendix Document 3c.

ASSUMPTION 3

One available ambulance is always available at the dispatch hospital dedicated to the EMS Command Centre.
There are MOH-owned ambulances and ambulances owned by the hospitals in the Greater Male area.

MOH:	4
IGMH:	3+1 (BLS EQUIPPED)
ADK:	2
TTH:	1 + 1 (BLS EQUIPPED)
HMH:	2

TOTAL:
14
AMBULANCES



SCOPE

The scope of this response plan is to identify and formulate the response SOPs for the five most urgent conditions attended by the EMS team. The SOPs are developed only for the Greater Male' area as Pilot SOPs which can later be adapted to other response protocols for the rest of the country as this requires broader discussion and analysis. The most urgent conditions identified for the purpose of formulating SOPs are:

1	Minor Road Crash Response Plan
2	Underwater Accident Response Plan (Diving and Drowning Accident)
3	Major Road Crash Involving spinal Injury Response Plan
4	Acute Chest Pain Response Plan
5	Unconscious patient evacuation from a high-rise buildingResponse Plan

CONCEPT OF OPERATIONS

The scope of this response plan is to identify and formulate the response SOPs for the five most urgent conditions attended by the EMS team. The SOPs are developed only for the Greater Male' area as Pilot SOPs which can later be adapted to other response protocols for the rest of the country as this requires broader discussion and analysis. The most urgent conditions identified for the purpose of formulating SOPs are:

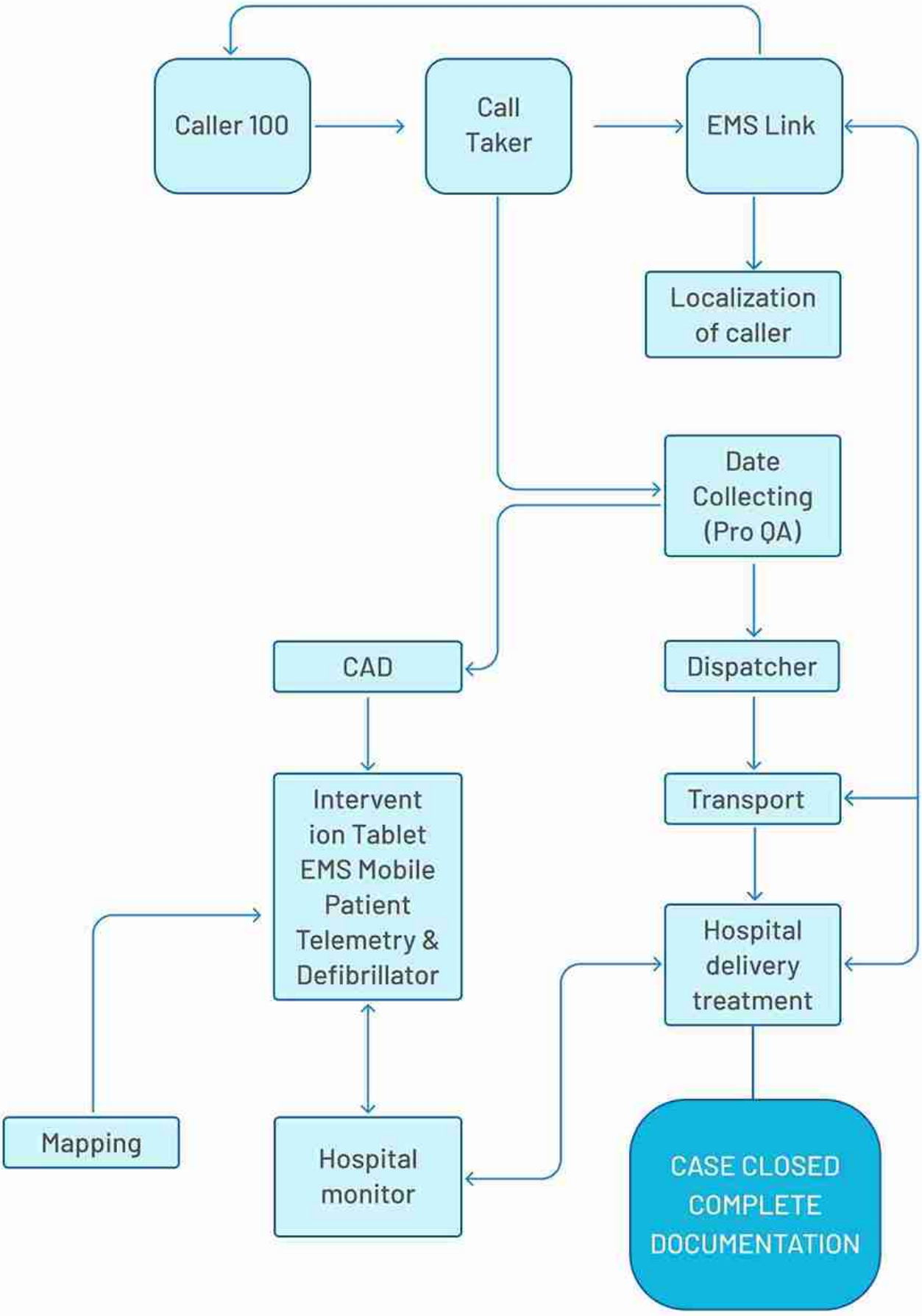
A. PRIME DIRECTIVE

Every request for medical assistance must go through the EMS Command and Communication Centre.

B. CONCEPT OF OPERATION FOR EMS: Figure 4a

When an Emergency Call is received by the EMS Command and Communication Centre to the number 100 the information given by the caller will be fed to the MPDS system. The call taking Algorithm (MPDS) will generate an " Event Code" that will then be fed into the CAD System for the recommended response plan. This basic concept plan applies to the whole country, but the pilot response plans are developed for the most urgent five cases identified for the Greater Male' Area which will be later adapted to other cases for the whole country. The concept of the EMS response plan is depicted in Fig 4a.

CONCEPT OF OPERATIONS FOR EMS IN THE MALDIVES



C. PROPOSED EMS PATHWAY:

Figure 4b

1	Accident report to 100 by the first responders or bystanders
2	Dispatch of an ambulance by 100 (EMCC)
3	Guidance for the emergency treatment provided by the 100 operators (dispatcher) until the ambulance arrives at the scene.
4	Emergency treatment by Paramedic/Emergency Medical Technician) at the scene.
5	Decision on a hospital to transport the patient to by sharing information between the Paramedic ambulance and 100
5	Decision on a hospital to transport the patient to by sharing information between the Paramedic ambulance and 100

A simplified Diagram of the actual response after a 100 call is depicted in Figure 4b.

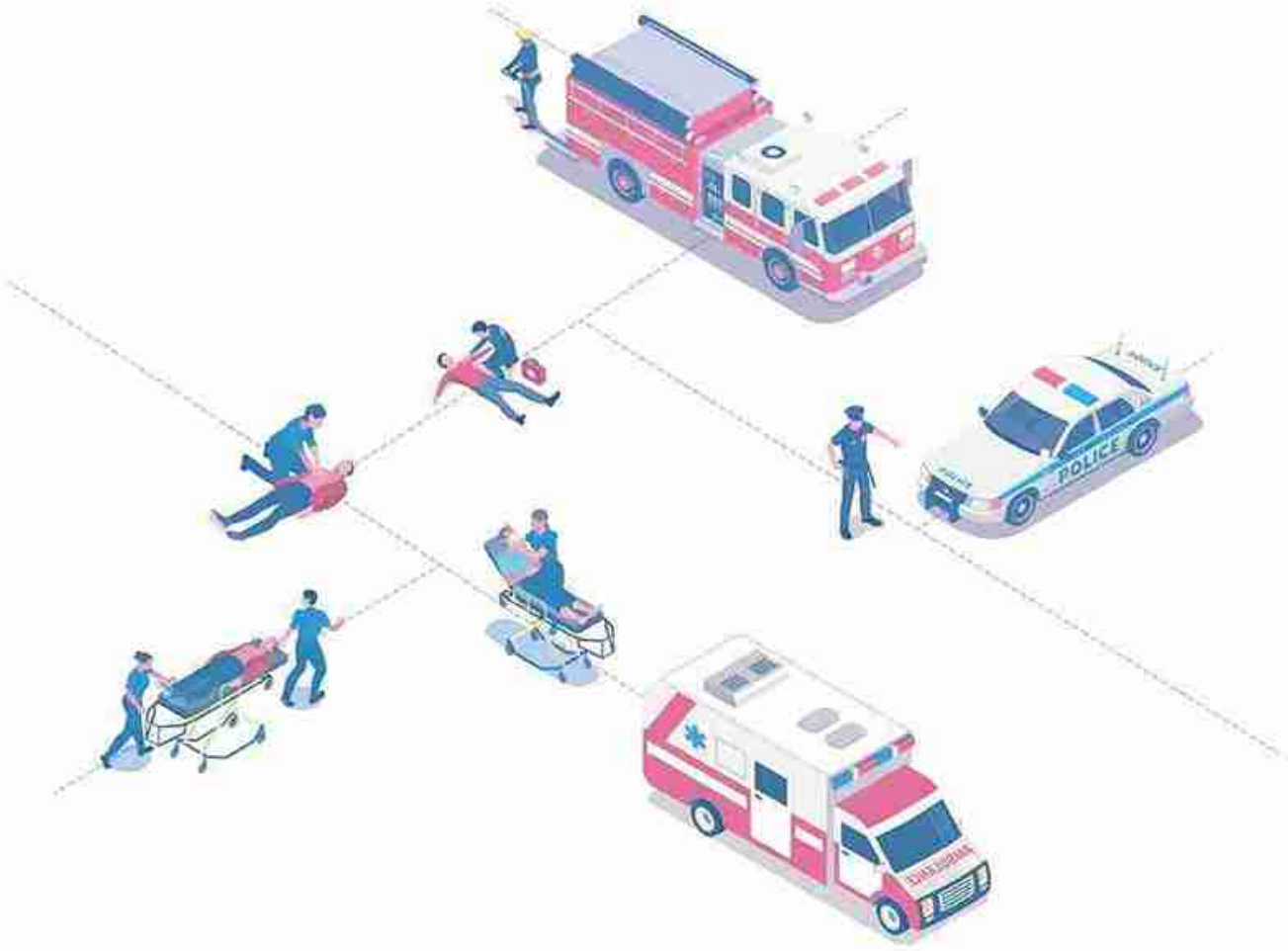
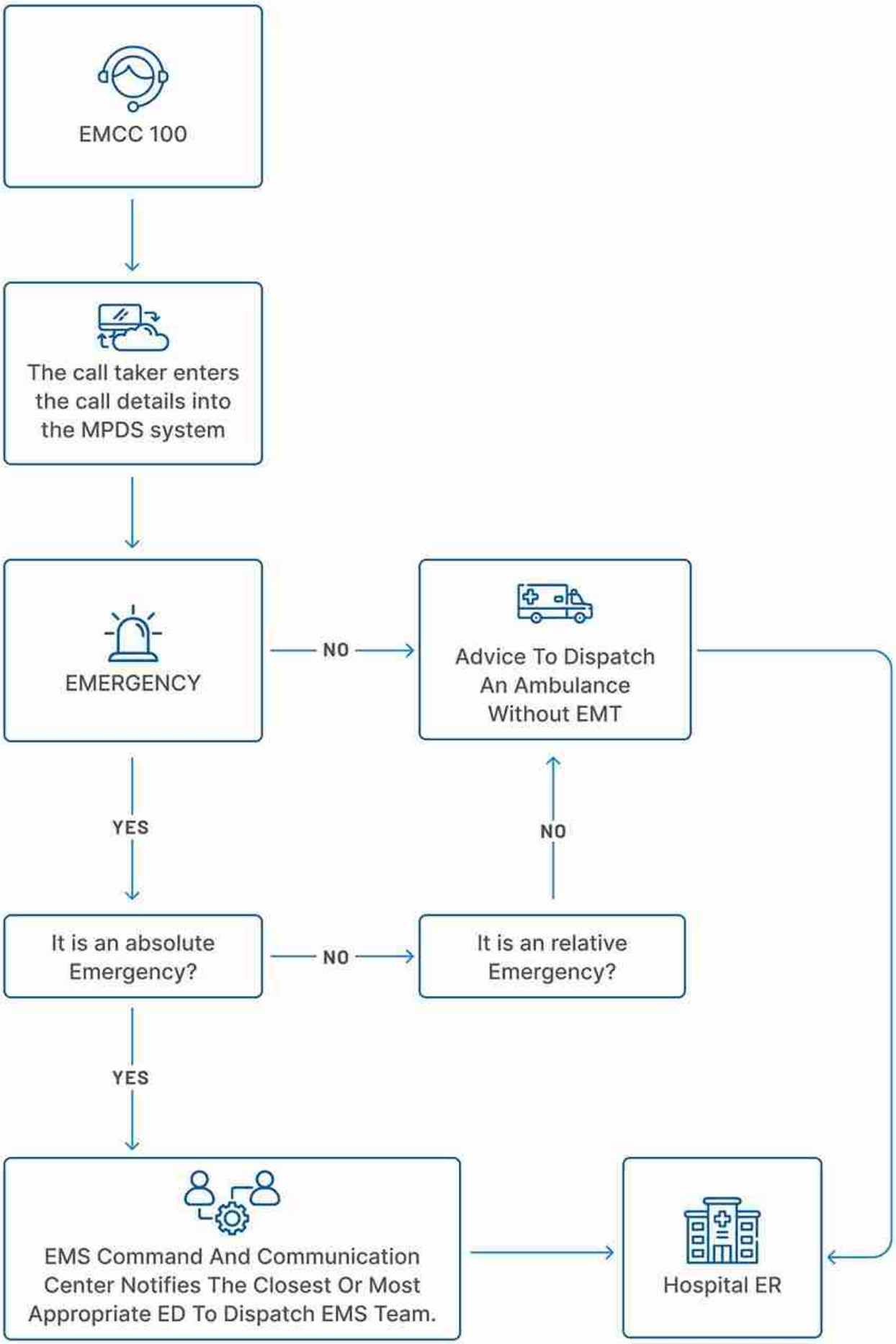


Figure 4b: EMS RESPONSE AFTER A CALL TO 100

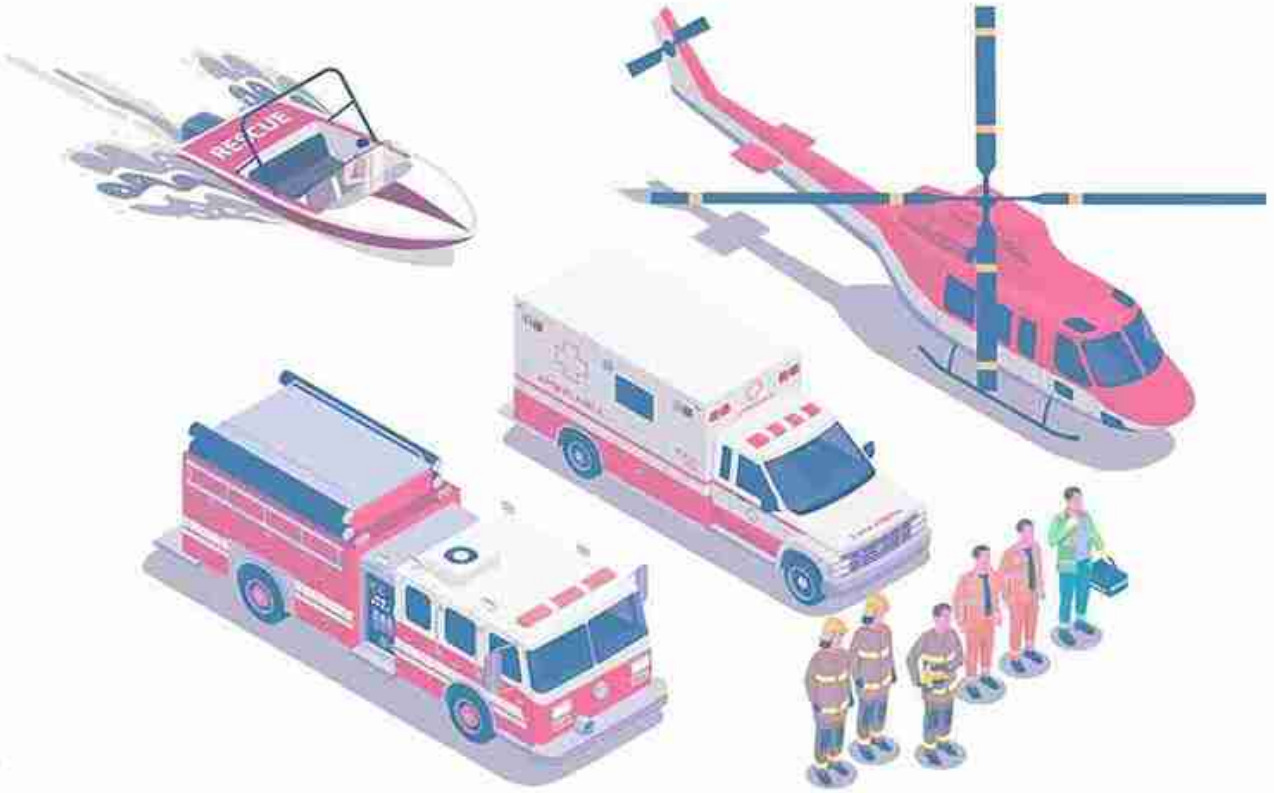


D. LEVELS OF RESPONSE:

Levels of response are shown in Table 4c

TABLE 4C LEVELS OF CARE FOR EMS IN THE MALDIVES

AMBULANCES AND LEVEL OF CARE	PUBLIC SAFETY PARTNERS / EMERGENCY MEDICAL RESPODERS	INTERNAL RESOURCES	SPECIALTY RESOURCES	SYSTEM PROTOCOLS
Ambulance BLS	MPS	Call Center Manager	IGMH	Stroke Alert
Ambulance ALS	FRS	Medical Director	ADK Hospital	Trauma Alert
Helicopter	MNDF	Supervisor	Tree Top Hospital	Haz Mat
Sea Ambulance	Coast Guard	EMS Manager		
Private Plane				
Private Boat				



ROLE OF MEDICAL DIRECTOR (EMCC)

1	Liaison with MPS, ambulance crew, and MNDF / FRS
2	Delegation of key medical tasks
3	Ensure information is passed to receiving hospitals.
4	Assess the medical needs of the accident scene and determine the need for specialist medical equipment or medications.
5	Determine the need for extra EMS personnel requested by MPS / MNDF Coast Guard and FRS.
6	Establish which hospitals should receive casualties in case of excessive bed occupation.
7	Ensure effective triage at the accident site if needed.
8	To oversee the medical treatment of the prehospital protocols and to advise on further management.
9	Liaise with MPS and ambulance paramedics regarding media briefings. Identify a spokesperson from each side.

ROLE OF MNDF / FRS

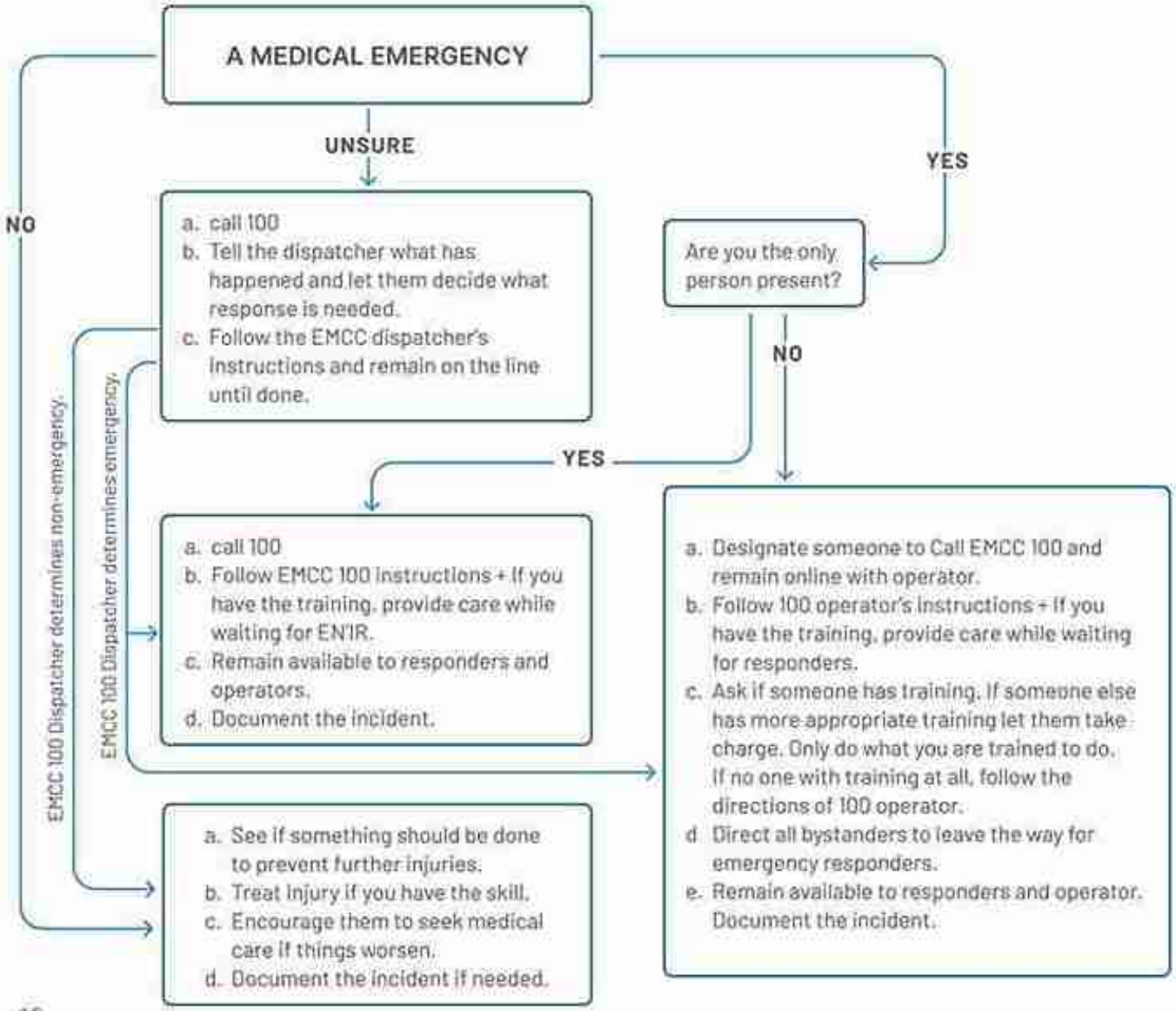
The general tactical objectives, listed in order of priority, are:

1	Protecting and rescuing life and protecting property in the event of fires.
2	Rescuing and protecting people in the event of a road traffic collision. Remove endangered occupants from accident vehicles and buildings and hand them over to the EMS team for treating the injured and transporting them to the Hospital.
3	Rescuing and protecting people, if called for by the EMS Command and Communication Centre in the event of other emergencies.
4	To follow the directives of EMCC (100) in all Emergency medical evacuations and Coordinate evacuation with 100 EMCC, MPS, and National Ambulance Service.
5	In case of multiple casualties, ensure the functions of triage, and extrication, before handing over to EMS personnel for treatment and transportation.

ROLE OF EMERGENCY MEDICAL RESPONDERS

1	Call EMCC (100) and send information about the incident.
2	Practice first aid emergency treatment until Paramedic/ EMR arrives.
3	Function as the incident command officer until the EMS ambulance leaves with the patient/ patients or till another ICS takes over.
4	Coordinating evacuation with 100 EMCC, FRS, MPS, and NAS and referring hospitals.
5	Follow the directives of EMCC (100) to transfer the patient to the hospital without an ambulance if advised by the EMCC.

Figure 4c: Emergency Medical Responder Flow Chart



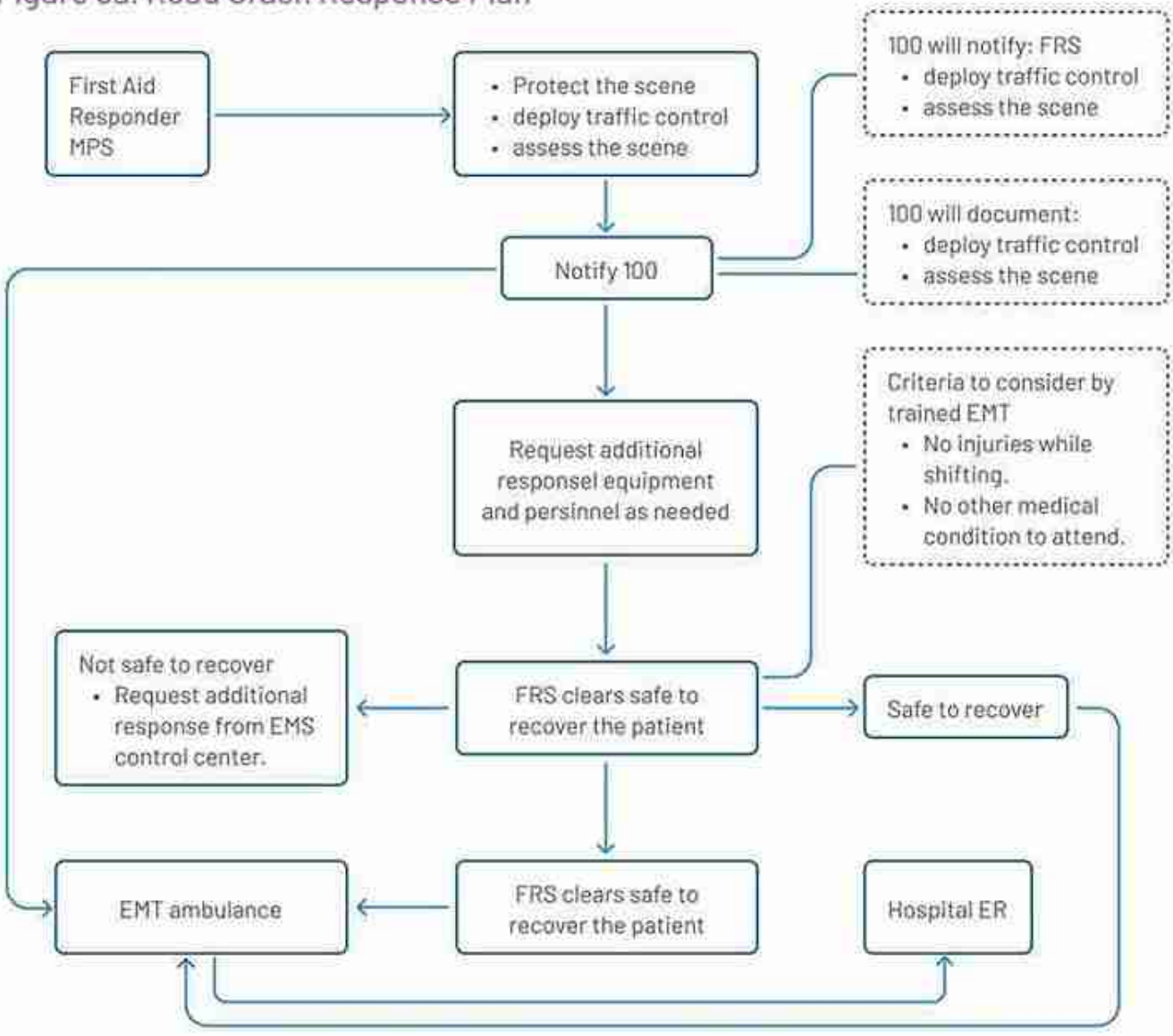
GENERAL EMERGENCY PROCEDURES

Top 5 Emergency conditions for which response plans will be developed. The most urgent conditions identified for the purpose of formulating SOPs are:

1	Road Traffic Accident
2	Underwater Accident (Diving and Drowning Accident)
3	Major trauma with a penetrating injury and possible involvement of spinal Injury
4	Acute chest pain (e.g. Myocardial Infarction)
5	Unconscious patient evacuation from a high-rise building

Road Traffic Accident

Figure 5a. Road Crash Response Plan



STANDARD OPERATING PROCEDURE EMS RESPONSE FOR ROAD CRASH	5A	Effective date: Revision Date: Policy No:

SCOPE

This SOP covers EMS response to a road traffic accident in the Greater Male' area.

BACKGROUND

According to the MPS statistics, Road Traffic Accidents are the most common calls to the MPS hotline. MPS have protocols to arrive at the accident site as soon as possible and they use motorbikes with or without buzzers to arrive at the accident site.

ROLE OF EMERGENCY MEDICAL RESPONDERS

Most of the accidents are reported to the MPS hotline whether it requires medical attention or not. MPS commanding center responds by sending the closest patrol in the area which has specific areas to patrol. Usually, the response time to any incident is less than 5 minutes. After arriving at the site the most important task of the MPS team is to identify if any victims need medical attention. If so those victims are attended.
If there is a victim needing medical attention the EMS Command and Communication Center should be informed and manage the case as advised by the EMS Command and Communication Center.

ROLE OF EMRs

The EMR will deliver the care as instructed by the EMS Command and Communication Centre (100) until the EMS team arrives from the allocated hospital to manage and transport the injured.

1	Control external bleeding
2	Perform spinal injury precautions as needed
3	ABCs and vital signs
4	Airway management and appropriate oxygen therapy as advised by 100
5	For evisceration injuries get advise from 100
6	For open chest injuries, cover with occlusive dressing; if dyspnea increases, release the dressing momentarily during exhalation as advised by 100.
7	For inhaled objects get advise from 100
8	Treat extremity injuries as advised by 100

ROLE OF EMT TEAM

1	Stabilize potentially unstable pelvic fractures
2	Transport the patient to the closest appropriate Trauma Center as advised by the EMS Command Centre (Appendix I: Trauma Hospitals)

Role of EMT / Paramedic STOP

ROLE OF EMS CONTROL AND COMMUNICATION CENTRE

When an emergency call is received for Road Traffic Accident, the Dispatch team will be alerted through the CAD system as the information given by the first responders are fed into the system.
Identification of those requiring urgent care and transportation will be done by the presenting symptoms and the type of injury.
Dispatch is medically trained, provides pre-arrival instructions, and classifies EMS calls based on their acuity level through the Medical Priority Dispatch System (MPDS).

Underwater Accident (Diving and Drowning Accident)

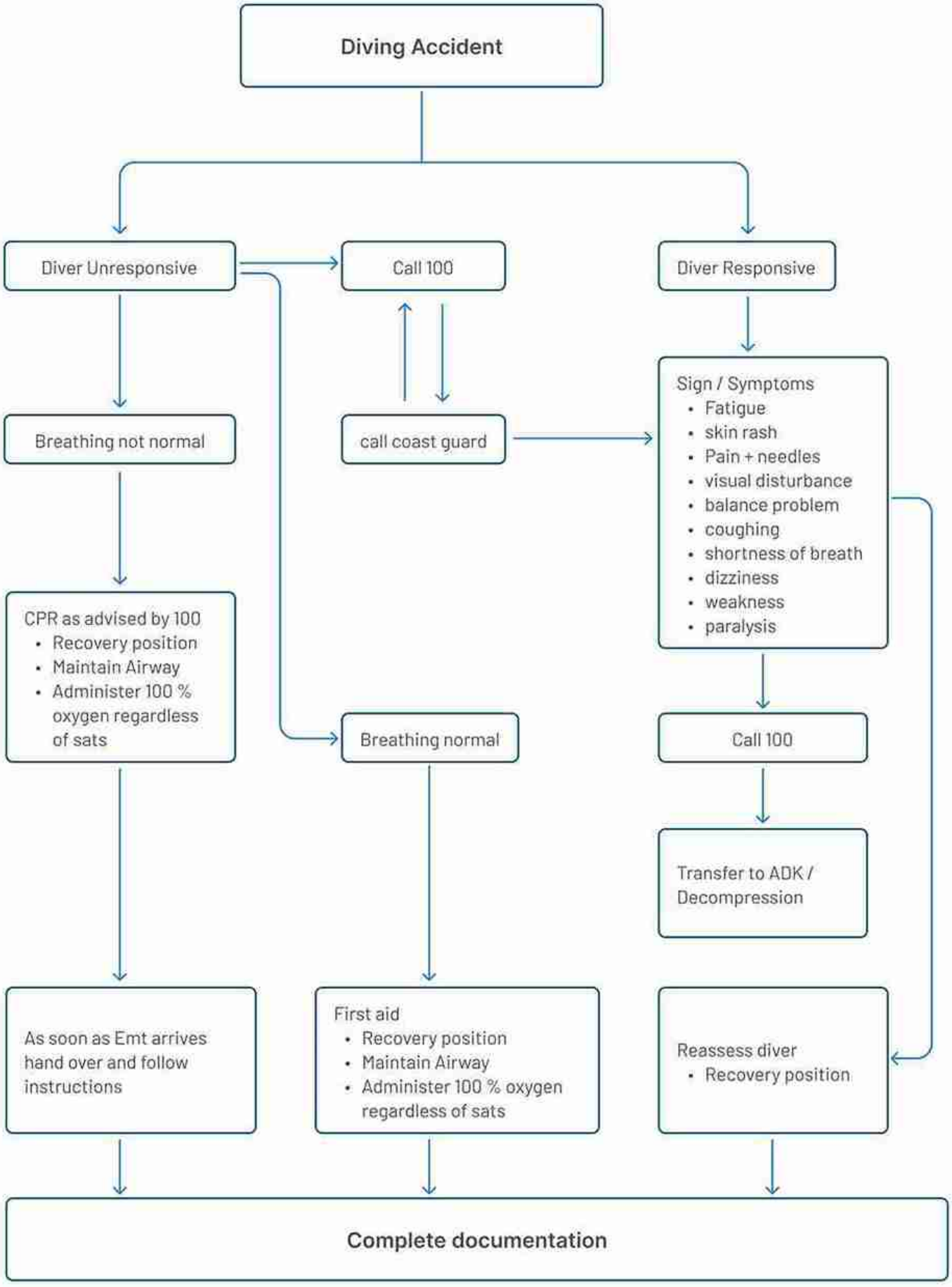
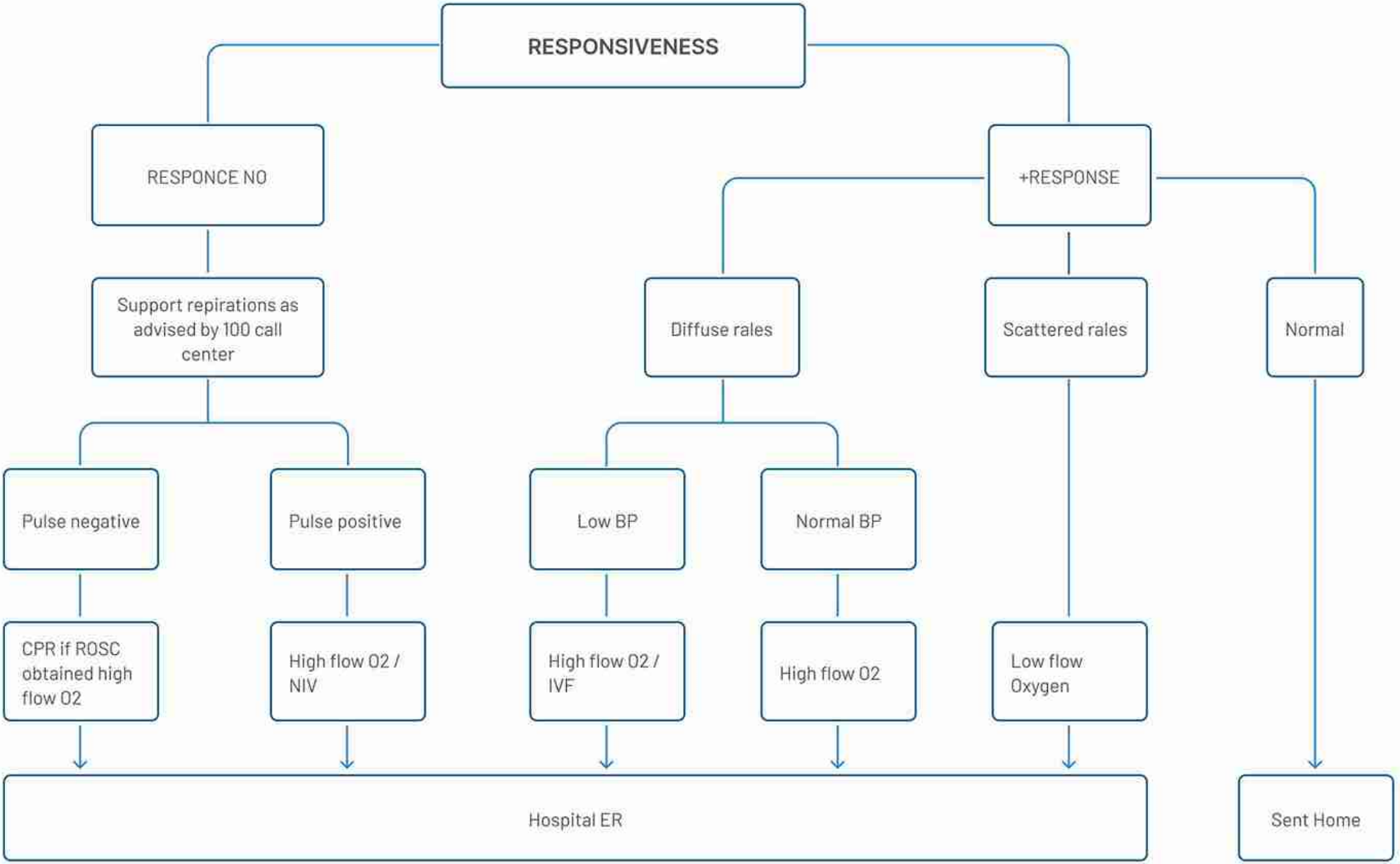


Figure 5b2. Underwater Accident Response Plan (Drowning)



STANDARD OPERATING PROCEDURE EMS RESPONSE FOR DIVING AND DROWNING ACCIDENT	005B1	Effective date: Revision Date: Policy No:

SCOPE

This SOP covers EMS response to a diving and drowning accident near the Greater Male' area.

BACKGROUND

Scuba diving fatalities are deaths occurring while scuba diving or because of scuba diving. Scuba diving deaths are usually associated with poor gas management, poor buoyancy control, equipment misuse, entrapment, rough water conditions, and pre-existing health problems. Some fatalities are inevitable and caused by unforeseeable situations escalating out of control, though the majority of diving fatalities can be attributed to human error on the part of the victim.
Equipment failure is rare in open circuit scuba, and while the cause of death is commonly recorded as drowning, this is mainly the consequence of an uncontrollable series of events taking place in water. Arterial gas embolism is also frequently cited as a cause of death, and it, too, is the consequence of other factors leading to an uncontrolled and badly managed ascent, possibly aggravated by medical conditions. About a quarter of diving fatalities are associated with cardiac events, mostly in older divers.
The role of EMR and the Paramedic / EMR team is analogous to diving and Drowning victims.

ROLE OF EMERGENCY MEDICAL RESPONDER

The first responder in most diving and drowning accidents will be MPS or the MNDF coast guard. These are the people who will initiate first aid to the victims. Professional diving instructors are also trained in first aid for both drowning and diving and can initiate first aid before the MPS or the coast guard arrives.
It should be noted that the dive accident victim has been diving using compressed gas. Although the victim may appear healthy and uninjured, it is possible that serious neurological or other injuries are present. Hence, it is crucial that medical evaluation and treatment commence as soon as possible by the first responders. It is critically important that this individual be provided High-Flow Oxygen (100% O2, 15 liters/minute, non-rebreather (mask) until the victim is evaluated by the Paramedic / EMT team.

First responder and All Provider Levels

1	ABCs and vital signs
2	Airway management
3	Administer oxygen
4	Assess for shock and treat as needed

Role of EMR STOP

ROLE OF EMT TEAM

1	Transport patients with any of the following signs and symptoms of decompression sickness after diving AND their companion divers to the closest Hyperbaric Center (Appendix II: Hyperbaric Chambers in the Greater Male area) • Neurologic: abnormal gait, dizziness, extremity weakness/numbness • Cardiac/Respiratory: chest pain, difficulty breathing, hypoxia • Gastrointestinal: abdominal pain, nausea, vomiting • Musculoskeletal: joint/muscle pain, painful range of motion • Skin: rashes or itching

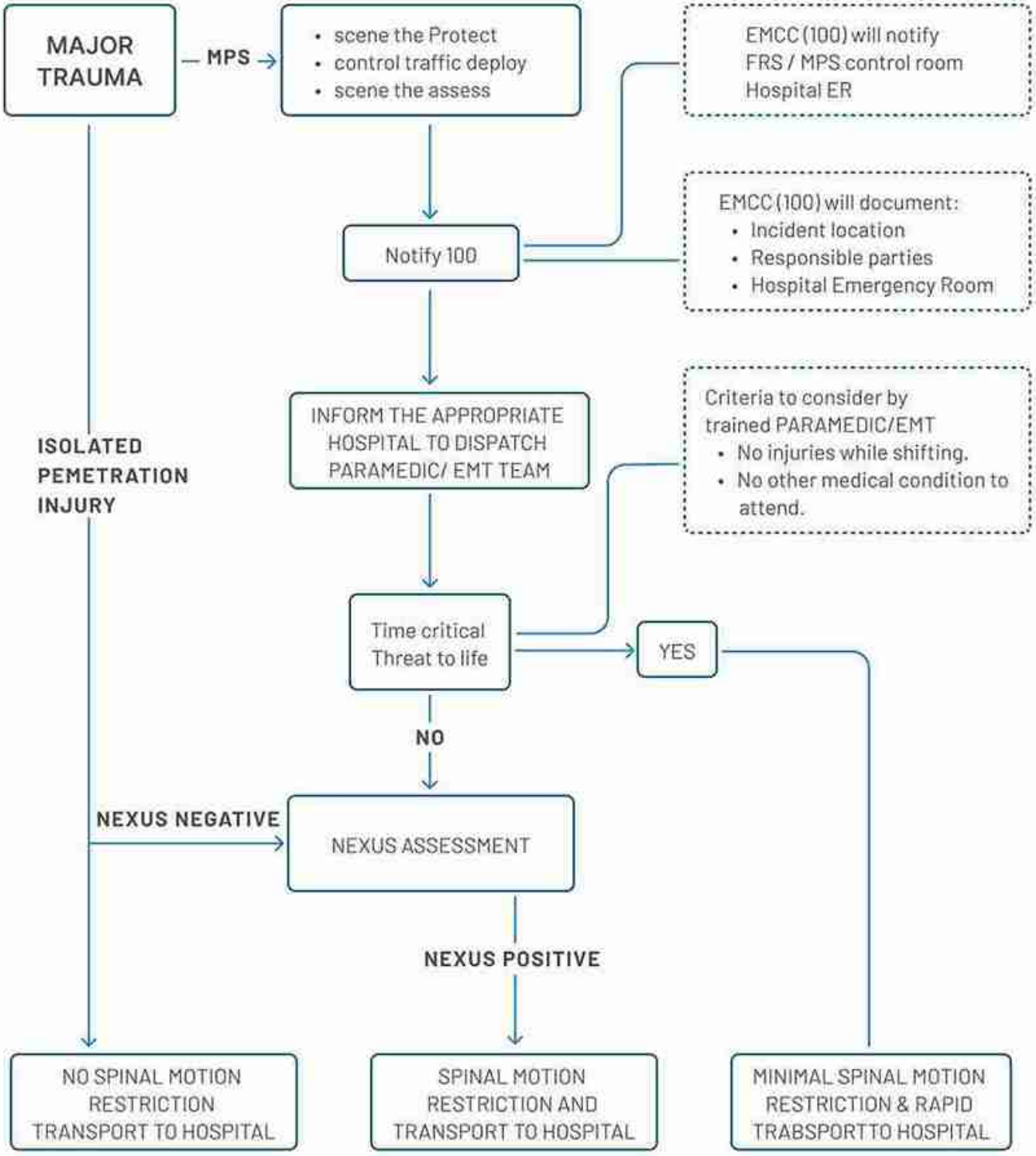
Pressure-related diving injuries can occur in any person who has been breathing compressed gas underwater regardless of depth. Decompression sickness and arterial gas embolism, collectively referred to as decompression illness (DCI) can affect any diver on any dive and may present with a wide variety of signs and symptoms.

Evaluation of the injured diver or near-drowning victims should include a full physical and neurological examination as advised by EMCC. Continuous Consultation with EMCC is encouraged while the diving accident victim is examined, and treatment initiated and transported to a Hyperbaric Chamber. Role of EMT/ Paramedic STOP

While the treatment is given utmost urgency should be given to transfer the diving victim to the hospital ER as soon as possible where decompression sickness and other neurological symptoms can be dealt with within an ICU setting.

Major Road Traffic Accident involving spinal injury

Figure 5c. Major Trauma involving spinal injury



STANDARD OPERATING PROCEDURE EMS RESPONSE FOR MAJOR TRAUMA INVOLVING SPINAL INJURY	005C	Effective date: Revision Date: Policy No:

SCOPE

This SOP covers EMS response to Major trauma involving spinal injury.

BACKGROUND

Traumatic injury to the spinal cord is uncommon but may have devastating consequences. Spinal instability occurs when the integrity of the spinal column is compromised by fractures and/or joint dislocations so that it no longer can maintain its protective configuration under normal physiologic loading, predisposing to further injury. Mishandling of the traumatized spine has been thought to cause neurological deterioration and field spinal stabilization has been considered pivotal for preventing such secondary injury. By adding external supports to the victim's body before extrication, treatment, and transport to the hospital ED, clinicians aim to reduce spinal movement and prevent further secondary injury.

DISPATCH

When an emergency call is received for Major trauma, the Dispatch team will be alerted by the EMCC through the CAD system for all the possible scenarios of Major trauma including spinal injuries. Identification of a spinal injury will be done by the presenting symptoms and the type of injury. Dispatch is medically trained, provides pre-arrival instructions, and classifies EMS calls based on their acuity level through the Medical Priority Dispatch System (MPDS). Major trauma including the possibility of Spinal Injuries are life-threatening if not handled professionally and are classified under the DELTA code.

RECOGNISING SPINAL INJURIES AND NEED FOR SPINAL MOTION RESTRICTION (FOR EMR)

Follow the instructions given by EMCC (100)
The aim of the Paramedic / EMT team should be to stabilize the spine and control other injuries and bleeding and transport the casualty to the ED as soon as possible.
Following trauma should any of the following factors be present:

- Dangerous mechanism of injury
- Fall from a height of greater than 1 meter or 5 steps
- Axial load to the head or base of the spine – for example diving, high-speed motor vehicle collision, rollover motor accident, ejection from a motor vehicle, accident involving motorized recreational vehicle, bicycle collision, horse riding accident, pedestrian v vehicle
- Impaired awareness (alcohol/drug intoxication, confused/uncooperative or ALoC)
- Age 65 years or older
- Age 2 years or younger incapable of verbal communication.

These victims should be regarded as 'high risk' and have active spinal motion restriction applied until assessment is complete.

Following trauma, if no 'high risk' factors are present, and where any two or more of the following factors are present:

- Involved in a minor rear-end motor vehicle collision
- Comfortable in a sitting position
- Ambulatory at any time since the injury
- No midline cervical spine tenderness
- No spinal column/midline pain and are able to actively rotate their neck 45 degrees to the left and right.
- Age 2 years or younger incapable of verbal communication.

These victims should be regarded as 'low risk' and have passive spinal motion restriction applied until assessment is complete.

Following a trauma assessment, should a patient present with any of the following 'spinal injury rule in' considerations:

- Any significant distracting injuries
- Impaired awareness (alcohol/drug intoxication, confused/uncooperative or ALoC)
- Immediate onset of spinal/midline back pain
- Hand or foot weakness (motor issue)
- Altered or absent sensation in the hands or feet (sensory issue)
- Priapism
- History of past spinal problems, including previous spinal surgery or conditions that predispose to instability of the spine
- Unable to actively rotate their neck 45 degrees to the left and right (P & AP only) or an appropriate assessment cannot be completed, a 'spinal injury rule in' shall apply.
- Priapism

Uncooperative patients shall not be forced into active spinal motion restriction as this is a greater risk to the patient.

People using assistive technology should not be separated from their devices when being transported.

If a patient with a suspected spinal injury is ambulatory following trauma, request the patient lies down on the trolley stretcher if he/she is able to do so. If unable to comply consider alternative methods.

Supine patients with suspected spinal injuries, where active spinal motion restriction is being continued, should be lifted with a split device. A longboard is primarily an extrication device and should be used primarily for this purpose.

The preferred mode for the transport of a patient with active spinal motion restriction is on a vacuum mattress. It is acknowledged that other devices may be utilized.

Patients presenting with penetrating trauma and without neurological signs should NOT have spinal motion restriction applied. Rapid transport to ED is essential to reduce mortality.

Uncooperative pediatric patients shall not be forced into active spinal motion restriction as this is a greater risk to the patient.

EMTs shall provide active spinal motion restriction for all patients with 'high risk' or 'low risk' factors present even in the absence of any of the 'spinal injury rule in' considerations.

Spinal movement restriction should never delay or preclude life-saving intervention in the critically injured trauma victim.

Cervical movement restriction may be achieved using manual in-line stabilization, head-blocks, a rigid collar or combinations thereof.

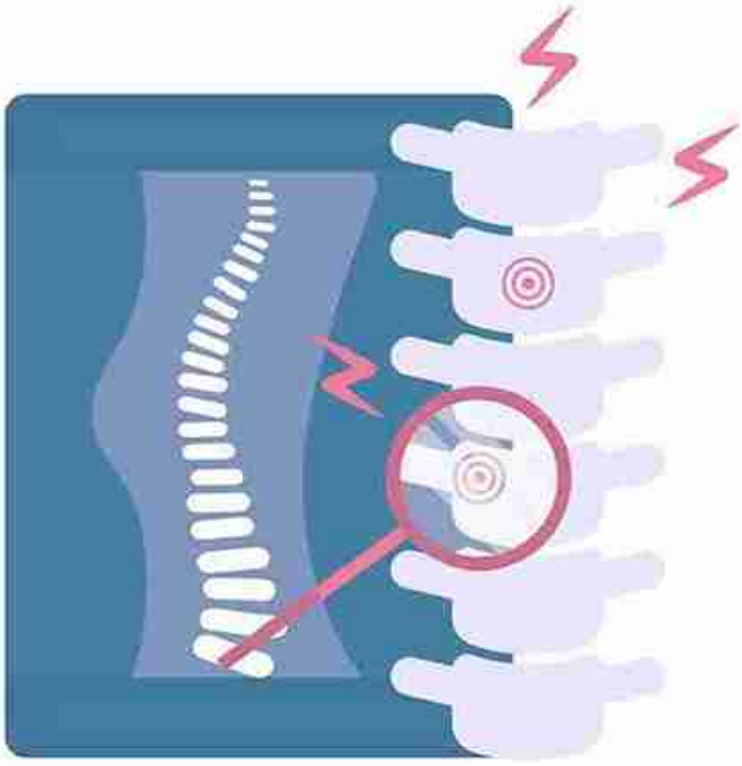
Transfer from the ground or between stretchers systems should be achieved using a scoop stretcher. As the scoop stretcher is split vertically and then reassembled underneath the patient, transfer from the ground or between stretchers requires minimal or no rolling.

Patients with potential spinal injury should be transported strapped supine on a vacuum mattress or on an ambulance stretcher system.

Hard surface stretcher systems may be used for transports of shorter duration only.

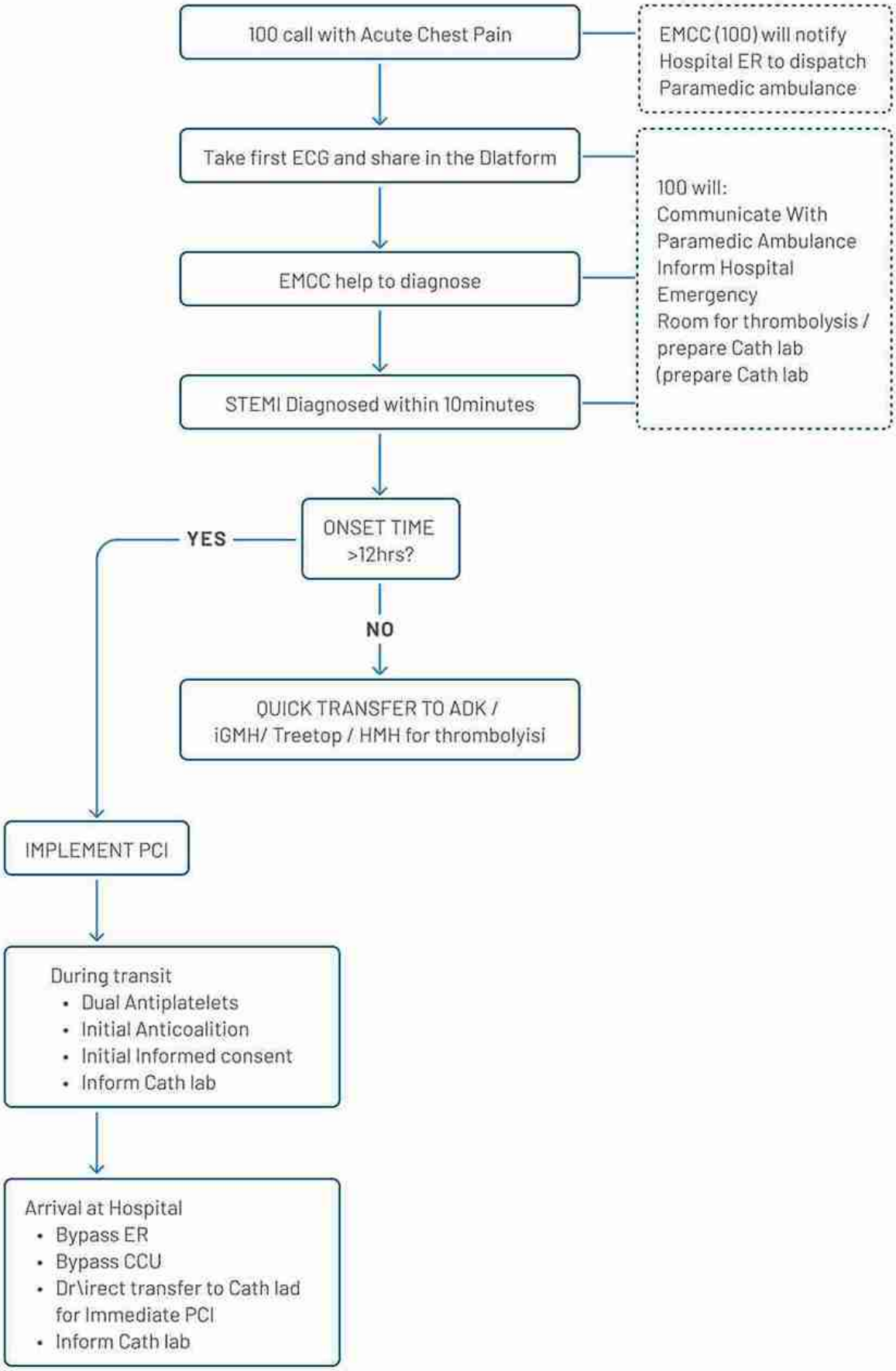
Patients should under some circumstances be invited to self-extricate from vehicles.

As long as patients with back or neck pain are not obtunded, not under the influence of any drug, and without significant distracting injury, they should be invited to self-extricate to a nearby stretcher system. Active spinal motion restriction shall thereafter be implemented until arrival at Hospital ER.



Acute Chest Pain

Figure 5d: Emergency medical response to Acute Chest Pain (e.g., Acute Myocardial Infarction)



STANDARD OPERATING PROCEDURE STANDARD OPERATING PROCEDURE 5d EMS RESPONSE FOR THE PRE-HOSPITAL ACUTE CHEST PAIN (ACUTE MYOCARDIAL INFARCTION) (AMI)	5D	Effective date: Revision Date: Policy No:

SCOPE

This SOP covers EMS response to Acute Chest Pain.

BACKGROUND

For those patients suffering an Acute chest Pain (example: acute myocardial infarction (AMI)), it has been shown constantly that the time from onset of symptoms to undergoing therapy is a major determinant of mortality. Nearly half of potentially salvageable myocardium is lost within 1 hour of the coronary artery being occluded, and two-thirds are lost within 3 hours. National initiatives have aimed to provide primary percutaneous coronary intervention (PPCI) for acute ST-elevation MIs (STEMIs) - a more effective treatment than thrombolysis with improved outcomes and shorter hospital stays.
Medical Team members or on call cardiologists may be asked to attend a patient with an AMI or give advice to paramedics at the scene on suitability for PPCI or attend patients post cardiac arrest due to an AMI.

DISPATCH

When an emergency call is received for chest pain, the Dispatch team will be alerted through the CAD system for all the possible scenarios of chest pain. Identification of a heart attack will be done by the presenting symptoms and a 12 lead ECG. Dispatch is medically trained, provides pre-arrival instructions, and classifies EMS calls based on their acuity level through the Medical Priority Dispatch System (MPDS). Heart Attacks are life-threatening and are classified under the ECHO code.

RECOGNISING AMI

Patients usually present acutely with :

- A history and symptoms that are suggestive of ischaemic chest pain
- 2 lead ECG showing acute changes consistent with acute myocardial infarction; (share ECG with EMCC medical director)

EMR and All Provider Levels

1	Begin CPR as per guidelines
2	Apply the AED pads to the patient's bare chest with minimal interruption of chest compressions
3	4. Connect AED pads and follow the AED voice prompts
4	5. Continue CPR, re-analyze every two (2) minutes and shock as indicated
5	6. Wait for ALS assistance from EMT/ Paramedic Ambulance

Role of EMR STOP

1	Begin CPR as per guidelines
2	Apply the AED pads to the patient's bare chest with minimal interruption of chest compressions
3	4. Connect AED pads and follow the AED voice prompts
4	5. Continue CPR, re-analyze every two (2) minutes and shock as indicated
5	6. Wait for ALS assistance from EMT/ Paramedic Ambulance

Paramedic

1	9. Continue CPR and defibrillation cycles with minimal interruption of chest compressions
2	10. If an AED is in place, transition from the AED to an ALS monitor after AED analysis and begin cardiac monitoring. Use the maximum joule setting possible when defibrillating.
3	11. Perform needle decompression for a suspected tension pneumothorax
4	12. Obtain intravascular access
5	13. Administer Epinephrine 1 mg IV (10 ml of a 1:10,000 concentration). Repeat every 3-5 minutes until patient achieves return of spontaneous circulation (ROSC)
6	14. Perform advanced airway management after the second rhythm analysis
7	15. Obtain blood glucose level and treat as needed enroute to ER
8	16. If the rhythm is ventricular fibrillation/pulseless ventricular tachycardia, administer one of the following:

- OPTION A: Amiodarone 300 mg IV
- OPTION B: Lidocaine 100 mg IV

Reach hospital ER

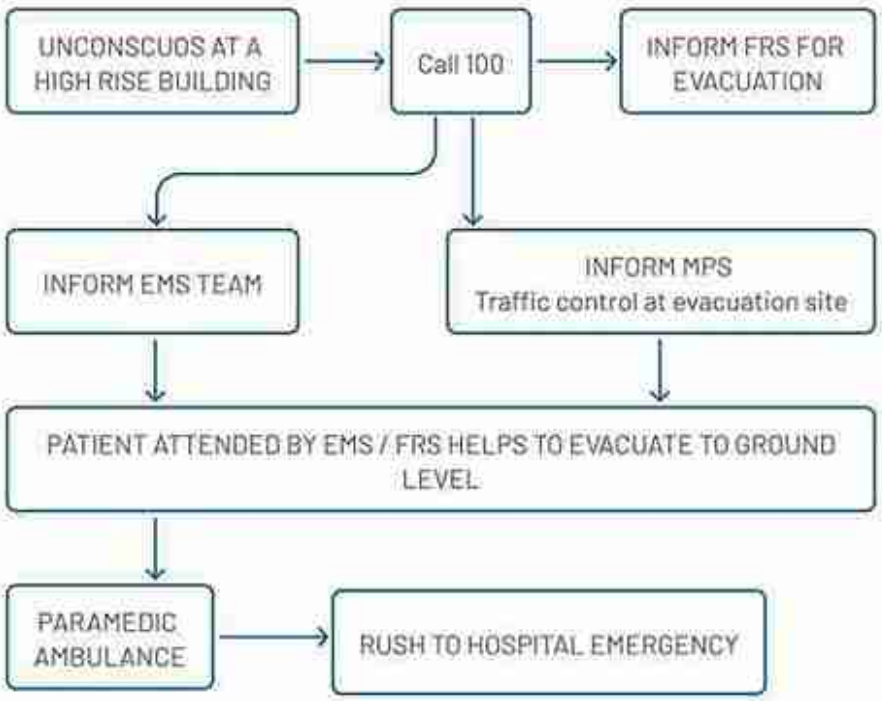
Role of EMT/Paramedic STOP

Key Points / Considerations

a	Do not interrupt compressions for placement of an advanced airway.
b	Minimize interruption in compressions for placement of a mechanical CPR device.
c	Do not delay compressions to begin ventilations.
d	Do not delay ventilation to connect supplemental oxygen.
e	An AED should be placed as soon as possible without interrupting compressions.
f	Artifact from vibrations in a moving ambulance may compromise the effectiveness of an AED.
g	aximum joule setting may vary depending on the defibrillator used.
h	Consider the possibility of conditions with reversible causes masquerading as PEA/asystole that require immediate treatment.
i	People using assistive technology should not be separated from their devices when being transported.

Unconscious patient at a high-rise building

Figure 5e: Evacuation of an unconscious patient from a high-rise building



STANDARD OPERATING PROCEDURE EMS RESPONSE FOR THE EVACUATION OF AN UNCONSCIOUS PATIENT FROM A HIGH-RISE BUILDING	5E	Effective date: Revision Date: Policy No:

SCOPE

This SOP covers EMS response to the evacuation of an unconscious patient from a high-rise building.

BACKGROUND

Living and working at height is unavoidable in a modern urban environment. Good design and construction practice require that safety controls include appropriate rescue equipment and personnel trained in proper rescue procedures. These may include First aid equipment, tripods and lifting equipment to shift workers from enclosed spaces, resuscitation equipment, fall rescue equipment, etc. Most buildings in the Urban Greater Male area are not designed with these safety controls. Therefore, there are frequent occasions when a sick person, is needed to be evacuated from a building. The staircases in some buildings are so small that it is not possible to maneuver a stretcher or a wheelchair to bring unconscious patients down the stairs.

PROCEDURE

The main actors involved in the evacuation of an unconscious patient from a high-rise building are MRS, FRS, and EMS.

ROLE OF EMERGENCY MEDICAL RESPONDERS

1	Assess the scene for potential or actual danger and establish a safe zone, if necessary
2	ABCs and vital signs
3	Airway management as advised by 100
4	Administer oxygen as advised by 100
5	Assess for an overdose as advised by 100

Role of EMR STOP

ROLE OF EMT / PARAMEDIC

1	Obtain blood glucose level (BGL)
2	If BGL < 60 mg/dl AND the patient is conscious AND able to drink without assistance, administer a glucose solution or other sugar-containing beverage
3	Transport to ER

Role of EMT / Paramedic STOP

ROLE OF MPS

1	Act as EMRs and update the patient's condition to EMS Command / Communication Centre
2	Manage the patient as advised by 100 until the Paramedic/ EMT team arrives.
4	Coordinate with MNDF FRS to evacuate the patient through to the ground level.
5	Deploy traffic control so that the Paramedic/ EMT team can reach the incident site quickly.
6	Assess for an overdose as advised by 100

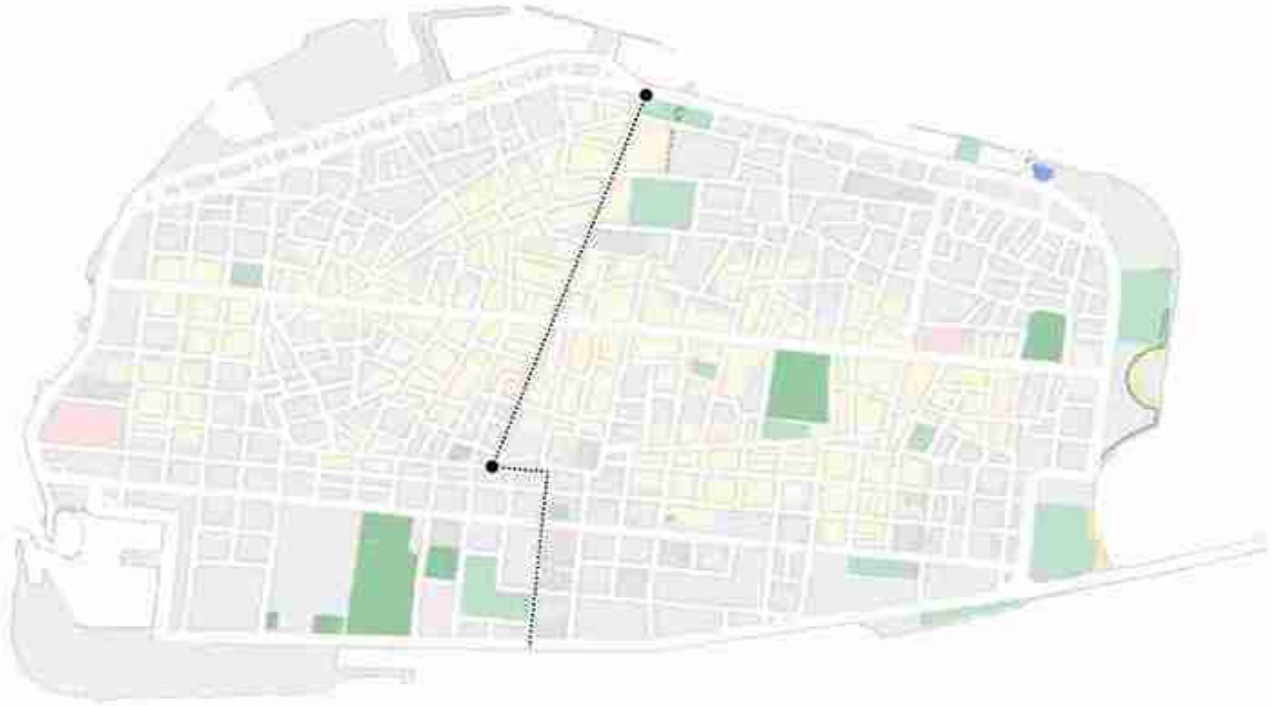
ROLE OF MNDF/ FRS

- Coordinate with EMS Command/communication Centre and MPS to facilitate safety evacuation of the patient to ground level and to the ambulance.

PROPOSED EMS RESPONSE DIVISIONS

The proposed EMS response divisions of the Male area is depicted on Figure 6a. These divisions are based on the response divisions of the MPS, where the Maafannu Police Station response to the area west of dotted line and Galolhu Police Station responds to the area on the east of the map. This response division ideally locates the major two hospitals in the Male' area.
Area 1 is designated for IGMH and area 2 for ADK Hospital in the Male' area.
For the bridge and the highway, both ADK and IGMH may get EMS calls depending on the availability of appropriate Ambulances. For the calls attended on the side of the bridge and the highway from Male' to HulhuMale' the response Ambulances will take the victim to the appropriate Hospital in HulhuMale' area, HMH or Treetop.

Figure 6a: Proposed EMS Response Divisions of Male'.



Any incident on the HulhuMale' to Male' side of the bridge and the highway, the response ambulances will be dispatched from HMH, TreeTop and EMS Command Centre. The receiving Hospitals would be IGMH, ADK or SenaHiya Hospital.
The proposed response division of HulhuMale' is to divide HulhuMale' into two phases and the response from both the Hospitals of HulhuMale' as well as the EMS Command Centre. The proposed divisions of HulhuMale' is depicted in Figure 6b.

Figure 6b: Proposed EMS Response Divisions of HulhuMale'

MULTIAGENCY COORDINATION

Special mention must be given to the coordination required between EMS and other agencies like MPS, MNDF and Hospital EDs that receive their patients.
To give patients the most efficient, effective and safe care possible, hospitals and EMS must cooperate in several operational areas, including:

- Medical direction.
- Quality improvement.
- Education and training.
- Specialty clinical team activation (trauma, STEMI, stroke, etc.).
- Patient handoff.

Hospital and EMS collaboration should be taking place many times every day – not only in terms of direct patient care but also through the intentional development of systems of care and communication. The best part of moving toward more cooperative relationships with multiple agencies involved in patient transport and evacuation to build a responsive EMS is that the initial efforts can be small, local, and inexpensive. There is no need for big, expansively planned, budget-exhaustive initiatives to make a difference and start changing the culture of the public. Before the implementation of the proposed response plans it is important to practice these plans as desktop exercises in a setting where input can be given by the respective agencies involved in the particular segment of the response plan.

MEDIA COORDINATION

It is proposed to develop a comprehensive media plan to respond to media enquiries responsibly. The EMS Media Plan focuses on how to create a guide for responding to nearly every type of media inquiry. Sample scenarios and media responses should be shared and dissected, providing EMS agencies with a framework to design a personalized emergency media plan for the respective EMS agency. Additionally, the EMS Media Plan should focus on how to dilute or protect an agency from negative stories by first building up an amity bank of positive news impressions that can be shared in all social media platforms.

APPENDICES

1-EMR Documentation Requirements

STANDARD OPERATING PROCEDURE SOP MS RESPONSE FOR THE EVACUATION OF AN UNCONSCIOUS PATIENT FROM A HIGH-RISE BUILDING	2A	Effective date: Revision Date: Policy No:

PURPOSE

To define the minimum documentation expectations for first responders to Medical Emergencies. This policy does not apply to transporting or non-transporting BLS and ALS ambulances that must complete a Prehospital Care Report for every incident to which they are dispatched.

POLICY

First responders must record all requests for emergency medical services using either a PCR or a written or electronic log, hereafter referred to First responders Pre-hospital Care report (FRPCR). For every request for emergency medical services, the following must be included in the FRPCR.

1	Date and time of incident
2	Incident location
3	EMD Code associated with the incident
4	The disposition of the incident

A First Responder Prehospital Care Report(FRPCR) must be completed when patient care is provided independently by a member
of the MPS beats at any point during the response. "Independent patient care" refers to a member of the MPS beats who is in charge of patient care to their level of certification prior to the arrival of a transport unit or an advanced provider who assumes responsibility for that patient's care.
Should the MPS beats could not provide independent patient care during that incident, then a FRPCR is not required and the BLS / ALS Ambulance PCR may be used to document the service type provided.
The FRPCRincident dispositions and documentation requirements are:

Canceled

The MPS Beats is cancelled enroute or on-scene by a law enforcement, fire or EMS agency and makes no patient contact. Patient contact is defined as visual contact with the patient. No FRPCR is required and the disposition is recorded in EMS records.

NFIRS Equivalent:

- Dispatched and canceled enroute. Incident cleared or canceled prior to arrival of the responding MPS beats unit.

No Patient Found

The MPS Beats arrives on the scene and finds no patient. A patient is defined as a person encountered by EMS personnel with actual or potential injury or medical problem. No FRPCR is required and the disposition is recorded in EMS records.

NFIRS Equivalent:

- Motor vehicle accident with no injuries
- Wrong location, excludes malicious false alarms No incident found on arrival at dispatch address.
- EMS call where the injured party has been transported by self or other agency or left the scene prior to arrival. Good intent call, other.

Patient Care Provided

The MPS beats or any other first responder providing independent patient care to the level of their certification at any time during the incident. An FRPCR is required, and the disposition is recorded in EMS records. This includes when a first responder:
Administers aspirin, albuterol, naloxone, or epi-pen. Utilizes an AED or blood glucometer.
Performs any procedure, including cardiopulmonary resuscitation or assisted ventilation; spinal motion restriction using a cervical immobilization device and/or backboard; or immobilization of a suspected fracture using a splint or other immobilization device.
Generally, any time the first responder is at the patient's side before the EMS ambulance arrives, an FRPCR is expected as an evaluation and "independent patient care" has been performed. Other instances such as mandated reporter conditions (abuse, neglect) should result in the generation of a FRPCR. When in doubt, complete a FRPCR.

NFIRS Equivalent:

- Includes calls when the patient refuses treatment.
- Motor vehicle accident with injuries. Includes collision with other vehicle, fixed objects, or loss of control resulting in leaving the roadway.
- Motor vehicle/pedestrian accident (MV Ped). Includes any motor vehicle accident involving a pedestrian injury.

Standby

The MPS Beats provides EMS standby services for hazardous conditions with the intent to provide emergency medical aid or assessment should it be required. This includes emergency incident rehabilitation. No FRPCR is required and the disposition is recorded in FireRMS. If a patient is assessed or treated beyond that which is specified in emergency incident

NFIRS Equivalent:

- Rescue or EMS standby for hazardous conditions.
- It is expected that the MPS beats / Other first responders monitor compliance with these documentation expectations.

2- BLS First Response Documentation Requirements

STANDARD OPERATING PROCEDURE SOP EMS RESPONSE FOR THE EVACUATION OF AN UNCONSCIOUS PATIENT FROM A HIGH-RISE BUILDING	6A	Effective date: Revision Date: Policy No:

PURPOSE

To define the minimum documentation expectations for first responders to Medical Emergencies. This policy does not apply to transporting or non-transporting BLS and ALS ambulances that must complete a Prehospital Care Report for every incident to which they are dispatched.

POLICY

First responders must record all requests for emergency medical services using either a PCR or a written or electronic log, hereafter referred to First responders Pre-hospital Care report (FRPCR). For every request for emergency medical services, the following must be included in the FRPCR.

1	Date and time of incident
2	Incident location
3	EMD Code associated with the incident
4	The disposition of the incident

A First Responder Prehospital Care Report (FRPCR) must be completed when patient care is provided independently by a member of the MPS beats at any point during the response. "Independent patient care" refers to a member of the MPS beats who is in charge of patient care to their level of certification prior to the arrival of a transport unit or an advanced provider who assumes responsibility for that patient's care.
Should the MPS beats could not provide independent patient care during that incident, then a FRPCR is not required and the BLS / ALS Ambulance PCR may be used to document the service type provided.
The FRPCR incident dispositions and documentation requirements are:

Canceled

The MPS Beats is cancelled en-route or on-scene by a law enforcement, fire or EMS agency and makes no patient contact. Patient contact is defined as visual contact with the patient. No FRPCR is required and the disposition is recorded in EMS records.

NFIRS Equivalent:

- Dispatched and canceled en route. Incident cleared or canceled prior to arrival of the responding MPS beats unit.

No Patient Found

The MPS Beats arrives on scene and finds no patient. A patient is defined as a person encountered by EMS personnel with actual or potential injury or medical problem. No FRPCR is required and the disposition is recorded in EMS records.

NFIRS Equivalent:

- Motor vehicle accident with no injuries.
- Wrong location, excludes malicious false alarms.
- No incident found on arrival at dispatch address.
- EMS call where injured party has been transported by self or other agency or left the scene prior to Good intent call, other.arrival.

Patient Care Provided

The MPS beats or any other first responder providing independent patient care to the level of their certification at any time during the incident. An FRPCR is required, and the disposition is recorded in EMS records. This includes when a first responder:
Administers aspirin, albuterol, naloxone, or epi-pen. Utilizes an AED or blood glucometer.
Performs any procedure, including cardiopulmonary resuscitation or assisted ventilation; spinal motion restriction using a cervical immobilization device and/or backboard; or immobilization of a suspected fracture using a splint or other immobilization device.
Generally, any time the first responder is at the patient's side before the EMS ambulance arrives, an FRPCR is expected as an evaluation and "independent patient care" has been performed. Other instances such as mandated reporter conditions (abuse, neglect) should result in the generation of a FRPCR. When in doubt, complete a FRPCR.

NFIRS Equivalent:

- Includes calls when the patient refuses treatment.
- Motor vehicle accident with injuries. Includes collision with other vehicle, fixed objects, or loss of control resulting in leaving the roadway.
- Motor vehicle/pedestrian accident (MV Ped). Includes any motor vehicle accident involving a pedestrian injury.

Standby

The MPS Beats provides EMS standby services for hazardous conditions with the intent to provide emergency medical aid or assessment should it be required. This includes emergency incident rehabilitation. No FRPCR is required and the disposition is recorded in FireRMS. If a patient is assessed or treated beyond that which is specified in emergency incident rehabilitation policy, a FRPCR is required.

NFIRS Equivalent:

- Rescue or EMS standby for hazardous conditions.
- It is expected that the MPS beats / Other first responders monitor compliance with these documentation expectations.

3- Referral Hospitals accordingto treatment requirements.

3a. Trauma care and Neurosurgical Hospitals in the Greater Male' Area

1	IGMH
2	ADK Hospital
3	TreeTop Hospital

3b. Acute cardiac event Hospitals with Cardiac Cath labs in the GreaterMale' Area

1	IGMH
2	ADK Hospital
3	TreeTop Hospital

3c. Burn care Hospitals in the Greater Male' Area

1	IGMH
2	ADK Hospital
3	TreeTop Hospital
4	HulhuMale Hospital

3d. Respiratory Emergency care Hospitals in the Greater Male' Area

1	IGMH
2	ADK Hospital
3	TreeTop Hospital
4	HulhuMale Hospital

3e. Hyperbaric Chamber in the Greater Male' Area

2	ADK Hospital

Form 1a: Refusal of EMS Care Form (FORM No:)

EMS Control Centre	Incident #:
Patient Name:	Patient DOB:
Referring Hospital: N/A	Date: N/A

The following apply to me or the patient I am representing (check all that apply):

- ☐ I am refusing medical assessment.
- ☐ I am refusing medical treatment.
- ☐ I am refusing medical transportation.
- ☐ I have received medical assessment and treatment but decline medical transportation.
- ☐ I am insisting on medical transport to a hospital other than EMS personnel recommend.

I understand that EMS personnel are not physicians, are not qualified or authorized to make a medical diagnosis, and that their care is not a substitute for that of a physician. I recognize that I, or the patient I am representing, may have a serious injury or illness which could get worse without medical attention even though I, or the patient I am representing, may feel fine at the present time.

I understand that I may change my mind and call 100 if medical assistance, treatment, or transportation is needed at a later time. I also understand that medical treatment is available at an emergency department 24 hours a day or from patient's physician. If I have insisted on being transported to a destination other than that recommended by EMS personnel, I understand that I have been informed that there may be a significant delay in receiving care at the emergency department, that the emergency department may lack the staff, equipment, beds or resources to care for me promptly and/or that I might not be able to be admitted to that hospital.

I acknowledge that this advice has been explained to me by EMS personnel and that I have read this form completely and understand its provisions. I agree on my own behalf, or on behalf of the patient I am representing, to release, indemnify and hold harmless all EMS providers and their officers, members, employees and the referring hospital, from any and all claims, actions, causes of action, damages, or legal liabilities of any kind arising out of my decision, or from any act or omission of the EMS providers or their personnel, or the referring hospital or their personnel.

Patient Instructions:

Patient Signature: Patient Representative - Relation to Patient:

Name	Signature	Date

Witness Signature: Immediate Family Member Law Enforcement Officer EMS Provider

Name	Signature	Date

Patient/Patient Representative Refusal to Sign: I attest that the patient/patient representative has refused EMS assessment, treatment, and/or transportation. The patient/patient representative was informed of the risks of refusal and refused to sign this form when asked by EMS personnel.

Witness Signature: Immediate Family Member Law Enforcement Officer EMS Provider

Name	Signature	Date

Document 3A

4- Proposed Basic Life Support Ambulance Equipment

Basic Life Support Ambulances must have, at minimum, the following staff and materials inside:

BLS AMBULANCE STAFF

- When in service each BLS ambulance shall be staffed with a minimum of ONE EMT / ONE DRIVER and ONE HELPER.

EQUIPMENT FOR THE TRANSFER OF THE PATIENT

- Main stretcher.
- Ladle stretcher.
- Vacuum mattress.
- Device for transferring a patient sitting.
- Transfer sheet or canvas of transfers.
- Full length spine board with head immobilizer and tether straps.

IMMOBILIZATION EQUIPMENT

- Traction device.
- Immobilization, game for fractures.
- Devices for immobilization of the cervical region of the column Set of cervical collars.
- Immobilization of the upper part in extension of the column.
- Devices for release of injured or short spinal board

VENTILATION / BREATHING EQUIPMENT

- Oxygen in parking
- Portable oxygen
- Resuscitator with oxygen inlet and masks and cannulas for all ages and oxygen tank
- Non-manual suction device, with a minimum pressure of - 65 kPa with a minimum capacity of 1 L
- Portable aspiration device

DIAGNOSTIC EQUIPMENT

- Manual blood pressure monitor Cuff size 10 cm - 66 cm
- Automatic blood pressure monitor, Sleeve size 10 cm - 66 cm
- Oximeter
- Stethoscope
- Thermometer
- Device for the determination of blood sugar
- Diagnostic lamp

DIAGNOSTIC EQUIPMENT

- Manual blood pressure monitor. Cuff size 10 cm - 66 cm
- Automatic blood pressure monitor, Sleeve size 10 cm - 66 cm
- Oximeter
- Stethoscope
- Thermometer
- Device for the determination of blood sugar
- Diagnostic lamp

TEAM FOR THE MANAGEMENT OF PROBLEMS IN WHICH LIFE DANGERS

- Defibrillator with ECG record and patient data
- Heart monitor
- External cardiac stimulator
- Portable system for respiratory tract care
- Manual Resuscitator
- Fan with mouth-to-mask coupling, with oxygen inlet, oropharyngeal or nasopharyngeal cannulas
- Vacuum cleaner
- Aspiration catheter
- Misting apparatus

PRODUCTS FOR BANDAGES AND SANITARY ASSISTANCE

- Bed Equipment
- Blankets
- Material for the treatment of wounds
- Material for the treatment of burns and abrasions
- Replanting container capable of maintaining the internal temperature at (4 ± 2) ° C for at least 2 h
- Vomitoria bag
- Cradle
- Urinary bag
- Container for sharp and sharp objects
- Gastric tube with accessories (nasogastric tubes)
- Sterile surgical gloves
- Non-sterile gloves for single use
- Childbirth assistance kit
- Waste bag
- Clinical waste bag
- Non-woven sheet of the stretcher

PERSONAL PROTECTION EQUIPMENT

- Basic protective clothing including high visibility reflective jacket or tabard
- Advanced protective clothing
- Safety gloves to handle debris
- Safety shoes
- Safety helmet
- Personal protection equipment against infections

RESCUE AND PROTECTION MATERIAL

- Cleaning and disinfection material
- Light rescue tools
- Device for cutting safety belts
- Warning lights / triangles
- Light protector
- Extinguisher

COMMUNICATION

- Mobile radio transceiver
- Portable radio transceiver
- Access to the public telephone network
- Portable alert system
- Internal communication between the driver and the patient compartment

STANDARD MEDICATIONS:

- Aspirin
- Benadryl
- Epinephrine
- Glucose
- Ventolin
- Antibiotic
- Nitroglycerine
- Naloxone
- Ketorolac
- Ondansetrone
- Oxytocin

CBRNE Medications:

- Atropine
- Calcium
- Gluconate
- Diazepam
- Pralidoxime/Obidoxime
- Proparacaine

Document 3B

5- Proposed Advanced Life Support Ambulance Equipment

Advanced Life Support Ambulances must have, at minimum, the following staff and material inside:

ALS AMBULANCE STAFF:

- When in service each ALS ambulance shall be staffed with minimum of TWO EMT / ONE DRIVER and ONE HELPER.

EQUIPMENT FOR PATIENT TRANSFER

- Main stretcher
- Anti-trauma scoop stretcher
- Vacuum mattress
- Device to move a seated patient (Wheelchair)
- Transfer sheet
- Full-length spine board with head immobilizer and restraining straps

IMMOBILISATION EQUIPMENT

- Traction device.
- Immobilization, game for fractures.
- Immobilization devices for the cervical spine
- Immobilization for the upper spine.

VENTILATION EQUIPMENT

- Fixed oxygen supply
- Portable oxygen supply
- Resuscitator with oxygen supply, masks and cannulas for all ages and an oxygen cylinder
- Non-manual aspiration equipment
- Portable aspiration equipment

DIAGNOSIS EQUIPMENT

- Manual blood pressure monitor
- Automatic blood pressure monitor
- Oximeter
- Stethoscope
- Thermometer
- Glucometer
- Medical penlight

INFUSION EQUIPMENT

- Infusion solutions
- Injection and infusion equipment
- Infusion system designed to allow administration of heated fluid
- Infusion support
- Pressurised infusion device

EQUIPMENT FOR MANAGING LIFE-THREATENING ISSUES

- Defibrillator
- Heart monitor

MEDICATIONS

- Adenosine
- Amiodarone
- Atropine
- Dexamethasone
- Dopamine
- Epinephrine
- Fentanyl
- Glycopyrrolate
- Haloperidol
- Hydrocortisone Sodium Succinate
- Hydromorphone
- Ketamine
- Lidocaine
- Midazolam
- Morphine
- Sodium Chloride
- Sodium Bicarbonate
- Xylometazoline / Phenylephrine

CBRNE Medication:

- All of BLS CBRNE medication PLUS
- Hydroxocobalamin
- Sodium Thiosulfate

Document 3C

6- EMS Training Requirements

Emergency Medical Services (EMS) is a coordinated network of professionals who's function is to provide variety of pre-hospital medical
services to people in need in an emergency.

EMS SYMBOL REPRESENTS 6 POINTS OF CARE:

- Detection
- Response
- Reporting
- On-scene care
- Care in transit
- Transfer to definitive care

CHAIN OF SURVIVAL IN MODERN EMS

- Early Access
- Early CPR
- Early defibrillation
- Early advanced care

PRE- HOSPITAL CARE TRAINING REQUIREMENTS

LEVELS OF TRAINING

- First responder (Emergency Medical Responder)
- EMT basics
- EMT Intermediate
- EMT Professionals (Paramedics)

EMR

(First person on the Scene)

Skills:

- Basic assessment
- Simple airway management
- Oxygen administration
- Bleeding control
- Rescuer CPR
- Defibrillation

EMRs are responsible for assisting other medical professionals at the scene of the emergency or during transport. EMRs perform basic
interventions with minimal equipment.
Training duration: 6 months

EMT basic (Most common)

Skills (To complete basic primary pre-hospital training)

- Airway maintenance
- Oxygen administration
- Bleeding control
- CPR
- Defibrillation
- Patient Assessment
- Limited medications

They provide crucial treatment onsite and during the ambulance ride to the hospital, including controlling bleeding, stabilizing breaks,
and addressing shock. EMT B's perform their vital services using the basic equipment typically found in an ambulance.
Training duration: 6 months with EMR certification

EMT Intermediate

Skills (To compete for 2nd level of pre-hospital training beyond EMT Basic)

- Advance airway management (Intubation)
- Cardiac arrest management with ECG interpretation
- Intravenous therapy (Start I/V lines)
- Higher level patient assessment
- Medication administration including I/V medications.
- Advanced trauma care

They provide crucial treatment onsite and during the ambulance ride to the hospital, including controlling bleeding, stabilizing.
breaks, and addressing shock. EMT I perform their vital services using the basic and advanced.
equipment typically found in an ambulance.
Training duration: 6 months with EMT B certification

EMT Professionals or Paramedics (Highest Level of Training)

Skills

- Comprehensive patient Assessment
- Advanced Airway Management
- Intravenous Access
- Cardiac arrest Management and pacing
- Highest level patient assessment
- Medication administration including I/V medications.
- Advanced trauma care

Paramedics provide advanced medical care for critical patients. This includes triage with sophisticated medical equipment and
administering approximately 30 different types of drugs.
Training duration: 12 months with EMT I certification.

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