

Queensland Health Mass Casualty Incident Plan

QHMCI-PLAN

June 2016

Queensland Health Mass Casualty Incident Plan (QHMC-PLAN)

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Authorisation statement

The Queensland Health Mass Casualty Incident Plan is issued under the Authority of the Director-General, and is a sub-plan to support the *Queensland Health Disaster and Emergency Incident Plan*.

The QHMCI-PLAN is designed to act as an escalation pathway in support of Hospital and Health Services and to complement the Queensland Ambulance Service *State Major Incident Plan* when responding to mass casualty incidents.

The QHMCI-PLAN is to be read in conjunction with the *Queensland Health Incident Management System Guideline* and incorporates incident management system methodology across the key elements of agency emergency preparedness, response capability and business continuity management.

The Chief Health Officer and Deputy Director-General Prevention Division, on behalf of the Director-General, maintains this plan for the Department.

The 2016 QHMCI-PLAN is hereby approved and recommended for distribution.

Director-General

Date:

Our vision

Healthier Queenslanders

Our purpose

To provide leadership and direction, and to work collaboratively to ensure the health system to deliver quality services that are safe and responsive for Queenslanders.

Amendments

Version	Date	Comments

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1. Introduction

The risk of mass casualty events occurring in Queensland, from either man-made or natural disaster/emergencies, coupled with the increasing threat of terrorism incidents, requires a comprehensive fully-integrated response model of acute care delivery to be activated following a mass casualty event. A fully integrated response will enable hospitals to rapidly mobilise available resources upon a mass casualty incident occurring to ensure the highest level of patient care to the greatest number of people possible is provided.

A mass casualty incident (MCI) is defined as¹:

An incident or event where the **location, number, severity** or **type of live** casualties, requires **extraordinary** resources.

MCIs may be the result of:

- man-made disasters or emergency incidents such as transport, industrial or terrorism
- natural disasters such as earthquakes and bushfires or anticipated events such as cyclones or floods where warning may be available
- epidemics/pandemics and the care of evacuated populations.

The *Queensland Health Mass Casualty Incident Plan* (QHMCi-PLAN) is the principal document supporting a Queensland Health response to a MCI. The QHMCi-PLAN is a sub-plan of the *Queensland Health Disaster and Emergency Incident Plan* (QHDISPLAN), and should read in conjunction the QHDISPLAN.

1.1 Aim

The aim of the QHMCi-PLAN is to outline the roles, responsibilities and procedures for a Queensland Health response to support a MCI.

The QHMCi-PLAN is to be read in conjunction with the Queensland Ambulance Service (QAS) *State Major Incident and Disaster Plan* (SMID) and Department of Health plans and is intended to be a guiding document for the development of HHS mass casualty planning ensuring a consistent, integrated and outcomes oriented response model.

1.2 Scope

The QHMCi-PLAN applies to the Department of Health (the Department) and all Hospital and Health Services (HHSs).

The QHMCi-PLAN does not incorporate requirements for the QAS. The QAS describes their arrangements for the response to a MCI in the *State Major Incident and Disaster Plan*.

¹ Based on the Major Incident Medical Management and Support definition of 'major incident'.

1.3 Purpose

The QHMCI-PLAN has been developed to assist in the provision of a safe, effective and coordinated health and medical response to a MCI. It:

- describes responsibilities and accountabilities for command and coordination of the Queensland Health response
- details arrangements for the escalation of the Queensland Health response
- describes how available clinical resources are organised
- details the relationship between the Queensland Health response, the state and national emergency response and recovery arrangements.

1.4 Planning hierarchy and framework

Mass casualty incident sub-plans are a mandatory plan for all HHSs (Ravenshoe Review Recommendation 5). QAS mass casualty arrangements are detailed in the SMID.

Table 1 Hierarchy of plans

National	AUSTRAMA Plan
Queensland Health	QHMCI-PLAN
QAS	State Major Incident and Disaster Plan (SMID)
HHS	HHS Mass Casualty Incident Plan
Hospital/Facility	Code Brown Plan & Internal Mass Casualty Plan

2. Governing principles

To ensure a consistent core set of concepts, principles, procedures, processes, terminology and standard requirements, the QHMCI-PLAN is based on a series of underlying principles which should be applied to mass casualty planning across all areas of Queensland Health.

Planning

- To be based on business as usual as much as possible.
- There should be a continuum from normal practice to incidents involving multiple patients (surge plan) through to true MCIs and disasters.
- Risk identification and management is essential.
- Capability mapping and gap analysis is an essential part of preparedness.

Organisational roles and responsibilities

- QAS has overall medical responsibility for the scene and provides road transport capability.
- Retrieval Services Queensland (RSQ) coordinates aeromedical transport.
- HHSs have local responsibility for management of MCIs occurring in Queensland, within their own District Disaster Management Group frameworks.
- The state responsibility is to support the local HHS response & coordinate state level assets.
- Queensland Police Service (QPS) will require assistance from Queensland Health with the evidentiary process in most MCIs.

Communication

- Communication will occur through pre-determined channels and processes.

Site management

- QPS maintains control of the site (outer cordon and inner cordon).
- Queensland Fire and Emergency Services (QFES) provide scene safety advice when they are the lead combat agency.
- QAS has first response health responsibility for the scene.
- Site Health Commander (SiteHC) works with QAS on disposition decisions and leads the Site Health Team (SiteHT).
- SiteHT work in the casualty clearing post.
- RSQ coordinates aeromedical transport as required.

Disposition and transport

- Patients should ideally be moved to a destination capable of definitive treatment to avoid secondary transfer. If unable to be moved to a definitive destination initially, patients should be transferred to a facility with the capabilities to provide immediate damage control/life-saving interventions.
- Patients requiring specialist services (e.g. burns, neurosurgery, paediatric, trauma surgery) should be moved to the definitive destination. If unable to be moved to

definitive destination initially, patients should be co-located at appropriate local facilities where possible until they are able to be transferred.

- Patient load should be distributed across a number of facilities to share the burden and not overwhelm a single service.
- Patients should be transported by those services equipped and prepared to do so.

Hospital management

- Surge planning needs to be coordinated across both the facility and the HHS to address 'space', 'staff', 'supplies' and the 'system'.
- Damage control surgery is more likely to be required than definitive surgery.
- Experienced trauma surgeons should help determine patient selection for operating theatres.
- Critical care capacity needs to be considered and managed effectively as this is likely to be a key limiting factor in capability of a facility.
- Access to medical imaging requires consideration to avoid it becoming a rate limiting step.

Recovery

- Psychological impact may be both significant and long term and should be addressed from the early stages of the response.

Review

- Review should take place in accordance with the *Queensland Health Operational Briefing and Debriefing Guideline*.

3. Scale

Mass casualty incidents occurring locally

HHSs have a responsibility to manage local MCIs occurring in Queensland. The Department of Health's responsibility is to provide additional support through advice and coordination of resources.

Mass casualty incidents occurring locally but across HHS borders

When incidents occur across multiple HHSs, primary responsibility still remains with the HHS. For these incidents there should be either a:

- pre-arranged unified command structure (for example metropolitan Brisbane incidents involving Metro North HHS, Metro South HHS and Children's Health Queensland HHS)
- liaison between key decision makers to determine which HHS Health Incident Controller (HIC) and Health Emergency Operations Centre (HEOC) will be the point of multi-HHS coordination and communication with the SiteHC.

Where two or more HHS HEOCs are activated, SHECC may activate to coordinate communication and operations, and prioritise allocation of Department resources.

Mass casualty incidents occurring nationally (outside Queensland)

- For MCIs occurring nationally, the Queensland Health role changes to one of assistance to the affected jurisdiction, rather than primary responsibility.
- Requests for assistance will come from the affected jurisdiction via the Australian Health Protection Principal Committee (AHPPC). These will be coordinated through State Health Emergency Coordination Centre (SHECC), with requests for assistance made to HHS.
- The exception is cross-border incidents that directly affect both jurisdictions. It is essential in these situations that lines of responsibility are developed in advance and early notification of SHC occurs.

Mass casualty incidents occurring overseas (outside Australia)

- For MCIs occurring overseas, the Queensland Health role changes to one of assistance to the affected nation, rather than primary responsibility.
- Requests for assistance will come from the affected nation via the Department of Foreign Affairs and Trade (DFAT) and AHPPC. These will be coordinated through SHECC, with requests for assistance made to HHS as part of an Australian Medical Assistance Team (AUSMAT), or other nationally coordinated, response.
- The exception to this is cross-border incidents in Papua New Guinea/Torres Strait, where there may be an immediate response by local personnel as patients arrive in Australia, while any formal response to Papua New Guinea will occur through AHPPC and SHECC (it is essential that early notification occurs from Thursday Island).

4. Disaster and emergency management process

Queensland Health adopts an all-agencies and all-hazards approach to disaster and emergency incident management across the **prevention, preparedness, response** and **recovery** phases.

4.1 Risk

Risk management is fundamental to effective planning for incidents, including MCIs. This process must consider all naturally occurring and human-engineered hazards that may result in the development of a MCI including:

- natural occurring hazards; for example:
 - earthquake (e.g. building collapse; transport incidents due to road damage; burns and injuries due to fire and gas incidents)
 - tsunami (e.g. building collapse)
 - cyclone (e.g. flooding and storm surge)
- human engineered hazards; for example:
 - transportation incidents (e.g. vehicle, bus, train and plane accidents)
 - industrial incidents (e.g. manufacturing, factory or warehouse explosions/fires)
 - terrorism or armed person incidents (e.g. bombings, shootings, building collapse).

Local HHS risks may differ and will need to be assessed and prioritised according to their susceptibility to, or impact of:

- likelihood of natural disasters
- proximity to transport corridors, airports, rail or bus stations
- industrial sites and specifically chemicals used at these
- risk of terrorism due to critical infrastructure or places of mass gathering.

Chemical, Biological and Radiological (CBR) incidents are dealt with specifically through the Queensland Health CBR plan, however still need to be considered as part of the mass casualty plan and how these interface.

The focus of QHMCI-PLAN is on sudden onset MCIs, with an acute surge in demand for resources, however slower onset MCIs can still be managed through this plan.

Planning for MCIs typically needs to focus on injury patterns consistent with blunt trauma (with the exception of terrorism, which has an increased likelihood of penetrating injury due to use of projectile weapons and explosives).

Table 2 Mass casualty incident injury risks

	Transport	Building	Industrial	Earthquake	Terrorism
Trauma	Blunt > penetrating	Blunt > penetrating	Blunt > penetrating	Blunt > penetrating	Penetrating > blunt high velocity weapons
Crush	Possible	Likely	Likely	Very likely	Likely
Blast	Less likely	Less likely	Likely	Less likely (gas lines)	Very likely
Burns	Likely (fuel risk)	Less likely	Likely (blast or fire)	Possible (gas lines)	Likely (blast)
CBR	Fuel/Cargo	Building type	Building type	Less likely unless 'at risk' buildings impacted	Possible
Specific risks	Depends on fuel load, transport type and occupancy (e.g. children, foreign visitors).	Dependant on building type & occupancy	Chemical storage & decontamination requirements	Crush syndrome and dialysis requirements	High velocity weapons or dirty bombs & need for decontamination

5. Mass casualty incident management structure & arrangements

The Queensland Health response to a MCI occurs when a HHS activates their disaster and emergency incident plan or mass casualty sub-plan. Where necessary, the Department may activate its disaster and emergency incident response arrangements to lead a response, or support the HHS response.

The Queensland Health incident management is based on the Australasian Inter-Service Incident Management System (AIIMS). This is described in the QHDISPLAN and QHIMS Guideline.

Management of a MCI should follow the same principles throughout the response from scene through to hospital. There should not be a separation between pre-hospital (site) and hospital systems but rather a seamless transition between the two. It is essential that Queensland Health and QAS systems align, and share common principles, to enable this.

This continuum is shown in the overlapping wedge model below. The integration of ambulance and retrieval services in the transport phase is the usual area of shared responsibility.

This area of shared responsibility may move to the left or right depending on the presence of a SiteHT at a site or QAS teams on site at a hospital, especially for an internal incident with mass casualties.

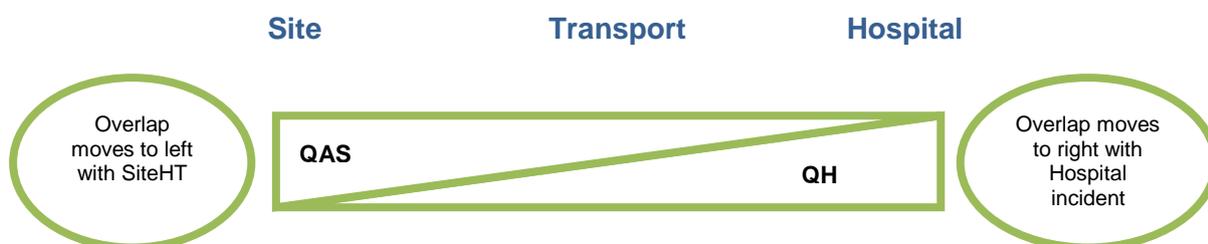


Figure 1 Model of shared responsibility

Response activities during a MCI scene should occur in accordance with Major Incident Medical Management and Support (MIMMS) principles using the mnemonic 'CSCATTT', as shown in Table 3. These principles apply equally in the pre-hospital and hospital phases of a response and are described in the table below.

Table 3 MIMMS principles

MIMMS	SITE	HOSPITAL
Command and control	Forward Command Post Site Health Commander	HEOC HIC and IMT
Safety of personnel	PPE ² Training Scene safety/zones	Universal PPE Training Entry control/security
Communication	Established communication pathways	
Assessment	SITREP – ETHANE	Reporting/briefing – SMEACS-Q
Triage	Triage tags (sort and sieve) At site and casualty clearing post	Triage tags or Emergency Department triage Emergency Department then OT, ICU access
Transport	Disposition to hospitals Distribution across hospitals Selection of platform	Decanting to create surge capacity Secondary transfer across hospitals
Treatment	Urgent care to ensure survival to transfer	Resuscitation to ensure survival to definitive care Damage control surgery before transport if needed

Models of distribution

There are four main models of patient distribution in an MCI. These may merge or evolve as the incident evolves and are not static.

Simple

RTS – Regional Trauma Service
MTS – Major Trauma Service

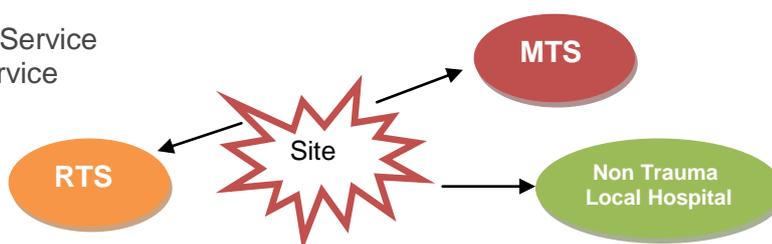


Figure 2 Simple patient distribution model

Patients are distributed to a number of hospitals in close proximity based on need (MTS, RTS, local).
The focus is on the right patient to the right place by right transport.

² Personal protective equipment

Expanded

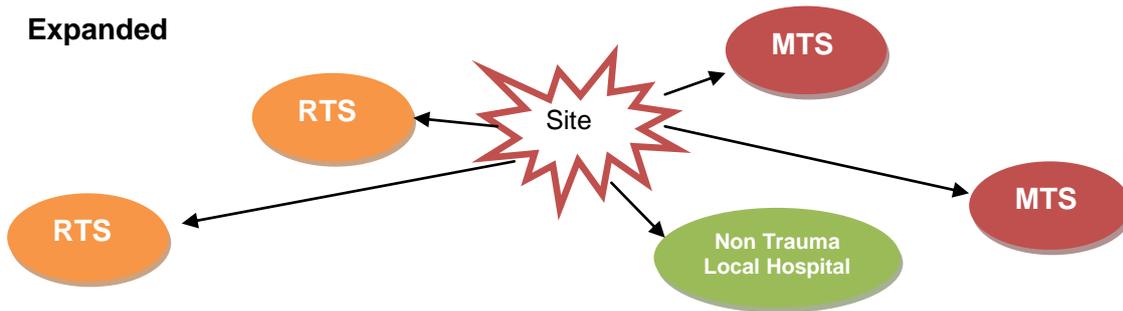


Figure 3 Expanded patient distribution model

In this *expanded* model, patients are distributed to a number of hospitals in close proximity based on need (MTS, RTS, local) but expanded to also include hospitals further away.

Particular care needs to be taken with patient selection in this model to ensure that longer transport times do not impact on access to care.

Interrupted or interval

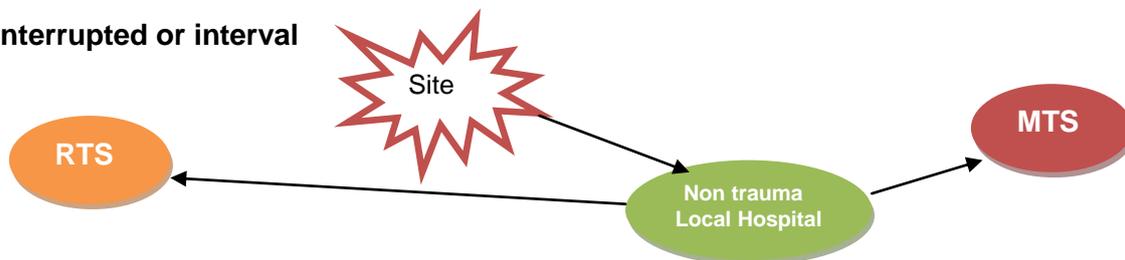


Figure 4 Interrupted or interval patient distribution model

In this *interrupted or interval* model, patients are unable to be sent to the ideal facility first due to transport limitations (e.g. distance, inaccessibility).

Patients may be moved initially to a smaller hospital for initial resuscitation and stabilisation as able and subsequently moved to definitive care as transport platforms become available.

Particular care needs to be taken in this model to ensure that the initial receiving, or triage hospital, is supported with additional staffing (e.g. SiteHT) and that patients are carefully prioritised to ensure that those who most urgently need care are transported first.

Complex

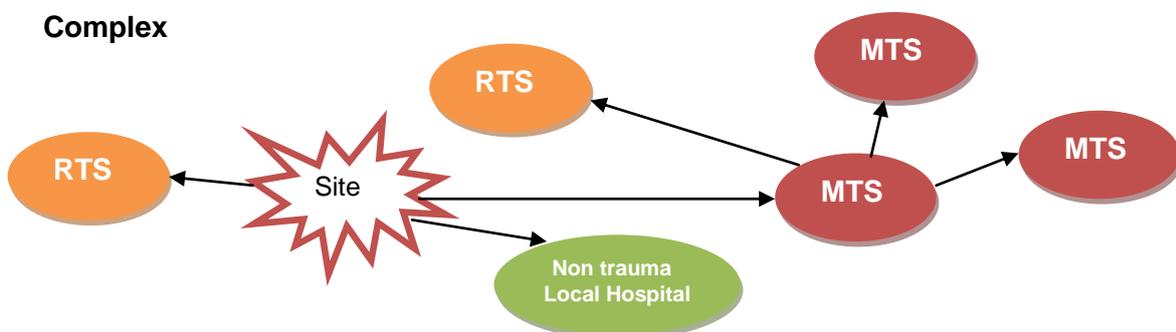


Figure 5 Complex patient distribution model

In this *complex* model patients, are initially distributed to the right centres but because of acute ongoing demand there is a need to preserve the local capacity by secondary transferring patients after they have received initial care that ensures their survival and safety to transfer.

This model was used following the Christchurch earthquake and involved damage control or initial surgery to address urgent issues before distributing these patients across New Zealand. This preserved local operative and critical care capacity for ongoing acute incoming patients while also distributing the load and ensuring patient safety.

6. Activation and response

In line with the Queensland disaster management arrangements, the HHSs are responsible for functional activity specific response to MCIs at a local level and are supported by the Department at a state level.

6.1 Activation escalation phases

Activation of a health response progresses through an escalation process as defined in the Queensland disaster management arrangements. The movement a response through these phases is not necessarily sequential.

Table 4 Activation escalation phases

LEVEL OF ACTIVATION	DEFINITION
Alert	When advice of an impending or potential disaster or emergency is received or following an occurrence, it is unclear if a Department of Health response is required.
Lean forward	When information available indicates necessity to instigate preparatory activities in readiness for the response phase. Disaster coordination centres are on stand-by; prepared but not activated.
Stand up	When a disaster or emergency incident occurs and a Department of Health response is required and resources are deployed. Disaster coordination centres are activated.
Stand down	When an organisations site and immediate emergency response is no longer required. Acute care for victims can continue but Department of Health can return to business as usual.

Refer to Annexure C: Levels of Activation for State Response Arrangements of the *Queensland State Disaster Management Plan* for further detail.

6.2 Incident levels

For the purposes of the QHDISPLAN, there are three levels of activation and response which is consistent with AIIMS, the *Management of a Public Health Event of State Significance Health Service Directive* and the QAS SMID. These are detailed in section 5.4 Activation of the QHDISPLAN.

6.3 Notification of a mass casualty incident

6.3.1 Notification pathways

Initial notification of MCI may be received at any level within Queensland Health. This first awareness will ordinarily be at a tactical level, as identified below, however may also be at strategic or operational level.

Notice of MCIs is likely to come through at hospital level from QAS Communications Centre, Queensland Police Service Communications Centre or directly from a Hospital or health facility within a HHS as patients arrive.

Media enquiries may also be the first notice of any MCI.

Escalation procedures need to be in place to ensure that this information is passed to the appropriate level of leadership that enables activation decisions to be made.

Appendix 1 outlines the relevant notification cascades following notification of a disaster or MCI. It is important to ensure all key stakeholders are notified of any activation to enable effective communications and response.

6.3.2 Notification processes

Notification may be initially be made by phone or email through designated emergency contact numbers, or established networks. To assist in providing and receiving complete and accurate information regarding a disaster or MCI, standardised format should be used.

A standardised notification cascade is included as Appendix 1 and describes the process to:

- notify the SHECC of the activation of a HHS HEOC
- request activation of the SHECC.

6.3.3 Notification format

Notification and reporting should use standardised formats that enable more effective communication and more complete data capture. Consistency of information also promotes shared understanding at early stages of response.

The ETHANE and SMEACS-Q formats should be used across Queensland Health and are described below. The notification template for activation of a HEOC, using the ETHANE, is included in the QHIMS Guideline as Appendix 1.

ETHANE

The initial situation report (SITREP) can be provided as an ETHANE.

Exact location

Type of incident

Hazards

Access and egress

Number of type of patients

Emergency services at scene or required

For notification from a hospital or HHS, additional information should be included such as whether the HEOC has been activated; the name of the HIC and the primary contact number.

SMEACS-Q

As more information is available additional detail is provided to form a SMEACS-Q.

Situation (ETHANE)

Mission

Execution

Administration

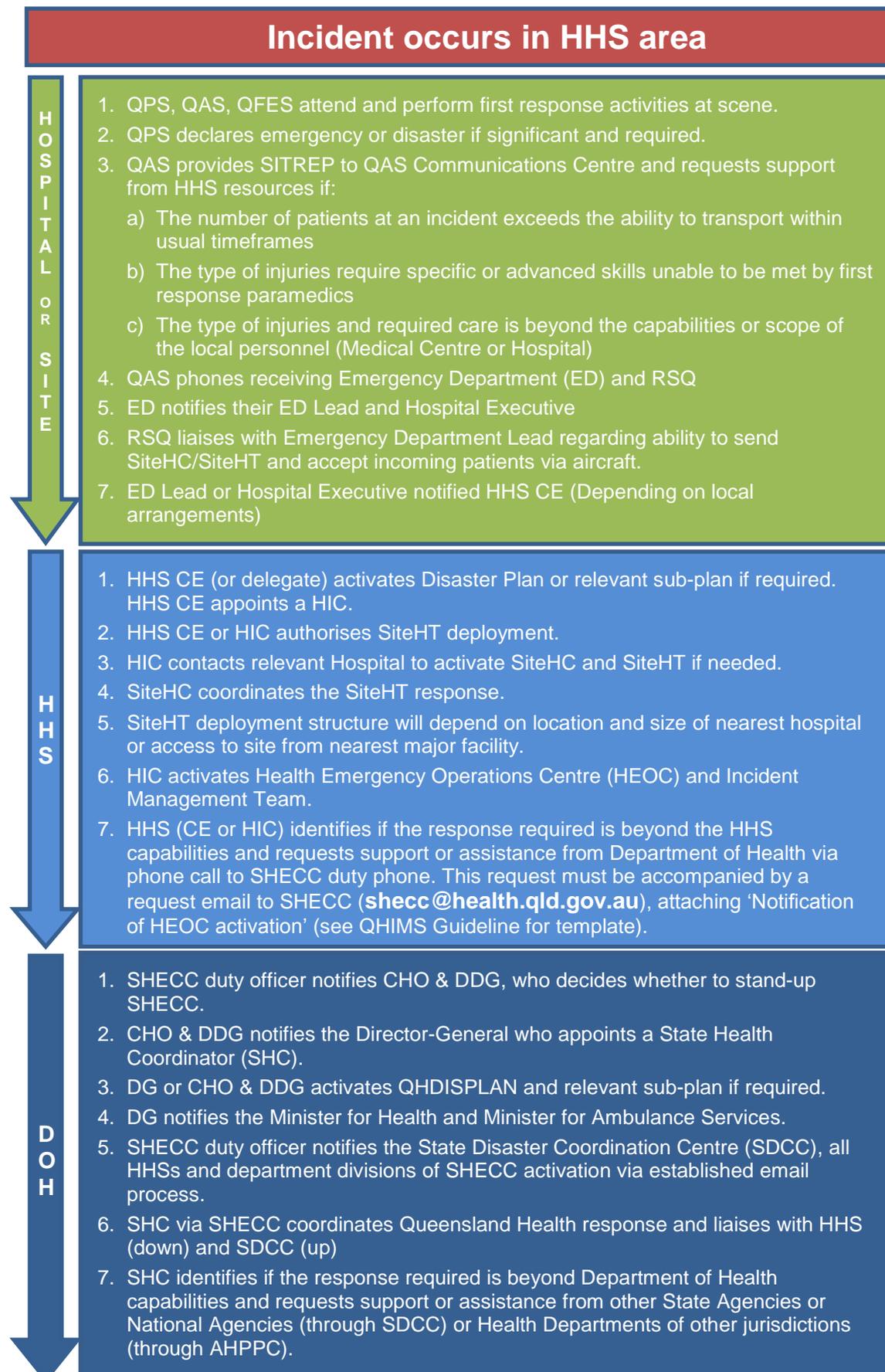
Communications

Safety

Questions

The inclusion of 'Questions' at the end is an important detail, and allows clarification or confirmation of information.

6.4 Queensland Health incident activation and notification process



6.5 Authority to activate the QHMCI-PLAN

The QHMCI-PLAN will be activated under the authority of the Director-General or the Chief Health Officer and Deputy Director-General Prevention Division (CHO & DDG).

At a state-level, the QHMCI-PLAN cannot be activated without the QHDISPLAN being activated. HHS mass casualty plans can be activated without the activation of their disaster plan, at the discretion of the HIC.

Upon activation of the QHMCI-PLAN, a State Health Coordinator (SHC) will be appointed to coordinate and lead the Queensland Health response. This person will either be the Director-General, the CHO & DDG or their delegate.

Where necessary, the SHC will activate the SHECC to support the incident, coordinate responses and liaise upwards (State Disaster Coordination Centre) and downwards (HHS HEOC). The SHC will also authorise activation of an incident management team if required to manage the necessary functions within the SHECC.

The QHIMS Guideline outlines the roles, responsibilities and procedures for a Queensland Health response.

6.6 Triggers for activation of the QHMCI-PLAN

Activation triggers will include:

- a MCI occurring across more than one HHS that exceeds the capacity, or has the potential to exceed the capacity, of the affected HHSs
- a MCI that requires coordination of state assets to assist an affected HHS.

Activation triggers may include:

- a request for activation from a HHS
- a MCI that occurs nationally (outside of Queensland but in Australia) or internationally but where requests for assistance have been made to Queensland Health.

Considerations:

- size and location of incident
- anticipated casualty load and type of injuries
- surge capacity of the local hospitals and expected impact on current patient management
- current demands on health system
- impact on critical business functions
- impact on other public services and facilities.

7. Hospital and site operational response

The operational response for a MCI at a site or a hospital **will** involve:

- establishment of an incident management team structure (including a Hospital Commander)
- activation of a HEOC at the relevant hospital and HHS managing the response.

The operational response for a MCI at a site or a hospital **may** involve:

- deployment of a SiteHC
- deployment of a SiteHT.

Relationship with surge capacity management

The response to MCIs is developed around the concept of surge capacity management:

- a mass influx of casualties may result in a health facility and clinical areas exceeding capacity
- surge capacity is defined in terms of 'Space', 'Staff', 'Supplies' and 'System' (Patient Flow) and all of these areas should be considered in planning
- intensive care beds are an asset of particular importance – the State-Wide Intensive Care Clinical Network should be notified early to help collate numbers of available ICU beds
- operative capacity.

Hospital system flow

The key principles in managing system flow in a hospital an MCI are:

- access to care should be maintained for the greatest number
- each level offers a higher level of care
- minimum acceptable care should be provided that ensures patients are safe to pass to the next level
- bottlenecks, both potential and real, should be identified and may need roles appointed to manage these. Examples include:
 - Transport teams (SiteHC and Retrieval Services Queensland)
 - Imaging (Coordinating Radiologist /Clinician)
 - Operative Theatre selection (Lead Surgeon)
 - Critical care (Lead Intensive Care Specialist)
 - Blood availability (Coordinating Pathologist).

These roles may be at HEOC level or SHECC depending on the scale of the incident and act as Clinical Advisors.

7.1 Deployment of a Site Health Commander or Site Health Team to a site (pre-hospital)

Queensland Ambulance Service provides first response patient management and transportation capabilities to medical incidents occurring in environments outside hospitals or major health centres.

There are times when QAS resources are depleted by the event itself or to a point where an effective response to another incident cannot be assured or where casualties outnumber resources (and the QAS SMID is required to be activated). This may require additional assistance from HHS resources (SiteHT) and/or Department of Health (RSQ).

Definition

1. Site Health Commander

The SiteHC is the appropriately trained Senior Queensland Health Medical Officer (or delegated member) providing leadership of the Queensland Health SiteHT members and management of all non-QAS health related activities as well as provision of information to the HHS HIC. See Appendix 2 for job card.

2. Site Health Team

The SiteHT is an appropriately trained health response team, comprised of two doctors and two nurses sent to an incident site to provide patient care in support of the Queensland Health response. See Appendix 2 for job card.

Suggested Site Health Team deployment structure

The ability to deploy a SiteHC and SiteHT will vary between the HHSs and depends on the staffing and resourcing availability at response hospitals. The following are recommended as minimum capabilities.

Table 5 Suggested Site Health Team deployment structure

FACILITY	RECOMMENDED RESPONSE	
Small facilities (1-2 Doctors on staff)	No site response	Recommend these facilities retain their medical staffing at the health facility to ensure ability to provide care to incoming patients.
Medium facilities	SiteHC	Facility may be able to provide a single Doctor to perform SiteHC role but unlikely to provide full SiteHT. If a receiving facility, members should ideally be retained and SiteHT sent from alternate facilities.
Large facilities	SiteHC and SiteHT	Facility should provide a SiteHC and SiteHT. If a receiving facility, members should ideally be retained and SiteHT sent from alternate facilities.

Authority to activate and deploy a SiteHC and SiteHT

SiteHCs and SiteHTs are the HHS operational response capability to a pre-hospital scene or health facility where additional or enhanced capabilities are required.

The **HHS CE** or appointed **HIC** will make the decision to deploy a SiteHC and SiteHT to an incident scene based on information from the QAS Communications Centre.

HHSs may consider using standing delegations to the senior Emergency Department Consultant on duty or Duty Hospital Executive in key facilities to expedite the decision making process and response capability.

Triggers for SiteHC and SiteHT be activation and deployment

As a general guide, a SiteHC or a SiteHT will only be deployed if a large number of patients will remain at an incident scene for a prolonged period (> 30 minutes) and those patients require:

- a SiteHT to provide care until transport platforms are available
- a SiteHC to provide assistance with disposition decisions
- a SiteHC will generally deploy in circumstances where a SiteHT is deployed.

The decision to activate and deploy a SiteHT will be dependent on:

1. Information received from the site detailing:
 - a) the size of the incident
 - b) the location of the incident
 - c) the number of casualties
 - d) the availability of QAS local resources
 - e) transport platform requirements and availability.
2. Specific circumstances of the incident including:
 - a) the number of patients at an incident will exceed the ability to transport within usual timeframes
 - b) the type of injuries require specific or advanced skills unable to be met by first response paramedics (pre-hospital)
 - c) the time that the incident will take to clear patients vs. the time that it will take the SiteHT to arrive on site.

The decision to activate and deploy a SiteHC will be dependent on information including:

- information detailed above concerning deployment of SiteHT
- the deployment of a SiteHT to a pre-hospital scene
- the size and resourcing capabilities of a hospital
- the type of injuries and required care is beyond the capabilities or scope of the local personnel.

Actions for the SiteHC prior to arrival at the incident

1. Contact site to obtain a clear situation report (SITREP) from the QAS team or Forward Commander.
2. Establish and maintain Distal Command of the scene.
3. Complete a brief SMEACS-Q planning template to ensure clear comprehension of the incident and activities to be undertaken upon arrival.
4. Brief the SiteHT using the SMEACS-Q planning document.
5. Provide a safety briefing and ensure that team members have sufficient personal protective equipment (PPE).
6. Ensure that required equipment is collected and transported with the SiteHT.

Actions for SiteHC and SiteHT upon arrival at the incident

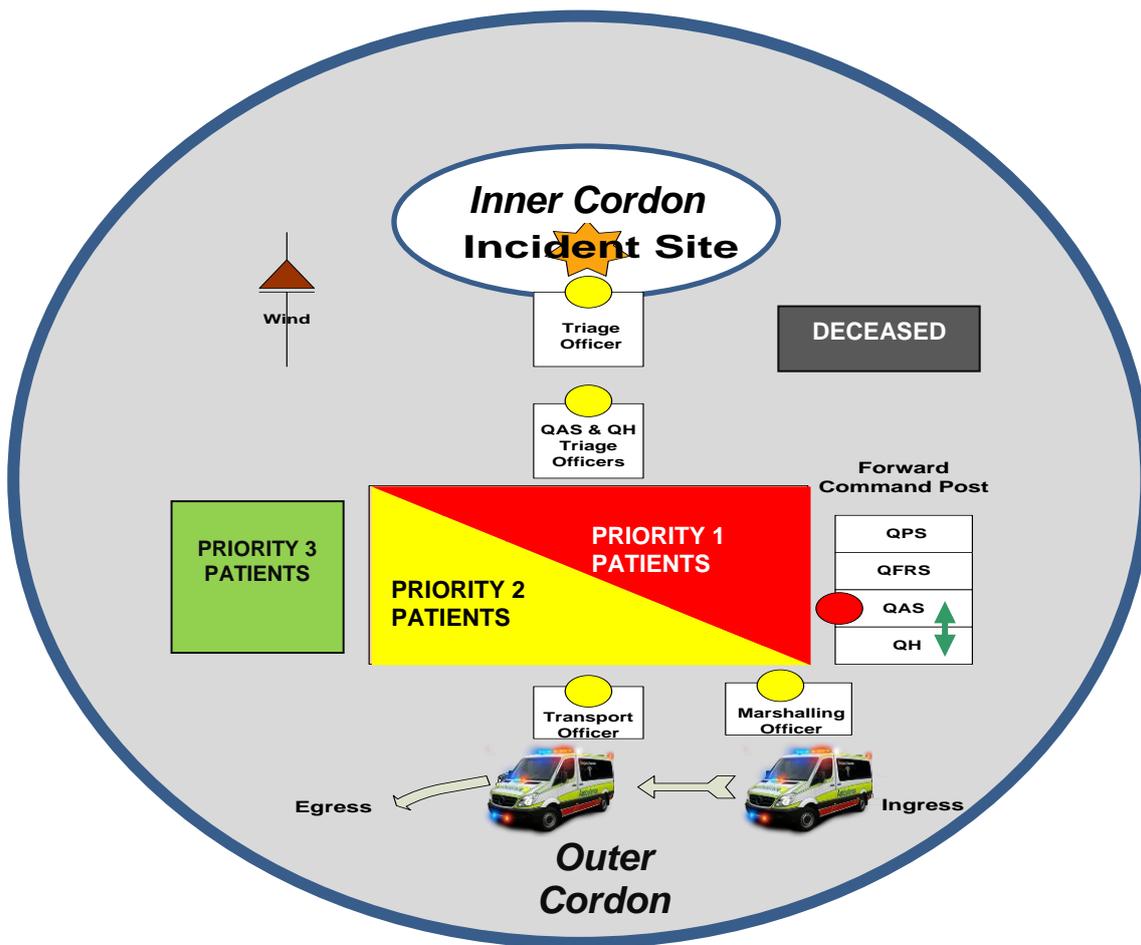
1. SiteHC to report and identify themselves to the Incident Forward Commander at the Forward Command Post. This will usually be QPS.
2. SiteHC to identify themselves to the QAS Forward Commander.
3. SiteHC to report their arrival and commencement of operations to the HHS HEOC.
4. SiteHC to provide SITREP and taskings to the SiteHT.
5. SiteHT to deploy to the casualty clearing post to support the Queensland Health overall site response.
6. SiteHC and SiteHT should not enter the inner cordon. There may be very rare circumstances where this is needed, but should only occur under the direction of the QPS Forward Commander and confirmation of safety from QFES and consultation with the HIC. If this is needed, the SiteHC and SiteHT should be escorted by the appropriate agency.

Site Organisation

Management of a pre-hospital site occurs in accordance with the standard incident command scene management arrangements and activities employed by first response functional agencies (for example, establishment of a forward command post, incident command teams, inner and outer cordons etc.).

It is important for deployed SiteHT members to be conscious of the scene management arrangements so that their actions are consistent and parallel with those of other agencies. The typical MCI site management layout is represented below.

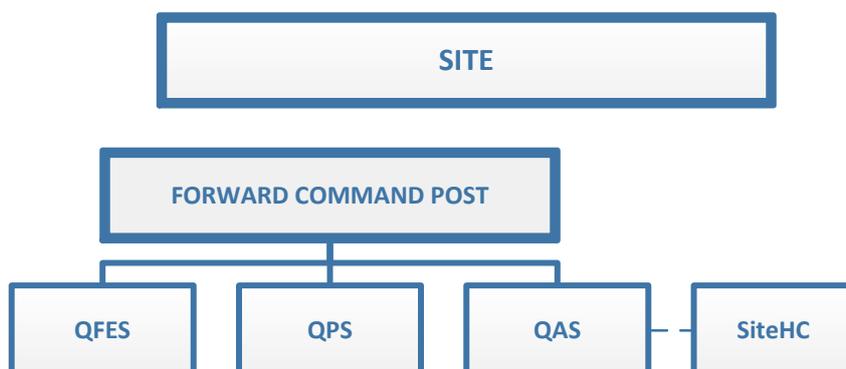
The incident site will be controlled by an inner and outer cordon, with the inner cordon established to contain the immediate incident scene, whilst the outer cordon is established to contain the relevant supporting activities, including the SiteHC and SiteHT response.



Site Reporting Structure

In a multiagency incident, QPS maintain the overall incident command (Forward Commander) responsibility with QAS or QFES at times being responsible for management of functional specific (fire, CBR etc.) incident management within the inner cordon.

A typical multiagency site reporting structure is represented below.



If a SiteHC is deployed to scene, that role liaises with QAS Forward Commander but will work predominately with the triage and transport officer to determine priorities for care and disposition from the scene. If a SiteHT is deployed, they report to the SiteHC and work in the casualty clearing post alongside QAS who are providing first response care. It would be unusual for the SiteHC to be present at the Forward Command Post.

Table 6 Key Queensland Ambulance Service Incident Site roles

PERSON	ROLE	IDENTIFICATION
Ambulance Forward Commander	Command of Ambulance resources at site Liaise with other Commanders	Red helmet and marked vest
Triage Officer	Secondary or SORT triage Movement of patients from forward area to treatment area Manage treatment area in liaison with SiteHT.	Yellow helmet and marked vest
Transport Officer	Supervise loading, movement and documentation of casualties departing the scene	Yellow helmet and marked vest
Marshalling Officer	Control of vehicles and order of progress to site	Yellow helmet and marked vest

The Ambulance Forward Commander and the SiteHC have two distinct roles but work in close partnership to deliver the Queensland Health response.

- The Ambulance Forward Commander is responsible for broader multiagency coordination and operational/resource management at the scene.
- The SiteHC assumes responsibility for ensuring the best possible provision of patient care and coordination of patient disposition plans with the HIC.

For multiple sites or complex sites, it may be necessary to appoint sector commanders to support the incident. Examples of this may be a terrorist attack or transport incident with multiple train carriages involved, or separated road access from two directions (e.g. a blocked highway). If this occurs, the SiteHC should remain at the Forward Command Post with disposition and treatment decisions decided by the SiteHT and Health sector commanders.

Role of Aeromedical Retrieval Services

Aeromedical retrieval should be considered in all MCIs.

For regional response involving greater transport times the use of fixed wing and rotary wing aircraft is essential to ensure timely transport of patients to appropriate level hospitals.

For urban response, especially in south east Queensland, the use of rotary wing aircraft should also be considered to help distribute patients across multiple Major Trauma Services (Royal Brisbane and Women’s Hospital (RBWH), Princess Alexandra Hospital (PAH), Gold Coast University Hospital (GCUH), Sunshine Coast University Hospital (SCUH) and Lady Cilento Children’s Hospital (LCCH)). This will obviously depend on the:

- numbers of patients involved in the incident and their injuries
- ability for aircraft to access the site
- availability of aircraft and crews.

The use of aeromedical aircraft and retrieval teams will be coordinated by RSQ in accordance with the RSQ Mass Casualty Incident SOP.

The primary role of a retrieval team is to transport injured patients. They should avoid assuming the role of SiteHC, even if temporary, as this removes transport capability. The retrieval team will report to the HHS SiteHC.

Site decision making

Patient disposition decisions at the site of an MCI should be based on common principles regardless of who is making them (see section 7.3 Patient disposition).

Consistent with the scalable approach to management of an MCI there may be different roles responsible for making these decisions:

- depending on the scale of the incident
- as handover to more senior personnel occurs following the initial response.

Table 7 Responsibilities for making on-site decisions

First QAS Officer on scene	<ul style="list-style-type: none"> • First QAS Officer on site assumes command. • Makes disposition decisions in conjunction with QAS Communications Centre.
QAS Forward Commander	<ul style="list-style-type: none"> • Senior QAS Officer will deploy to scene and assume Forward Commander role. • Makes disposition decisions in conjunction with QAS Communications Centre.
Site Health Commander	<ul style="list-style-type: none"> • Senior doctor deployed by HHS as QH SiteHC. • Reports to HHS HEOC to identify best placed hospitals to receive patients. • Makes disposition decisions in liaison with QAS Forward Commander <ul style="list-style-type: none"> – Match patient needs to receiving facility capacity and transport platform capability.
Retrieval Team	<ul style="list-style-type: none"> • The Retrieval Team will report to the HHS SiteHC. • If no SiteHC, should liaise with QAS Forward Commander and RSQ Medical Coordinator to make disposition decisions. <ul style="list-style-type: none"> – must prioritise roles (transport vs. care vs. site health command) with RSQ so awareness of other Retrieval Teams, or SiteHC, en-route. – should avoid assuming role of SiteHC, even if temporary, as removes transport capability.

Decision making is linked to command structures and communication processes and should be clearly understood by all parties involved in the response.

Safety

MCI sites are likely to contain a range of hazards. As a general rule SiteHC and SiteHT members are responsible for their own personal safety and are to consider their patients and other stakeholders safety at all times. Safety considerations are to be reinforced by the SiteHC prior to deployment and during deployment. SiteHC is to ensure that appropriate PPE is issued and used whilst at the incident site.

Patient triage

Triage ensures that what may be limited patient management resources are directed at the principal of achieving the greatest good for the greatest number of people. Patient triage at the scene is generally a responsibility of the QAS Triage Officer however as triage is a continuous process, more advanced re-triage (sort) may be undertaken by the SiteHT in addition to QAS. Effective triage will aim to priorities casualties into the following groups:

Table 8 Triage priorities

Priority 1 (Red)	High priority transport patients to be moved immediately to Casualty Clearing Post
Priority 2 (Yellow)	Medium priority/delayed transport to be moved to Casualty Clearing Post
Priority 3 (Green)	Patients with lesser injuries
Deceased (Black)	No treatment. Leave in place for Queensland Police or Coroner.

7.2 Patient care (casualty clearing post)

The focus of patient care within the Casualty Clearing Post (CCP) is on prioritisation of patient care needs, rapid interventions in patients with survivable injuries, stabilisation prior to transport and provision of analgesia and advanced care while awaiting availability of transport platforms.

For large or complex scenes, there may be a requirement to use more than one CCP. Establishing a CCP is the responsibility of QAS and the CCP will generally be located in a safe position away from hazards where possible.

CCP usually provides care for Priority 1 (Red) and Priority 2 (Yellow) patients. Priority 3 (Green) patients should be transferred to a facility appropriate to their need, but are less likely to need advanced care prior to transport.

Refer to Appendix 3 for a clear definition of requirements for deployable equipment.

7.3 Patient disposition

Patient disposition should be guided by knowledge of:

- number of patients
- types of injuries, especially if requiring specialised services such as burns, neurosurgery or paediatrics
- urgency of care needs (including immediate resuscitation, definitive care, futility)
- distances to health service facilities, capacity of facilities and transport platforms
- care needing to be provided en-route.

Disposition decision principles

To ensure the best outcomes of patients and the most efficient use of resources patient disposition from the scene of an MCI is based on the following principles:

- Patients should be cared for at hospitals with appropriate levels of practice:
 - Patients should go to an appropriate level hospital as the first destination:
 - those with major trauma should go to Major Trauma Services
 - those with less severe injuries to Regional Trauma Services
 - those with specific injury should go to appropriate specialist centres.
- If patients are unable to be initially transported to an appropriate facility they should not have transfer from the scene delayed but:
 - go to the next most appropriate facility
 - aeromedical retrieval be considered early and contact made with RSQ.
- The patient load should be distributed across a number of health service facilities (if possible) using a rotating distribution model to avoid overload of one hospital.
- Patients should be identified on scene who:
 - need immediate interventions prior to transport
 - have urgent definitive care needs and are priorities for transport.
- There should be provision of appropriate care en-route for patients meaning:
 - transport should occur through providers who are equipped and trained to do so (QAS and RSQ)
 - consideration of care en-route must be considered when mass transport options such as buses are utilised for large numbers of ‘walking wounded’ or Category Green patients.
- There will be ongoing acute transfer needs for QAS to meet, and acute care needs for QH facilities to meet, to support the community.
- All arrangements should integrate with ‘business as usual’ practices.
- There should be appropriate and culturally sensitive management of the deceased.

Integration with ‘business as usual’

The [QAS Clinical Practice Guidelines: Trauma/Pre-hospital trauma by-pass](#) identifies trauma patients who require transport to a Major Trauma Service, and uses three elements for the triage of trauma patients:

- vital signs
- mechanisms of injury
- patterns of injury.

[QH Clinical Services Capability Framework](#)

- Identifies self-assessed capability of hospitals across clinical service areas.

Hospital Capability

Hospital capability is defined in Appendix 4 which also includes site response capability.

Trauma

Hospitals best placed to receive acute trauma-based injuries from a MCI are those with:

- minimum Level 4 Emergency Department capability (CSCF)

- minimum Level 4 Perioperative and Anaesthetic services capability (CSCF)
- minimum Level 4 Surgical and Orthopaedic capability (CSCF)
- minimum Level 4 Intensive Care capability (CSCF).

This corresponds to a Regional Trauma Centre.

More severe trauma should go to a Major Trauma Centre, which will have Level 5 or 6 Emergency Services, Anaesthetic, Perioperative, Surgical, Orthopaedic and Intensive Care capability.

Those with minor injuries may be transported to facilities with lower level capability.

Similarly if no other facility is in transport distance patients may need to be transported to lower level hospitals but with awareness that:

- these facilities may need additional staffing support (both numbers and skill mix)
- aeromedical retrieval teams should be activated to enable secondary transfer.

Non Trauma

Patients not related to a MCI may need to bypass Major Trauma Services or Regional Trauma Services to preserve capacity at these centres and support the ongoing needs of the community. This should only be considered in the following circumstances:

- appropriate services are available at the alternative hospitals
- road transport time is less than 45 minutes by road.

Private Hospitals

As a general rule private hospitals should not be considered as a destination for transport of patients from a MCI.

Private hospitals may have considerable resources at their disposal but this will vary, just as in the public hospital system, across facilities. The role of a private hospital will be to:

- continue accepting transport of patients with existing private health cover with conditions appropriate to the facility as per normal arrangements
- be prepared to accept patients who self-evacuate and arrive at a private hospital by their own means rather than QAS.

Both of these situations are consistent with business as usual practices.

The role of a private hospital may include:

- surge support for public hospitals through transfer of other inpatient groupings such as elective surgery, medical inpatients or intensive care patients
- secondary transfer from public hospitals of surgical subspecialties with isolated injuries to preserve operative capacity.

Both of these situations would need agreement at appropriate executive level so private hospital costs are covered and would involve actions such as activation of disaster management arrangements, use of pre-existing local arrangements, or strategies such as winter bed policies.

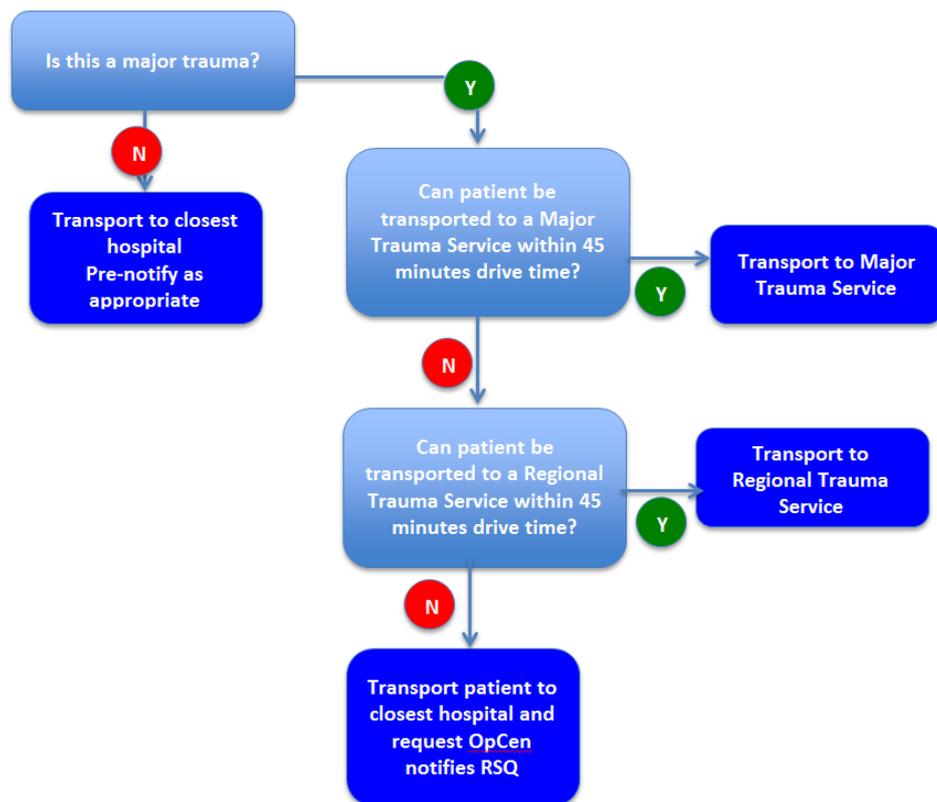


Figure 6 Disposition decision flowchart (consistent with QAS Trauma Bypass Guidelines)

Notes:

- If a Major Trauma Service is within 45 minutes road transport time it should be the referred destination if the patient fits the criteria as stated above – even if this means bypassing a Regional Trauma Service.
- As the number of patients at a scene increases the reliance on vital signs and patterns of injury becomes more important than mechanism of injury. Those patients who have normal vital signs and no significant patterns of injury may be sent to Regional Trauma Centres or lower level facilities as appropriate to better spread the workload across hospitals.
- Patients not related to the incident may need to bypass Major Trauma Services or Regional Trauma Services to preserve capacity at these centres. This will only be considered if appropriate services are available at alternative hospitals and transport time is less than 45 minutes by road.

Transporting patients directly to specialist facilities if within 45 minutes road transport time.

- Adult patients with > 20% burns should go to Royal Brisbane and Women’s Hospital (RBWH).
- Adult patients with spinal injuries with neurological deficit to Princess Alexandra Hospital (PAH).
- Children with > 10% BSA burns or complicated burns should go to Lady Cilento Children’s Hospital (LCCH).
- Patients with amputations should go to a Major Trauma Service.

7.4 Site Communications

1. Normal business – QAS road transport only



Figure 7 Site communications – normal business, QAS road transport only

During a standard QAS first response to an incident scene, the following radio and phone communication occurs:

- QAS Communications Centre receives 000 call and dispatches a paramedic crew/s
- the paramedic crew maintains communications with QAS or vice versa (SITREPs and safety checks)
- paramedic crew contacts the Emergency Department directly notifying estimated time of arrival and patient condition
- QAS Communications Centre will liaise with Emergency Department if there are communications problems with the crew at site or issues.

2. Normal business – QAS request Retrieval Team at site

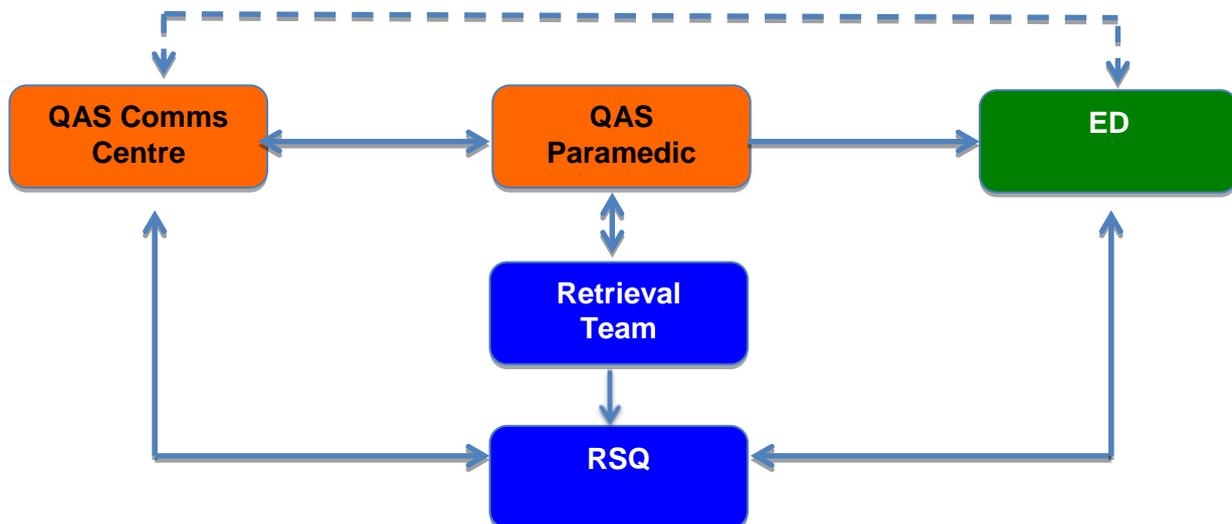


Figure 8 Site communications – normal business, QAS request Retrieval team at site

During a standard QAS first response to an incident scene where a retrieval team is requested and attends, the following radio and phone communication occurs:

- As per normal business (1) above **plus:**
 - QAS Communications Centre initially contacts RSQ for aeromedical retrieval support (considering distance and accessibility) or the paramedic crew at site request RSQ directly
 - RSQ deploy a retrieval team and liaise directly with receiving Emergency Department
 - Retrieval team at site liaise with QAS paramedics at site and provide SITREP to RSQ.

3. MCI with QAS Forward Commander: QAS road transport only

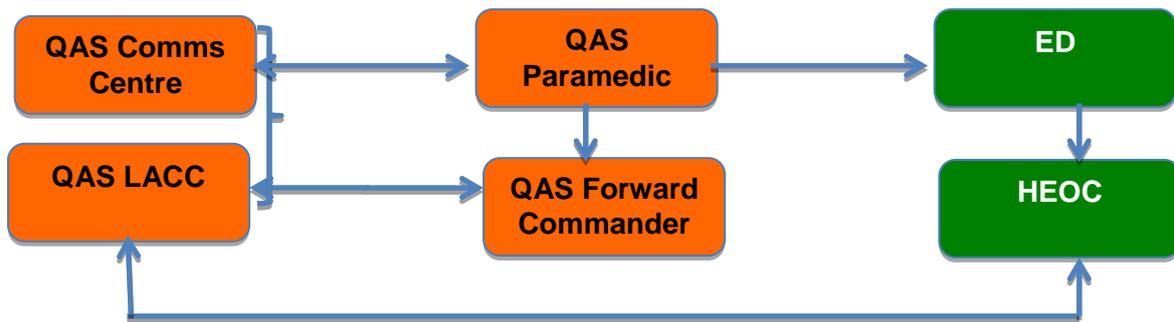


Figure 9 Site communications - MCI with QAS Forward Commander: QAS road transport only

During a standard QAS first response to a Mass Casualty Incident Scene where a QAS Forward Commander attends, the following radio and phone communication occurs:

- As per normal business (1) above **plus**:
 - QAS Local Ambulance Coordination Centre (LACC) will be established with either:
 - dedicated communications cell to monitor QAS Communications Centre, or
 - QAS Communications Centre appoints dedicated liaison officer to LACC.
 - QAS Forward Commander communicates with Communications Centre and all communications are recorded.
 - QAS LACC coordinates QAS activity through QAS Communications centre.
 - QAS LACC notifies HHS to advise that they are activated and HHS activates HEOC if necessary.
 - HEOC is established and coordinates HHS response and liaises with LACC.

4. MCI with QAS Forward Commander and Retrieval Team on site

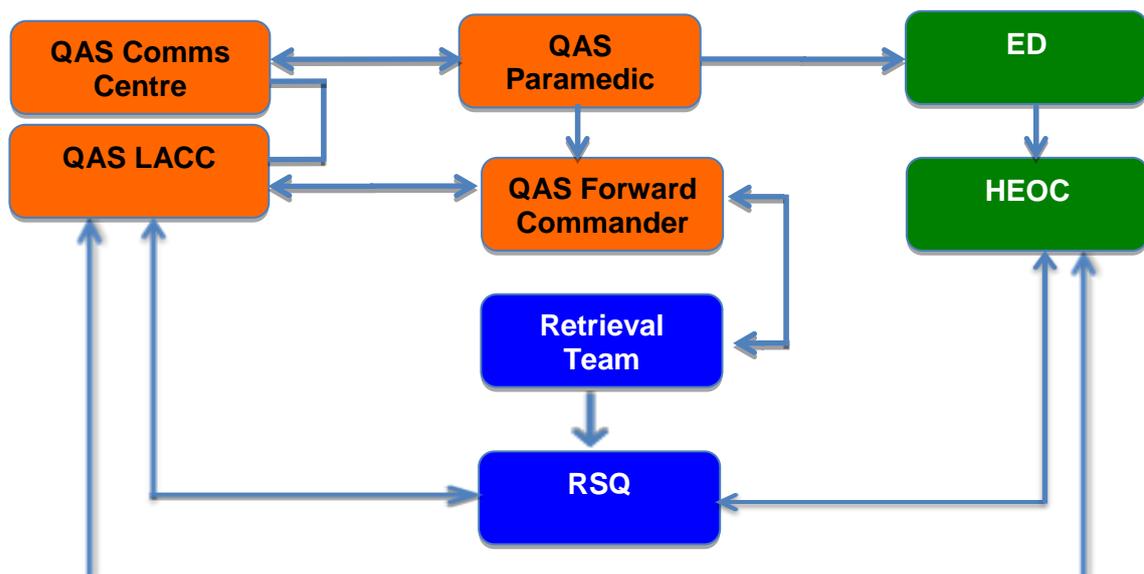


Figure 10 Site communications – MCI with QAS Forward Commander and Retrieval Team on site

During a standard QAS first response to a Mass Casualty Incident Scene where a QAS Forward Commander attends, the following radio and phone communication occurs:

- As per MCI (3) above **plus**:
 - Retrieval Team liaises with QAS Forward Commander rather than paramedic on site (retrieval team should liaise with senior QAS officer on site as per normal practice - no significant change).
 - RSQ will liaise with HEOC once established rather than Emergency Department to confirm preferred receiving facility as well as notify arrival time/s.

5. Major MCI with Site Health Team and Retrieval team

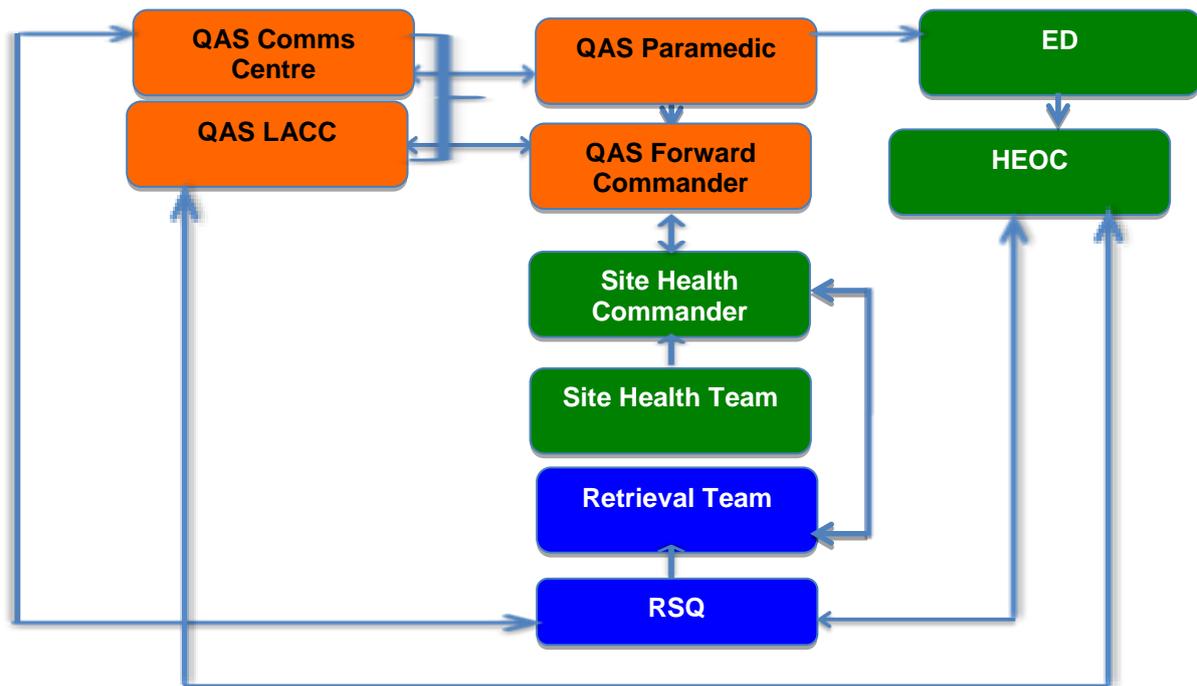


Figure 11 Site Communication – Major MCI with Site Health Team and Retrieval team

During a standard first response to a Mass Casualty Incident Scene where, QAS Forward Commander, SiteHT and a retrieval team attends, the following radio and phone communication occurs:

- As per MCI (4) above **plus**:
 - SiteHC is deployed by HHS and communicates with HEOC and provides SITREP.
 - SiteHT, if deployed, report to SiteHC.
 - SiteHC liaises with HHS HEOC to identify receiving facilities and match patients to facilities.
 - RSQ liaises with HHS HEOC to identify preferred receiving facilities and match to transport capability.
 - Retrieval Team(s) reports to SiteHC to be allocated patients to transport who are matched by transport platform to receiving facility to needs.
 - The SiteHC, the HIC and the RSQ Senior Medical Coordinator (as Queensland Health controller of all aeromedical assets and tasking) who will assume a strategic role for provision of aeromedical retrieval capability.
 - Both the SHC and RSQ SMC will liaise with appropriate national bodies if required.

7.5 Deployment of a Site Health Commander or Site Health Team to a hospital or facility

Whilst a hospital is generally responsible and capable for managing responses to a surge in patients locally, there may be instances where a smaller hospital isn't capable of managing the increased load and a SiteHC or SiteHT may also be deployed in support of that facility.

Similar governing principles for an incident scene deployment apply to a hospital or facility deployment.

Triggers for activation or deployment of a Site Health Commander

A SiteHC deployment to a hospital or facility may occur when:

- a SiteHT is deployed to a health facility
- complex disposition decisions are needed to ensure integration across a number of health districts or facilities
- to provide assistance in a health command role to regional and remote facilities so that local personnel can concentrate on provision of care.

Triggers for activation or deployment of a Site Health Team

A SiteHT deployment to a hospital or facility may occur when:

- a MCI occurs in close proximity to a smaller facility and patients have self-evacuated to the facility or the facility is being utilised as a 'triage hospital' pending patients being transported to a suitable facility
- the type of injuries and required care is beyond the capabilities or scope of the local personnel
- to provide assistance as health command to regional, rural and remote facilities so that local personnel can concentrate on provision of care.

Hospital or facility considerations

- Surge planning needs to be coordinated across not just the facility but the HHS and address 'space', 'staff', supplies' and the 'system'.
- Damage control surgery rather than definitive surgery is likely to be required.
- Experienced trauma surgeons should help determine patient selection for operating theatres.

Actions for the SiteHC prior to arrival at the hospital or facility

1. Contact site to obtain a clear SITREP from the Senior Clinician or Executive in Charge.
2. Consider establishing and maintaining command en-route if SiteHC is to take responsibility for the hospital or facility upon arrival (see command accountabilities below).
3. Complete a brief SMEACS-Q planning template to ensure clear comprehension of the tasks and activities to be undertaken upon arrival
4. Brief the SiteHT using the SMEACS-Q planning document.

5. Ensure that required equipment is collected and transported with the SiteHT.

Actions for SiteHC and SiteHT upon arrival at the hospital or facility

1. SiteHC to report and identify themselves to the senior clinician or executive in charge of the hospital.
2. SiteHC to provide SITREP and tasking to the SiteHT.
3. SiteHT to undertake roles as directed by the SiteHC.

Command accountabilities at a hospital or facility where a SiteHC or SiteHT has been deployed

The decision concerning the command structure at a facility where a SiteHC or SiteHT has been deployed will need to be determined by the Health Incident Controller and will be dependent upon the seniority and availability of staff at the facility in question.

7.6 Nationally or Internationally

A SiteHC or SiteHT will not be deployed nationally or internationally. This will be dependent on requests for assistance from the impacted state or country through the AHPPC and coordinated at a national level in consultation with the State Health Coordinator if SHECC has been activated, or the Chief Health Officer and Deputy Director-General Prevention Division (CHO & DDG) if activation of SHECC is not required. Deployment will be consistent with the national AUSMAT arrangements, see Appendix 5.

8. Management of deceased

Where fatalities occur as a result of an MCI, QPS is responsible for the investigation of the deaths on behalf of the coroner. The management and care of deceased at the scene is responsibility of the QPS Disaster Victim Identification Squad, with Queensland Health Forensic and Scientific Services (FSS) taking over the management and care of the deceased once they have been transferred to a mortuary, whether temporary (at a scene) or at a Queensland Health facility.

Guidelines for management of the deceased can be found at Appendix 6.

9. Policing and investigative requirements and responsibilities

During a multi-agency MCI response, the QPS will be the lead command and control agency at the site, responsible for the overall management of the MCI and also controlling access into and out of the site.

All MCIs will require investigation by the QPS and potentially the Australian Federal policing authorities if the event is an act of terrorism.

Similar to the scalability of Queensland Health responses to incidents detailed in Section 4, policing activities and investigations will be commenced and managed locally (within a police region) with specialist support, assistance and incident management being provided from teams and structures that are controlled centrally from Brisbane. Specialist teams may include the Hazardous Environment Examination Team, the Disaster Victim Identification Team in addition to other specialist investigative teams.

QPS may establish an area within the outer cordon to provide for the immediate or timely collection of evidence from witnesses (some of whom may also be victims) and also to provide for information sharing with family members of victims.

Ensuring the safety of affected persons will be the primary objective of QPS with a secondary objective being the collection and investigation of evidence both at the incident site and at secondary locations including receiving hospitals.

SiteHC and SiteHT are to be conscious that:

- clear identification (tabard) is worn to ensure that they can enter and remain within the outer cordon and inner cordon where required
- the environment in which they are working may form part of a broader crime scene
- patients may contain evidence internally (shrapnel from a blast) or be wearing clothing or items that will be required to be collected and kept for evidentiary purposes
- investigating police may require access to patients being triaged to gather urgent information about ongoing activities.

Receiving hospital staff are to be conscious that:

- QPS may deploy officers to the hospital to manage policing and liaison activities

- patients may contain evidence internally (shrapnel from a blast) or be wearing clothing or items that will be required to be collected and kept for evidentiary purposes
- documents and reports completed at the time of an incident may be requested and subpoenaed by police as part of the broader investigation and form evidence as part of a subsequent coronial inquiry or commission of inquiry
- documents may be subject to freedom of information requests and made available to external agencies, organisations or the public.

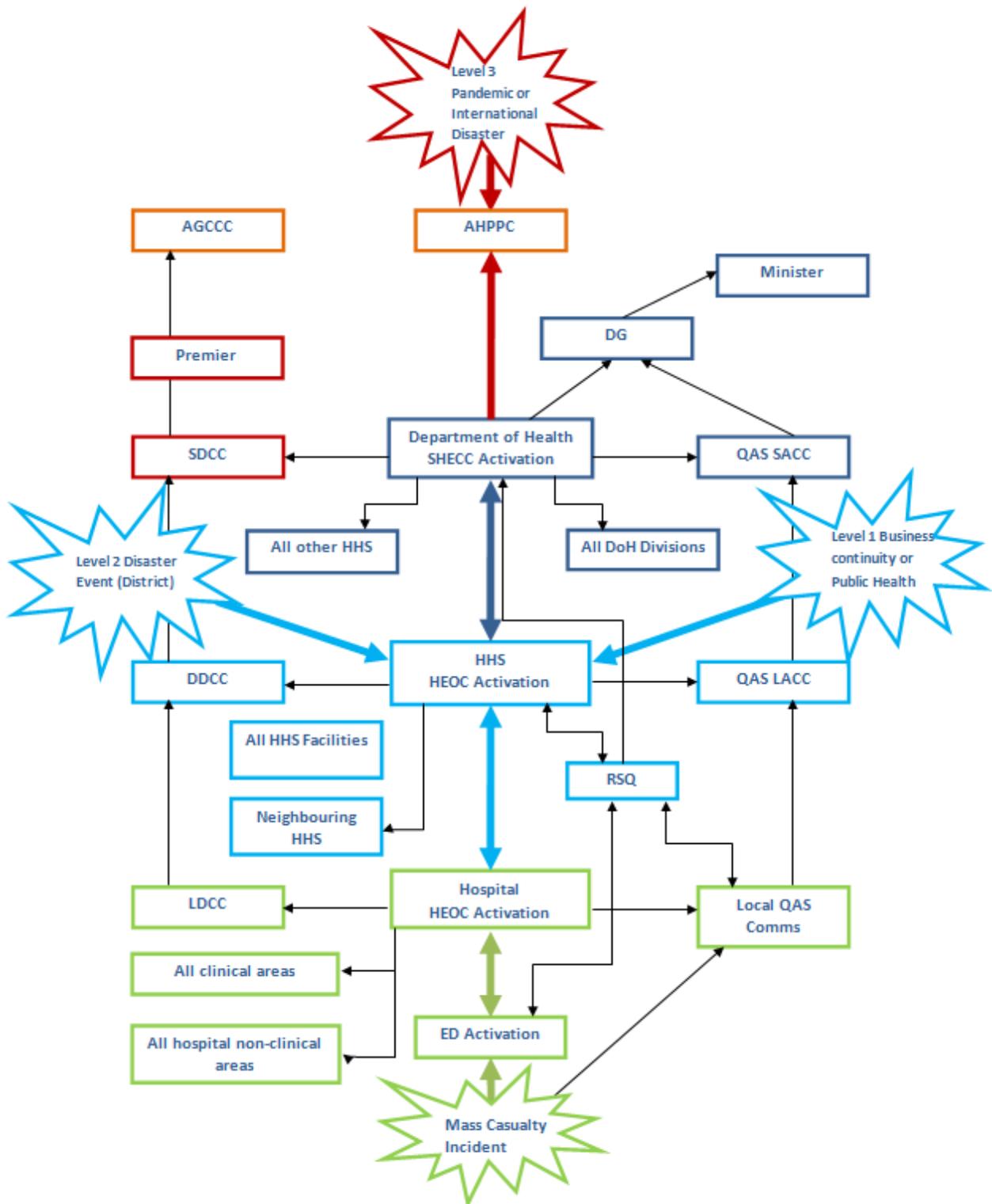
10. Debriefing standards

Post-incident debriefing should occur in line with the *Queensland Health Operational Briefing and Debriefing Guideline*.

11. Injury patterns and care

Planning needs to consider some injury patterns which will require highly specialised care only available at a limited number of centres. Refer to Appendix 5 for detail.

Appendix 1 Notification cascade



Note: Inputs for disaster and emergency incident notifications are provided as an example only, and are not an exhaustive representation.

Appendix 2 Job cards

The SiteHT is a specialist medical response team (trained in pre-hospital medicine) comprising of Doctors and Nurses sent to an incident site to provide patient care in support of the Queensland Health response.

Site Health Commander (SiteHC)

Description: The SiteHC is the Senior Queensland Health Medical Officer (or delegated member) providing leadership of the Queensland Health SiteHT members and management of all non-QAS health related activities at an incident scene or within a hospital as well as provision of information to the HHS Health Incident Controller (HIC).

Appointed by: Health Incident Controller

Reports to: HHS Health Incident Controller (HIC)
Site Police Forward Commander or Responsible Functional Commander

Training: As per the *Queensland Health Disaster and Emergency Incident Training Framework*.

Identification: SiteHC to wear a tabard marked **Site Health Commander** and a green helmet. Helmet must be worn at all times in adherence with workplace health and safety requirements.

Responsibilities:

- Command and safety of SiteHTs.
- Maintain situational awareness.
- Communication and liaison with the Ambulance Commander (AC) and other Commanders.
- Reporting back to the HIC using ETHANE format.
- Prioritisation of care at casualty clearing post with Ambulance Triage Officer.
- Transport disposition decisions (priority, platform, destination) in conjunction with HIC, AC, Ambulance Triage Officer and Ambulance Transport Officer (ATO).
 - Identification of the receiving facility will be determined by the SiteHC in consultation with HIC.
 - HIC will liaise with RSQ Medical Coordinator regarding transport platform availability.
 - Priority for transport will be determined by the SiteHC in conjunction with the AC and the ATO.
- Ensure sufficient health resources are sent to the site (via HIC).
- Check all health personnel and equipment clear of site.

Site Health Team – Doctor

Description: SiteHT Doctor is a clinician with appropriate experience and training who provides patient care at a major incident site or remote facility.

Appointed by: Health Incident Controller

Reports to: SiteHC

Training: As per the *Queensland Health Disaster and Emergency Incident Training Framework*.

Identification: SiteHT to wear a tabard marked **Site Health Team - Doctor** and a green helmet. Helmet must be worn at all times in adherence with workplace health and safety requirements.

Responsibilities:

- Provision of patient care in the casualty clearing post; during transport or at regional, rural and remote centres.
- Maintain situational awareness.
- Additional tasks as directed by the SiteHC.

Site Health Team – Nurse

Description: SiteHT Nurse is a clinician experienced and trained in pre-hospital medicine providing patient care at an incident site or remote facility.

Appointed by: Health Incident Commander

Reports to: SiteHC

Training: As per the *Queensland Health Disaster and Emergency Incident Training Framework*.

Identification: SiteHT to wear a tabard marked **Site Health Team - Nurse** and a green helmet. Helmet must be worn at all times in adherence with workplace health and safety requirements.

Responsibilities:

- Provision of patient care in the casualty clearing post; during transport or at regional, rural and remote centres.
- Maintain situational awareness.
- Additional tasks as directed by the SiteHC.

Appendix 3 Equipment cache and principles

Site Health Team equipment

The role of a SiteHT is to work in the casualty clearing post to supplement existing QAS resources and provide additional advanced care beyond the scope of what is already available.

In virtually all responses QAS will be on scene before SiteHTs and may have a number of assets already in place. Each operational vehicle contains enough equipment to provide basic treatment for 5 to 10 patients. This is expanded as other assets arrive and is summarised below.

Level	Number	Location	Equipment
QAS operational vehicle	Approximately 1400	All LASNs	5-10 patients
Supervisors car	Approximately 100-200	All LASNs	1-2 patients
Stor-It Kits	63	Spread across all LASN	15 patients
Emergency Support Units	7	Cairns, Townsville, Mackay, Rockhampton, Bundaberg, Brisbane, Toowoomba	100 patients
Equipment Trucks	3	Brisbane	500 patients

This means that the equipment taken to a scene by SiteHTs should integrate with, and supplement, the equipment used by QAS at the scene:

- key equipment needs are likely to include that used for control of haemorrhage, airway and breathing interventions; circulatory support (CABC) and analgesia
- equipment unlikely to be needed, as will be available through QAS, includes large numbers of basic dressings, combines and IV fluids
- local context and geography will determine exact requirements and collaboration is needed.

Equipment list

Critical care

The equipment list is designed to supplement existing QAS resources and is based on the assumption that SiteHTs will be working with QAS personnel in a casualty clearing post.

Equipment should also:

- be light and easy to carry to enable rapid transport to the scene
- be able to be easily identified at a scene and protected from the elements
- be included in stock inventory so it is maintained and rotated before expiry dates to ensure both economic efficiencies (avoid wastage) and efficacy of response

- assist documentation and recording of interventions
- help ensure safety of personnel (see PPE list).

The list of equipment will enable the following procedures:

Priority Area		Procedure	Specific Equipment
C	Control of haemorrhage	Compression	Crepe bandages and combines x 8
		Staple	Staplers x 2
		Haemostatic suture	Suture kit with 4 suture packs
		Tourniquet	CAT x 2
A	Airway	Basic airway	See airway bag
		Intubation	Rocuronium x 8, airway bag
		Surgical airway	Surgical airway kit
B	Breathing	Ventilation	BVM only
		Chest drains	
		Chest decompression	Surgical chest kit x 2
		Chest escharotomy	Scalpels in surgical chest kit
C	Circulatory support	Large bore IV access	14G angiocath IVs 14/16/18/20 x2 each
		IO access	IO drill
		Pump sets	IV pressure pump sets x 4
		Fluids	NS 500 ml x 4
Analgesia and procedural sedation		Ketamine	Ketamine x 4
		Narcotic analgesia	Fentanyl x 4
		Regional nerve block (femoral nerve block only)	Bupivacaine/Ropivacaine with adrenaline x 4
Personal Equipment		See kit list	

The following equipment should be obtained, where possible, from QAS personnel:

- compression bandages
- splints
- dressings
- plastic wrap for burns
- intravenous fluids.

The following equipment will not be routinely brought to a scene:

- Ventilators: these should not be included as they will consume staffing resources and impact on the ability to treat maximum numbers of those in need.
 - *The exception is an extremely remote scene with a prolonged scene time or urban environments where prolonged scene time is associated with entrapment.*
- Blood products: these should be preserved for use at receiving hospitals given the likely need for large volumes in provision of definitive care.
 - *The exception is an extremely remote scene with a prolonged scene time.*

- Ultrasound: in rare situations this may help prioritise patients for immediate transport but only if its use at a scene does not remove USS capability from a receiving facility; it is robust, portable and scene safe; and does not distract Site HTs from their primary roles of patient care and advanced triage.

Example equipment list (based on PAH)

<p>HAEMORRHAGE CONTROL</p> <p>Crepe bandage x 4 large Crepe bandage x 4 small Combine x 4 large Combine x 4 small Suture kit Suture material 4 prolene CAT x 2 Stapler x 2</p>	<p>AIRWAY and BREATHING</p> <p>Stethoscope x 1 Nasopharangeal sizes 7,8 x 2 each Safety pins x 4 Orophangeal sizes 3,4,5 x 1 each LMAs sizes 3,4,5 x 1 each ETT sizes 3,4,5,6,7,8,9 x 2 each</p> <p>Short laryngoscope handle Long laryngoscope handle MAC Blades 3 & 4 x 2 each Peep valve x 2 30ml syringe x 2 10ml syringe x 2 Trachy white tie x 2 Filter x 2 Lubricant sachets x 2 Magills forceps x 1 Suction catheters 12,14 x 2 each Batteries AA,D x 2 Yanker Suction x 2 Bougie x 2 (Frova) Nasal Prongs x 2 Surgical Airway (Size 6 ETT & disposable scalpel) BVM</p>	<p>MEDICATIONS</p> <p>MO need to collect/sign-out medications. Ketamine x 4; Fentanyl x 4; Rocuronium x 8; Lignocaine 1% x 4; Bupivacaine/Ropivacaine with adrenaline x 4</p> <p>PROCEDURES</p> <p>Sterile gloves (sizes 7,8) Scalpel x 2 (sizes 22,24) Trauma shears x 1 Spencer wells curved forceps x 2 Gauze square x 8</p>
<p>CIRCULATION</p> <p>Non sterile gloves (M,L) Goggles x 1 IV pump pressure pump set x 4 14 GA Angiocath x 1 IO drill N/S 500ml x 4 bags N/S 10mls x 4 ampoules Tegaderm x 4 Tourniquet x 2 Hypofix - roll Bungs x 4 Sharps bin small x 1 IVC size (auto guards) 14 Ga x 2 16 Ga x 2 18 Ga x 2 20 Ga x 2 22 Ga x 2 3 way tap x 1</p>	<p>SURGICAL CHEST KIT x 2</p> <p>ETT's size 8 Bougie (Frova) Spencer wells curved forceps Scalpel Heimlich Valve (Cook emergency Pneumothorax set)</p>	<p>MISCELLANEOUS</p> <p>Personal PPE Hand sanitiser Cotton long sleeve shirt and pants Pen/ black marker/ notepad Clipboard/ paperwork</p>

Personal protective equipment

The safety of SiteHC and SiteHT must be ensured. The PPE used by SiteHCs and SiteHTs must be consistent with that used by QAS, given the shared workspace, and need to conform to existing workplace health and safety guidelines.

This means the following should be used:

- Helmet: Green
- Tabard: 'Hi vis' yellow with role description stated. It is recommended that removable role statements are used to provide flexibility
 - Site Health Commander
 - Site Health Team – Doctor
 - Site Health Team – Nurse
 - Retrieval Team – Doctor
 - Retrieval Team – Nurse
- Enclosed footwear
- Long sleeve shirts
- Long sleeve trousers
- Gloves
- Aerosol masks

Appendix 4 Hospital Trauma Services, CSCF classification and site response capability

HHS	Facility	Trauma Service	Site Health Commander	Site Health Team (2 Doctors and 2 Nurses)
Cape & Torres	Thursday Island	-	Yes	Yes
	Bamaga	-	N	N
	Weipa	-	Yes	N
Cairns & Hinterland	Cooktown	-	Yes	N
	Cairns	Regional	Yes	Yes
	Mossman	-	N	N
	Gordonvale	-	N	N
	Babinda	-	N	N
	Innisfail	-	Yes	N
	Tully	-	N	N
	Mareeba	-	N	N
	Atherton	-	Yes	N
	Herberton	-	N	N
	Georgetown	-	N	N
	Croydon	-	N	N
	Forsyth	-	N	N
North West	Mount Isa	Regional	Yes	Yes
	Mornington island	-	N	N
	Doomadgee	-	N	N
	Normanton	-	N	N
	Cloncurry	-	N	N
	Julia Creek	-	N	N
Townsville	Townsville	Major	Yes	Yes
	Ingham	-	Yes	N
	Charters Towers	-	Yes	N
	Ayr	-	Yes	N
	Home Hill	-	N	N
	Richmond	-	N	N
	Hughenden	-	N	N
Mackay	Mackay	Regional	Yes	Yes
	Bowen	-	N	N
	Proserpine	-	Yes	N
	Collinsville	-	N	N
	Sarina	-	N	N
	Moranbah	-	N	N
	Dysart	-	N	N
	Clermont	-	N	N
Central Queensland	Rockhampton	Regional	Yes	Yes
	Emerald	-	Yes	N
	Blackwater	-	N	N
	Springsure	-	N	N
	Woorabinda	-	N	N
	Baralaba	-	N	N
	Mount Morgan	-	N	N
	Gladstone	-	Yes	N
	Biloela	-	N	N
	Moura	-	N	N
	Theodore	-	N	N
Central West	Longreach	-	Yes	Yes
	Winton	-	N	N
	Aramac	-	N	N
	Barcaldine	-	N	N
	Blackall	-	N	N
	Alpha	-	N	N
Wide Bay	Bundaberg	Regional	Yes	Yes
	Gin Gin	-	N	N
	Childers	-	N	N
	Monto	-	N	N
	Eidsvold	-	N	N

	Mundubbera	-	N	N
	Gayndah	-	N	N
	Biggenden	-	N	N
	Hervey Bay	Regional	Yes	N
	Maryborough	-	N	N
South West	Roma	-	Yes	Yes
	Mitchell	-	N	N
	Injune	-	N	N
	Quilpie	-	N	N
	Thargomindah	-	N	N
	Cunnamulla	-	N	N
	Dirranbandi	-	N	N
	St George	-	N	N
	Surat	-	N	N
	Charleville	-	Yes	N
Darling Downs	Toowoomba	Regional	Yes	Yes
	Goondiwindi	-	N	N
	Inglewood	-	N	N
	Texas	-	N	N
	Millmerran	-	N	N
	Tara	-	N	N
	Dalby	-	Yes	N
	Miles	-	N	N
	Chinchilla	-	N	N
	Wandoan	-	N	N
	Jandowae	-	N	N
	Murgon	-	N	N
	Wondai	-	N	N
	Cherbourg	-	N	N
	Kingaroy	-	Yes	N
	Nanango	-	N	N
	Oakey	-	N	N
	Warwick	-	Yes	N
	Stanthorpe	-	N	N
West Moreton	Ipswich	Regional	Yes	Yes
	Esk	-	N	N
	Gatton	-	N	N
	Laidley	-	N	N
	Boonah	-	N	N
Gold Coast	Gold Coast	Major	Yes	Yes
	Robina	-	N	N
Sunshine Coast	Sunshine Coast	Major * (from 2017)	Yes * (from 2017)	Yes * (from 2017)
	Nambour	Regional ** (not after 2017)	Yes ** (not after 2017)	Yes ** (not after 2017)
	Caloundra	-	N	N
	Maleny	-	N	N
	Gympie	-	Yes	N
Metro North	Royal Brisbane	Major	Yes	Yes + Burns
	Prince Charles	-	Yes	Yes
	Caboolture	-	Yes	N
	Redcliffe	Regional	Yes	N
	Kilcoy	-	N	N
Metro South	Princess Alexandra	Major	Yes	Yes
	Mater	-	N	N
	QE2	-	N	N
	Wynnum	-	N	N
	Redland	-	N	N
	Beaudesert	-	N	N
	Logan	Regional	Yes	Yes
Childrens Health Qld	Lady Cilento	Major	Yes	Yes

Note: The Sunshine Coast University Hospital (SCUH) once open in 2017 will be a Major Trauma Service. Once the SCUH opens the Nambour Hospital will NOT be either a designated trauma service or able to provide a SiteHC or SiteHT.

Queensland Health Capability Mapping

Hospital and Health Services, Queensland Health by Recognised Public Hospitals and Primary Health Centres



Prepared by: Statistical Reporting and Coordination, Health Statistics Branch, 29 January 2015
Hospital and Health Services by recognised public hospitals and primary health centres as at 29 November 2014

-  Major Trauma Service
-  Regional Trauma Service
-  Able to provide Site Health Commander and Site Health Team
-  Able to provide Site Health Commander
-  QAS ESU location
-  QAS Major Incident Truck location (may also be prepositioned)

Appendix 5 Injury patterns and care

Planning needs to consider some injury patterns which will require highly specialised care only available at a limited number of centres.

These include injury types or patient groupings such as:

- Neurosurgical injuries
- Burns (see below for further detail)
- Crush injuries
- Blast injuries
- Injuries for high velocity weapons
- Paediatrics (see below for further detail).

While some of these are described in more detail below, the following apply to all MCIs with these injury patterns requiring specialised care:

1. Early notice is important.
2. Recognition of an MCI involving these injuries means:
 - a) contact with appropriate State-wide Clinical Lead and determination of current capacity
 - b) consider activation of QHDISPLAN and this plan
 - c) appointment of a Senior Clinician to act as Expert Clinical Advisor to SHECC
 - d) consider activation of appropriate Annex of AUSTRUMA Plan to facilitate interstate transfer.
3. Specific operational considerations include:
 - a) Consider the need to deploy an advance team or senior clinician to the site or initial receiving centre to assist early specialist management, triage and disposition decisions.
 - b) If patients are unable to be transported initially to a specialist centre, they should ideally be collocated at appropriate local facilities prior to secondary transfer. This aids recognition, referral and assisted care of these patients.
 - c) Transport of large numbers of patients by air may also be needed and use of the mass transport may need to be considered (see below for further detail).
 - d) Large numbers of burns victims (particularly for international incidents) may also entail deployment of an AUSMAT with specialist capabilities.

Mass burn casualties

Need and influencing factors

- Burns injuries require specialised care only available in a limited number of centres and this capacity may easily be overwhelmed.
- It is essential to establish, as early as possible whether the Burns Annex of the AUSTRAMA Plan should be activated and, if possible, before patients have been moved.

Usual resources and referral patterns

Existing burns centres are located in the Royal Brisbane and Women's Hospital (RBWH) and the Lady Cilento Children's Hospital (LCCH). Limited burns capacity is also available in The Townsville Hospital (TTH) (burns to approximately 20-30%) and regional trauma centres for minor burns.

Usual criteria for referral to a burns centre are:

- burns greater than 10% total burn surface area (TBSA)
- burns greater than 5% TBSA in children
- full thickness burns greater than 5% TBSA
- burns to special areas such as hands, face, feet, perineum, major joints
- circumferential limb or chest burns
- burns with inhalational injury
- electrical burns or chemical burns
- burns with pre-existing illness
- burns associated with major trauma
- burns at the extremes of ages (children and the elderly)
- non accidental injury.

Specific considerations and actions

- Early notice is important.
- Recognition of an MCI involving burns injuries means:
 - contact with Burns Consultant at RBWH and determination of current burns capacity
 - consider activation of QHDISPLAN and relevant MCI plan
 - appointment of a Senior Burns Clinician to act as Expert Clinical Advisor to SHECC
 - consider activation of Burns Annex of AUSTRAMA Plan to facilitate transfer.

Specific operational considerations include:

- Consider the need to deploy an advance burns team or burns clinician to the site or initial receiving centre to assist burns triage and disposition decisions.
- All burns patients fitting usual criteria should go to a burns centre for care.

- If patients are unable to be transported initially to a burns centre, they should all go to a single centre rather than being dispersed. This aids recognition, referral and assisted care.
- Transport of large numbers of patients by air may also be needed and use of the Mass Transport may need to be considered (see below for further detail).
- Large numbers of burns victims (particularly for international incidents) may also entail deployment of an AUSMAT with burns capabilities (see below for further detail).

Mass paediatric casualties

Need and influencing factors

Mass casualty events may involve large numbers of paediatric casualties. This may be in conjunction with adult patients or as an isolated event (e.g. school incident). These may also be as a result of communicable disease incidents (e.g. at school camps). Paediatric casualties require specialised care that is only available in a limited number of centres which may be overwhelmed.

Usual resources

- To optimise patient outcomes all efforts should be made to provide care for paediatric patients in facilities that are accustomed with provision of acute paediatric care. This is particularly important for patients requiring operative intervention, artificial ventilation or intensive care unit support.
- Paediatric surgery and ICU capability is located in Brisbane (LCCH) and Townsville (TTH).
- Other centres may be able to offer limited surgical capability or short term ICU support.

Additional/alternative resources

The expertise required to deal with mass paediatric casualties may be different from those in a conventional casualty event. Specific aspects to consider include:

- clinicians skilled in acute paediatric care (eg trauma, burns, communicable disease)
- equipment used in care of paediatric patients (monitoring, resuscitation, beds/cots, etc.)
- human social support such as:
 - minimising risk of separation of children from parents and pursue reunification
 - support for psychological impact of care of acute paediatric casualties on health staff.

Transportation issues

The default position should be the care of patients at the facility where they present, with consideration of the resources of that facility.

Where specialised care is needed (e.g. intensive care for patients requiring artificial ventilation or surgery) appropriate mechanisms should be in place for the safe transportation of these patients including consideration of the ability to secure paediatric patients and provide care en-route.

Specific considerations and actions

- early notice is important.
- recognition of an MCI involving large numbers of paediatric patients means:
 - consider activation of QHDISPLAN and relevant MCI plan
 - appointment of a senior clinician experienced in acute paediatrics as Expert Clinical Advisor to SHECC.
- Specific operational considerations include:
 - the need to deploy an advance team to the site or initial receiving centre to assist paediatric triage and disposition decisions
 - early human social support for reunification and support for both families and staff
 - transport of large numbers of patients by air need the mass transport (see below for further detail).

Mass transport

Need and influencing factors

Following a MCI, there may be large numbers of patients requiring transport. The number of patients requiring transport may exceed the capacity of available transport platforms.

This is especially likely to occur with:

- large MCI
- MCI occurring in regional or remote locations
- MCI with large numbers of patients requiring specialised care (eg burns).

The following factors will also determine the urgency of transport requirements:

- severity of illness/injury and urgency of treatment needs
- weather conditions, geography and local risks
- ability to provide appropriate levels of care 'on scene' by deployment of site medical teams or AUSMAT
- ability to stage patients at nearby facilities.

Usual resources

All efforts should be made to transport patients using usual platforms and usual staffing. This includes:

- road ambulances (QAS)
- medically configured aircraft (fixed wing and rotary wing) provided by recognised or contracted services with tasking clinically coordinated by RSQ.

Additional/Alternative Resources

Additional transport resources may be accessed by the HIC or SHC through liaison with:

- QPS and LDMG/DDMG to source alternative means of transport for those patients with:
 - less serious injuries (e.g. buses)

- special transport needs (e.g. ferries)
- QAS regarding use of additional road ambulances from other districts.

Aeromedical support

Transport of large numbers of patients by air may be required and needs special consideration. In these circumstances the RSQ Senior Medical Coordinator will assume a strategic role for provision of aeromedical retrieval capability. They will:

- contact the local Health Incident Controller and CHO & DDG to discuss activation of a state-based response
- review aeromedical transport tasking and availability of both platforms and crews
- act as Queensland Health controller of all aeromedical assets and tasking if appointed by SHC (and act as expert clinical advisor to SHECC in this role)
- ensure participation of RSQ in the Aviation Cell if the SDCC is activated
- liaise with the Australian Mass Transport Coordination Group if required.

Australian Medical Assistance Team (AUSMAT) deployment

Introduction

- AUSMAT is a disaster medical assistance team capable of deployment locally, nationally or overseas depending on the type of incident.
- AUSMAT uses a modular structure consistent with the AUSMAT National Manual endorsed by the AHPPC and international guidelines and is capable of a scalable response consisting of both an immediate response including needs assessment and a later response tailored to the needs of the affected community.
- AUSMAT consists of a mix of health professionals, including doctors, nurses, allied health and paramedics, and non-medical members such as logisticians that supplement the local response which has been overwhelmed or rendered inoperable due to the incident.
- The team may be self-sufficient supplying its own shelter, power, food, water, medical supplies and communications.

Requests for activation of AUSMAT

Requests for activation of AUSMAT may occur in two ways:

Intra State:

- Requests for assistance from disaster affected HHS. This will usually occur from the HIC of the affected HHS to the SHC in SHECC.

Inter State or Internationally:

- Requests for assistance from disaster affected jurisdictions (states or territories). This will usually occur via the AHPPC to the CHO & DDG.
- Requests for assistance from disaster affected nations. This will usually occur via DFAT with final requests for assistance made via the AHPPC to the CHO & DDG .

Requests for Activation of AUSMAT

Once a request for activation of AUSMAT has been received:

- The CHO & DDG provides details of the tasking request to the AUSMAT Coordination Officer, who coordinates team membership based on the appropriate deployment structure and consistent with the National AUSMAT Manual.
- The AUSMAT Coordination Officer will remain within SHECC for the duration of deployment as an expert clinical advisor.
- The actual logistics of activation and deployment will occur through the SHECC in association with the National Incident Room and Emergency Management Australia.

Appendix 6 Management of the deceased

Multiple deceased from incidents in Queensland are generally transferred to the mortuary at Queensland Health Forensic and Scientific Services (FSS) at Coopers Plains, Brisbane (formerly John Tonge Centre) for coronial autopsy and identification. This is consistent with the disaster sub-plans of FSS and Health Support Queensland (HSQ).

FSS should be alerted to an incident involving multiple deceased via the Executive Director, Chief Forensic Pathologist, the forensic pathologist on call, Managing Scientist in Coronial Services, or Mortuary Manager. The roster for the forensic pathologist on call is widely distributed and includes mobile numbers. In practice, the alert is usually received via a police officer. Whoever at FSS receives the alert should advise all other relevant FSS staff (e.g. Senior Coronial Counsellor, forensic dentist, Managing Scientist in DNA Analysis).

The nearest regional hospital mortuary should also be alerted in case of (1) to (6) below.

Multiple deaths occur in various settings (e.g. flood, aircraft accident, explosion) but are always “reportable” to the coroner under the *Coroners Act 2003*. The QPS manages and investigates the incident and the deaths for the coroner. FSS provides specialist services to the coroner, QPS, the Australian Defence Force, other agencies and the community. The State Coroner generally takes control in such incidents.

The FSS mortuary has an initial capacity for c. 60-70 deceased (varying with workloads). If required, FSS can install shelving in an existing cold room, providing capacity for an additional 30-40 deceased within 24-48 hours. FSS has an arrangement with the Department of Housing and Public Works to establish further temporary storage facilities for multiple deaths (e.g. refrigerated containers), either on site or at an alternate location (see below). Emergency procurement and construction can occur while QPS document the scene and transfer deceased.

In some situations, FSS staff may determine that body storage and/or autopsies will be conducted at an alternate location (e.g. FSS compromised or inaccessible, unduly large numbers of deceased, autopsies hazardous due to a chemical, biological, radiological, incendiary or explosive (CBRIE) incident, as below).

Other FSS services include autopsy facilities, liaison with families of the missing, coronial counselling, forensic Computed Tomography (CT) scanning, forensic testing (e.g. toxicology) and specialist identification, particularly forensic dentistry and DNA analysis. FSS pathologists, scientists or dentists may attend the incident scene, if practicable and likely to assist. Involvement of coronial counsellors is restricted to families bereaved by a “reportable death”.

If an incident is likely to exceed the capacity of FSS staff, the Executive Director of FSS, Chief Forensic Pathologist or Managing Scientist in Coronial Services should seek interstate (or overseas) help, aided by Health Disaster Management Unit or the SHECC where activated.

Regional hospital mortuaries may be involved in multi-fatality incidents as follows:

1. storage and autopsies in small straightforward incidents
2. temporary storage of small numbers of deceased in transit to FSS
3. temporary storage of victims who die in hospital, pending transfer to FSS
4. storage of incident deaths if transfer to FSS is delayed (e.g. roads cut)
5. storage of **all** deceased if funerals disrupted and delayed (e.g. by floods)
6. viewings of deceased for both identification and humanitarian purposes.

Hospitals are responsible for managing mortuary infrastructure, including cold storage, and are advised to develop contingency plans for additional cold storage in the event of (4) or (5) above. Options include arrangements with local funeral directors and hiring a refrigerated container. FSS staff can provide advice as required.

CBRIE incidents

Advice and assistance in the emergency response to CBRIE incidents (i.e. chemical, biological, radiological, incendiary and explosive incidents) should be sought through the QFES Scientific Section. FSS may also be able to provide advice and assistance in some CBRIE incidents, principally via managing or other senior scientists in communicable diseases, chemistry or radiation physics. Where a CBRIE incident involves multiple deceased, FSS will seek advice on how to conduct autopsies. Safety considerations may dictate the extent of autopsies and where they can be conducted.

Preservation of evidence for forensic investigations and identification

In a criminal incident (e.g. bombing), QPS may require trace evidence from both living victims and deceased or their clothing (e.g. explosive residues). Also, clothing, jewellery and personal effects, if reliably linked to a particular deceased, may play a vital role in identification. Hospital staff should be aware of the potential importance of preserving the above material and seek police advice appropriate to the incident in question.

Information about Disaster Victim Identification

FSS and QPS follow internationally agreed disaster victim identification procedures described in the Guide on the Interpol website (see <http://www.interpol.int/INTERPOL-expertise/Forensics/DVI>).

Phase 1: The deceased people are recovered from the incident scene by QPS, aided by FSS where appropriate.

Phase 2: Pathologists conduct coronial autopsies at FSS, including forensic dentistry. In many disasters, autopsies focus solely on documentation of identifying features.

Phase 3: QPS officers gather “ante-mortem” data from the families of the missing, assisted by FSS coronial counsellors or dentists where appropriate. Without ante-mortem data, dental records and DNA reference samples, identification is impossible.

Phase 4: Reconciliation involves matching data from phases 2 and 3. The coroner must approve identification proposed by QPS officers, pathologists and dentists.

Disaster victim identification is more straightforward in closed disasters, where those missing are well documented (e.g. aircraft passenger list), than in open disasters where the missing are initially unknown.

Advice to families, briefings and media releases

It is usual for bereaved families and the media to press for the identification and release of the victims for funeral services. Unfortunately, it is not widely appreciated that:

- deceased victims are often unrecognisable due to the effects of injury, decomposition or fire
- identification may take weeks or even months to accomplish due, for example, to the scale of the incident, the need to obtain ante-mortem material or the technical difficulties of DNA analysis
- only the coroner can authorise release.

Senior FSS officers mitigate these problems through departmental briefings and, where appropriate, media releases. Coronial counsellors seek to ensure that families are kept informed throughout the process with accurate factual information.

Abbreviations

AC	Ambulance Commander
AHPPC	Australian Health Protection Principal Committee
AIIMS	Australasian Inter-service Incident Management System
ATO	Ambulance Transport Officer
CBRIE	Chemical, Biological, Radiological, Incendiary, Explosive
CE	Chief Executive
CHO & DDG	Chief Health Officer and Deputy-Director General Prevention Division
DDCC	District Disaster Coordination Centre
DDMG	District Disaster Management Group
DG	Director-General
DVI	Disaster Victim Identification
FSS	Forensic and Scientific Services
HEOC	Health Emergency Operations Centre
HHS	Hospital and Health Service
HIC	Health Incident Controller
IMT	Incident Management Team
LACC	Local Ambulance Coordination Centre
LDMG	Local Disaster Management Group
MCI	Mass Casualty Incident
MTS	Major Trauma Service
QAS	Queensland Ambulance Service
QDMC	Queensland Disaster Management Committee
QFES	Queensland Fire and Emergency Services
QHDISPLAN	Queensland Health Disaster Plan
QHMCi-PLAN	Queensland Health Mass Casualty Incident Plan
QPS	Queensland Police Service
RTS	Regional Trauma Service
RSQ	Retrieval Services Queensland
SACC	State Ambulance Coordination Centre
SDCC	State Disaster Coordination Centre
SDCG	State Disaster Coordination Group
SHC	State Health Coordinator
SHECC	State Health Emergency Coordination Centre
SiteHC	Site Health Commander
SiteHT	Site Health Team
SITREP	Situation Report
SMEACS-Q	Situation, Mission, Execution, Administration, Communications, Safety, Questions
SMID	State Major Incident and Disaster Plan

