

AMPLANZ Part 2:

Consistent Operations at the Scene

For all Ambulance Services staff working directly at or with the scene

September 2016

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Part 2: Consistent Operations at the Scene

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1.0 Introduction

AMPLANZ is divided into four parts plus an overview document. This is Part 2 and focuses on the activities to be undertaken by responding crews, the duty management, the CCCS and those operational officers directly involved at the scene, in coordination with other responding agencies.

This document should be read in conjunction with Part 1: Introduction to AMPLANZ and Emergency Management for the Ambulance Sector.

Appendix 1 has a Glossary of Terms and Abbreviations.

2.0 Readiness and Reduction

2.1 Planning and development

The Ambulance Service is responsible for the development and maintenance of:

- Relationships with other emergency services, including the DHBs, civil defence and key public and private sector agencies that may require an ambulance major incident response or will impact an ambulance response
- Business Continuity Management will be integrated into the service; from station level through to core support departments, such as IT or Finance
- Risk analysis processes in their area to ensure priority operational risks are mitigated
- Predetermined or tactical response plans including their integration with other emergency services and partner agencies. This will include the timely communication of these plans from the CCCS to responding ambulance officers and management
- The provision of appropriate and consistent equipment and materials required for responding to a major incident. These will be in the form of kits and caches of materials and equipment.

It is also an Ambulance Service responsibility to develop its own exercises and / or to take part in multi-agency exercises that clearly test aspects of the service's major incident response procedures and plans and enables review and learning to be reflected in modifications of these procedures. See Part 3 Section 2 for further details.

2.2 Training and education

All operational ambulance staff shall have a basic level of emergency management training from their primary qualifications. To further enhance an Ambulance Service emergency response, ambulance officers and managers shall have the appropriate level of training for the role they may be required to undertake at the scene of a major incident. Such training should include, but is not limited to:

- All emergency ambulance staff and CCCS staff to

complete CIMS 2 training, with refresher training every five years

- All ambulance operations managers, CCCS managers and relief managers to complete CIMS 4 training with refresher training every five years
- Senior ambulance managers and officers (District Operations Managers, Territory Managers etc.) who will be required to fill Ambulance Commander or Operations Manager roles to complete 'Ambulance Critical Incident Management' training or similar (to be developed)
- Emergency Management Continuing Clinical Education Modules for ambulance officers shall be developed and maintained to develop skills and competencies in key aspects of the Ambulance Service major incident readiness and response
- Ambulance and Communications staff effectively practice their skills in ambulance and multi-agency major incident or emergency exercises
- Operational Staff who are required to undertake Specialist Operations will receive appropriate specific training. There shall be a national alignment, in conjunction with partner agencies, to ensure consistent training in all specialist areas.

Training needs analysis is required to further enhance the appropriateness of emergency management training and education within an Ambulance Service.

Training and education in emergency management for Ambulance Services shall also align appropriately with competency frameworks and guidelines of other emergency service partners, as well as with Civil Defence and Emergency Management Agencies.

3.0 Response

3.1 Activations, Level of Response¹, and Notifications

This section outlines the Ambulance activation mechanisms and levels of response required for an incident in the community that may require escalation to the national level.

The aim is to ensure that every major incident is managed appropriately as early as possible in the response. This will improve patient outcomes and will ensure that the responding ambulance officers are supported quickly and effectively.

The classification of the type of incident is essential to ensure that appropriate activations and notifications occur. Once an incident has been classified it triggers certain actions that must be taken by the affected Ambulance Service. This will enable quick decision-making to determine the level of coordination required.

¹This section draws on Ambulance Victoria (AV) Emergency Response Plan 2009. AV's generous support is acknowledged.

The major variables that govern the type of response from an Ambulance Service include:

- Time to respond to the incident (travel, triage, treat and transport)
- The complexity of the incident
- The number of patients.

There are four levels of response:

- Normal Operations
- Level 1: medium impact on normal operations
- Level 2: high impact on normal operations
- Level 3: severe impact on normal operations.

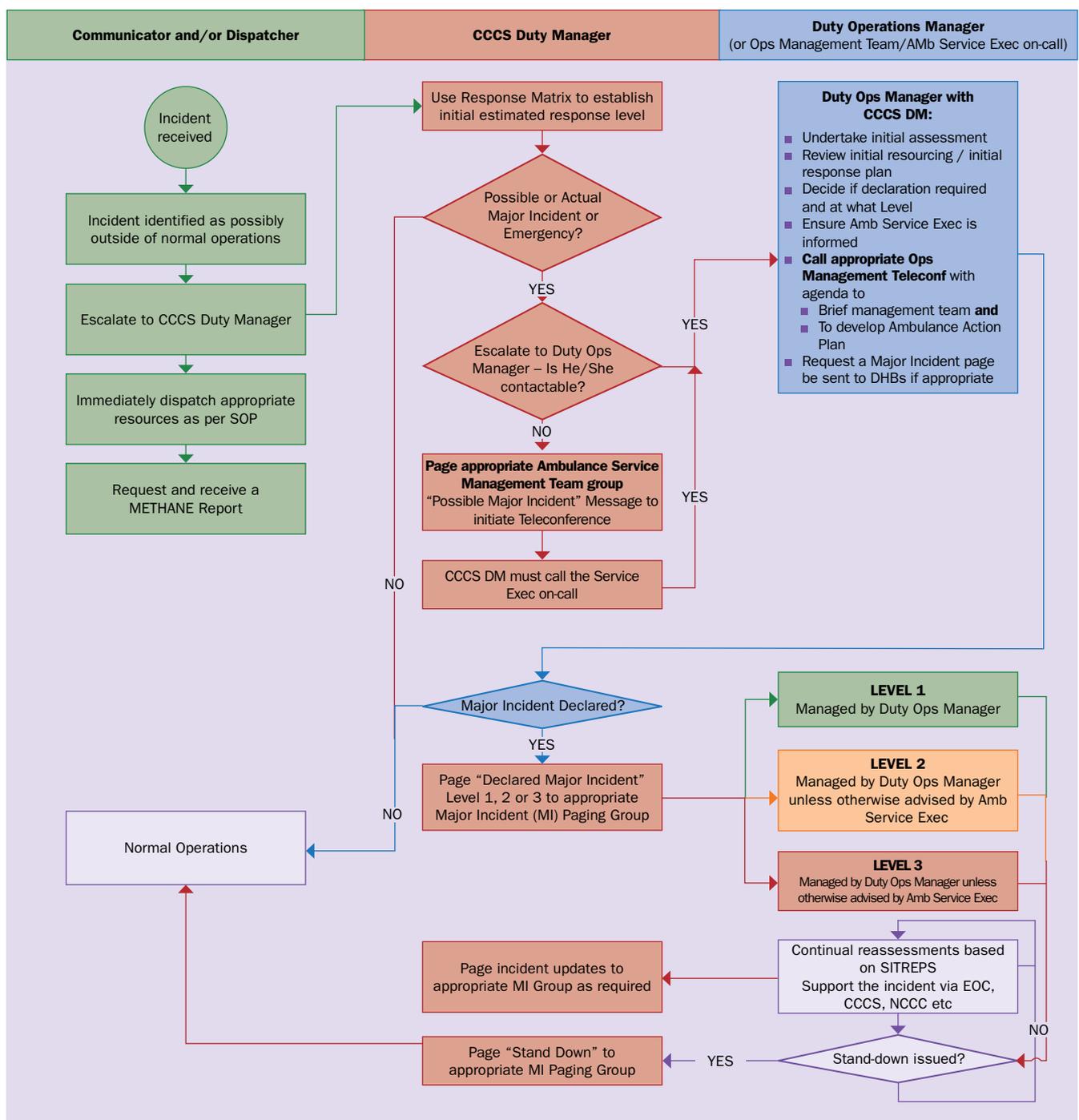
To allow the identification of correct response levels, two tools have been developed:

- An Escalation Flow Chart that notes the actions of all ambulance parties in the initial escalation
- A Response Matrix to be used by the CCCS.

3.1.1 Escalation

The Escalation Flow Chart – Figure 1 – provides an overview of the actions by the CCCS and the Ambulance Duty Operational Manager² in the initial stages of a major incident. This outlines when to use the Response Matrix and the initial assessment, as well as clearly defining the actions to be undertaken by the CCCS and Duty Manager, based on the level of incident.

Figure 1: Escalation Flow Chart



²Duty Operational Manager is a generic position title that covers a number of positions used across the sector such as Operations Team Manager, Shift Supervisor, Duty District Manager etc.

3.1.2 Definition and Types of Incident

A major incident or emergency for ambulance is defined as:

Any occurrence that presents serious threat to the health of the community, disruption to the service or causes (or is likely to cause) such numbers or types of casualties as to require special arrangements to be implemented by appropriate responding agencies including:

- Ambulance Services
- District Health Boards (including, for example, hospitals, primary care, and public health)
- The Ministry of Health.

AMPLANZ has adopted a set of descriptors for types of incidents applicable to all hazards. These incident descriptors relate to the ability to access patients, involvement of a lead agency or a comprehensive CIMS structure and the complexity of the response and its impact on normal services.

Time to respond, triage, treat and transport is another factor that will impact on patient care and normal service delivery. Therefore this will need to be taken into account in the decision-making process.

Figure 2: Types of Incidents

Type of Incident	Description
Complex	Incident that is not routine or it is an infrequently used procedure (e.g. CBR, Airport emergency, major Civil Defence Emergency Management (CDEM) event (tsunami))
Controlled	Incident that has a lead agency (e.g. Police, Fire, Health, CDEM etc) or comprehensive CIMS structure in place or a large number of personnel are deployed
Restricted	Where access to patients is difficult owing to hazardous, environmental or security factors
Open	Where there are no issues regarding the access to or egress from patients
Simple	Incident where normal or routine Ambulance procedures apply

3.1.3 Response Matrix Tool

The initial assessment of an incident is the responsibility of the CCCS Duty Manager using the response matrix below in Figure 3.

Figure 3: Response Matrix

>21	Level 2	Level 2	Level 2	Level 3	Level 3
11–20	Level 2	Level 2	Level 2	Level 3	Level 3
6–10	Level 1	Level 1	Level 2	Level 2	Level 2
3–5	Normal Operations	Level 1	Level 1	Level 2	Level 2
0–2	Normal Operations	Normal Operations	Level 1	Level 1	Level 2
Numbers of Patients Type of Incident	Simple/ Open	Simple/ Restricted	Simple/ Restricted/ Controlled	Complex/ Controlled	
Time	<1hr	1–2hr	2–4hr	4–8hr	>8hr

How to use the Response Matrix

1. Estimate the total likely 'Time' or duration of the incident for ambulance (travel, triage, treatment and transport) and plot on the Response Matrix
2. Determine the 'Type of Incident' from Figure 2 and plot it on the Response Matrix
3. Determine the Severity of the Incident by comparing the time estimate to the Type of Incident, and select the greater (i.e. further to the right of the matrix)
4. Determine the likely number of patients and plot against the Severity of the Incident on the Response Matrix
5. The Duty Operational Manager will be informed and will respond according to approved Standard Operating Procedures. If the local Duty Operations Manager is not available then CCCS Duty Manager will contact the Local Operations Management Team and the Ambulance Service Exec to escalate the incident.

3.1.4 Risk Assessment and Response

Once an incident has been classified using the Response Matrix Tool and determined to be outside of normal business, the CCCS will inform the Ambulance Service Duty Operational Manager.

Ambulance Service Duty Operational Manager, in consultation with the CCCS Manager, will then be required to confirm that a major incident has occurred and will declare a major incident for ambulance at the appropriate level. This will be done using information from the incident scene, the CCCS, partner agencies and other reliable sources. To assist with decision-making the Ambulance Service Duty Operational Manager will need to consider:

- The type of incident
- The possible time for ambulance to respond (travel, triage, treat and transport) and therefore for patients to reach definitive care
- The location of the incident, relative to ambulance resources and health facilities

- The number and status of patients
- The availability of ambulance resources
- Environmental factors, such as weather and time of day
- Health and safety of responding ambulance resources
- The need to coordinate with other services and the impact of their operations, in particular, the health services.

3.2 Role of the First Crew

The actions of the first-arriving ambulance crew at an incident are crucial to establishing an appropriate response to an incident. These are summarised below.

Primary Roles

- Ensure the scene is safe. Use 'STEP 1, 2, 3' as appropriate. See Appendix 3
- Complete a scene 'walk around / size up'
- Provide an immediate and initial Incident Situation Report (Sitrep) utilising the following METHANE³ format to the CCCS
- Identify and make contact with the Officers in Charge of other responding services and begin the coordination process
- Adopt Operations Manager and Triage Officer roles and put on the appropriate Major Incident vests
- Conduct initial triage of the scene
- Provide further and regular Sitreps following the METHANE format to the CCCS
- Meet, brief and allocate roles to incoming ambulance crews
- Provide a handover to a more senior Officer when/if requested.

Summary of Operations Manager Role

- Ensure scene safety
- Complete scene assessment and reconnaissance
- Establish appropriate sites and roles for scene management
- Maintain liaison with responding agencies

- Coordinate the deployment of resources at the scene
- Provide Sitreps using the METHANE format.

Summary of Triage Officer Role

- Assess and triage the number and type of patients
- Obtain triage tags and apply triage tags
- Inform Ambulance Operations Manager (AOM) of numbers and status of patients
- Begin to coordinate the removal of triaged patients to the Casualty Clearing Point(s) (when set up)
- Begin to allocate the clinical priority for patients until a Treatment Officer is appointed. (See Section 3.6 for role description of the Treatment Officer)

For full task cards for the members of the first crew – see Appendix 4.

All ambulances will carry Ambulance Major Incident Folders to assist the first crew. See Part 2 Section 3.4.4.

3.3 Triage

The aims of triage, wherever it is done, are not only to deliver the right patient to the right place at the right time so that they receive the optimum treatment but also to 'do the most for the most', accepting that valuable medical resources are directed to those with the greatest clinical need.

The principles of triage shall be used whenever:

"The number of casualties exceeds the number of skilled rescuers available".

The first triage decision will be made at the scene, likely where the patient is found. This will be done using a primary triage process as outlined in Figure 5. This is a process performed by the designated triage officer at the scene. The Triage Officer should be the highest clinically qualified officer available.

The process is rapid, taking seconds to complete. Triage enables the Triage Officer to prioritise patient treatment and transport. Patients will be labelled and, where appropriate, grouped according to their status.

³ METHANE is a mnemonic for a standard situation report. See AMPLANZ Part 2 Section 3.4.2 and Figure 5

Figure 5: Primary Triage Algorithm

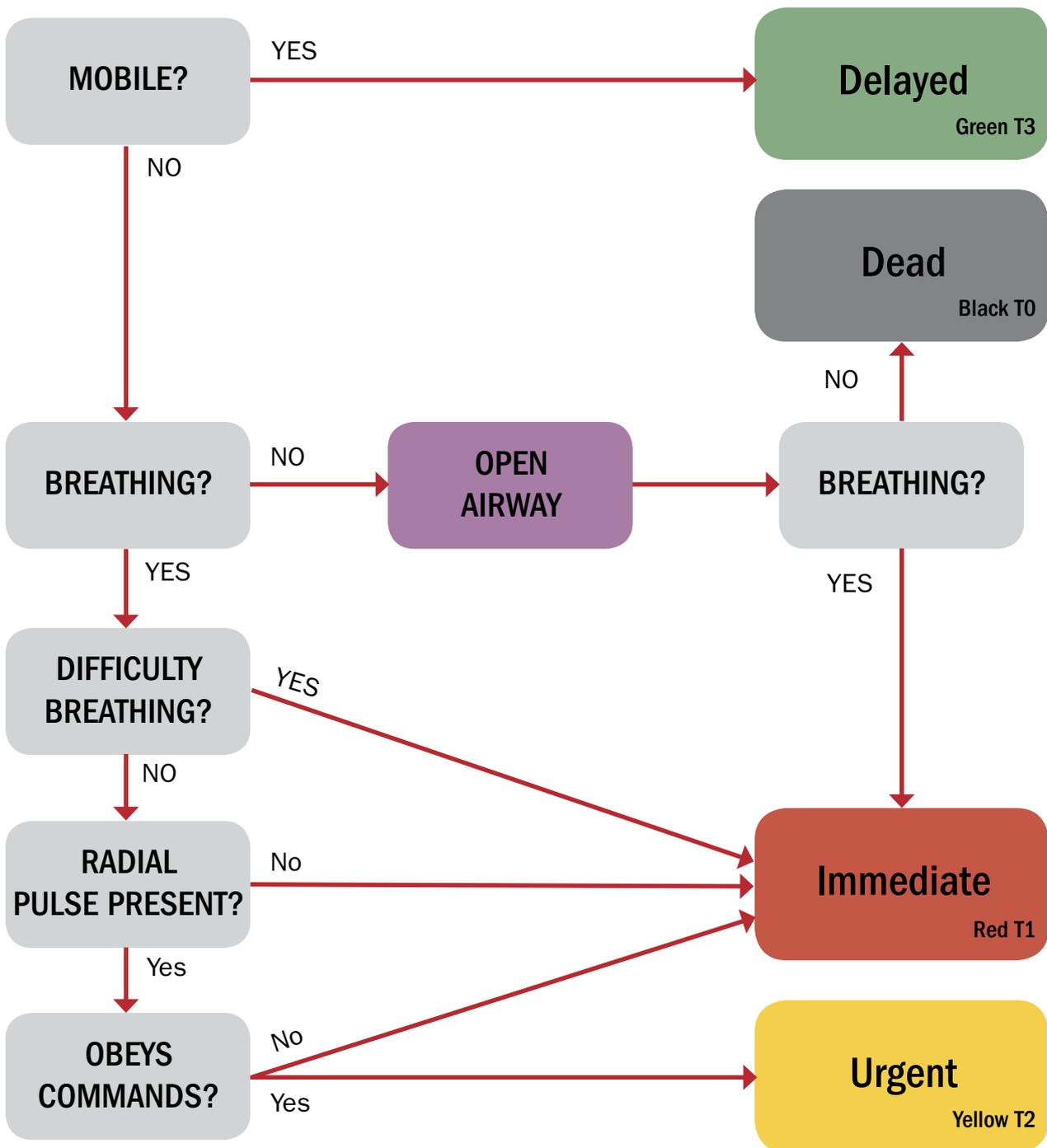


Figure 4 notes a casualty category of 'Mobile'. This is defined as a person with minor injuries who is able to walk or be moved **without** assistance from medical personnel to a designated 'green' triage area, where they will be reassessed.

It is the responsibility of the Triage Officer to ensure that the appropriate label or tag (black, red, yellow or green) is attached to the patient and that patients are directed to the appropriate location.

The triage tools, including tags, to be used by all Ambulance Services are outlined in Appendix 5. (Note the triage tags are under review.)

Triage is an ongoing and dynamic process. Following the primary triage, further triage decisions at the scene are taken at the Casualty Clearing Point (secondary triage). It is also important to recognise that changing clinical conditions may require re-labelling and further documentation. Ambulance Personnel will use best endeavors to access all health information available at the scene including personal medical information adjuncts while noting the time and resource challenges of triaging and treating in a major incident.

3.4 Communications and information management

The most significant factor that will contribute to successful command and control of an incident is effectiveness of the communications systems and protocols. These include:

- On-scene communications within the Ambulance Service and within the Incident Management Team
- Communications between the responding crews, the Ambulance Commander and the CCCS
- The detail and timeliness of information given to the Incident Controller, to the CCCS and to health partners
- The tools available to the Ambulance Commander and CCCS to manage the information, including sitreps, action planning and resource requests.

3.4.1 On-scene communications

On-scene communications will initially be from the first arriving ambulance, until a specialised communications vehicle or a senior officer's car is on scene and able to act as an Ambulance Command Point.

The on-scene communications point must establish immediate communications with the CCCS. Continuous communications must be maintained at all times. The principal radio communications system on-site is the ambulance radio network, through the site communications point. A Communications Officer shall be appointed by the Ambulance Commander in complex incidents. All communications from the scene to the CCCS will be managed by the Communication Officer.

All responding crews and management must switch to the on-site communications network (for example, VHF simplex or UHF) on arrival at the incident scene.

Incident and Ambulance Action Plans should include the establishment of command, control and local operational networks: for both radio and telephone communications; on-site and off site. It is recommended that provision be made for ground to air communication capability.

Ambulances may only communicate with the CCCS once they have left the site, with the exception of the break down of the communications system on-site.

3.4.2 METHANE

Standardised communications are required around any notification or status change of major incidents. These communications need to be readily understood and meet the needs of all agencies. A METHANE report is the internationally recognised tool for this and is utilised in this plan. See Figure 5.

When communicating, all sections are used in the report. Where information is unknown, that section is stated as being unknown or that an estimate is being provided.

'Number of patients unknown, but is estimated to be approximately 50'

'Hazard identification has not yet been completed, but heavy rain looks imminent'.

If any section of the report is missing, the receiver requests the information from the originator.

The recognised status changes affected are:

- Standby notification (warning of a Possible, unconfirmed Major Incident)
- Declaration (Confirmed Major Incident or "Not" a Major Incident)
- Update to Major Incident Level (A level or information change)
- Stand-down (Notification that an Agency can stand down or that the 'whole of incident' stand-down is given.

Standby: The First Crew arriving at the incident is required to provide an initial sitrep as soon as possible (within 5mins of arriving at scene). This can be an incomplete METHANE report to the CCCS and the "M" may be a "Standby" if the situation is unclear.

As soon as possible a full sitrep shall then be communicated using the METHANE Report and clearly stating at the beginning:

Declaration⁴: Major Incident Declarations are communicated using a METHANE report. The declaration starts the report with words clearly stating, for Example: *'Major Incident Declared'*.

Or, if it is NOT a major incident and a declaration is NOT required at scene, then clearly state "M. This is not a major incident". The rest of the METHANE report should be used.

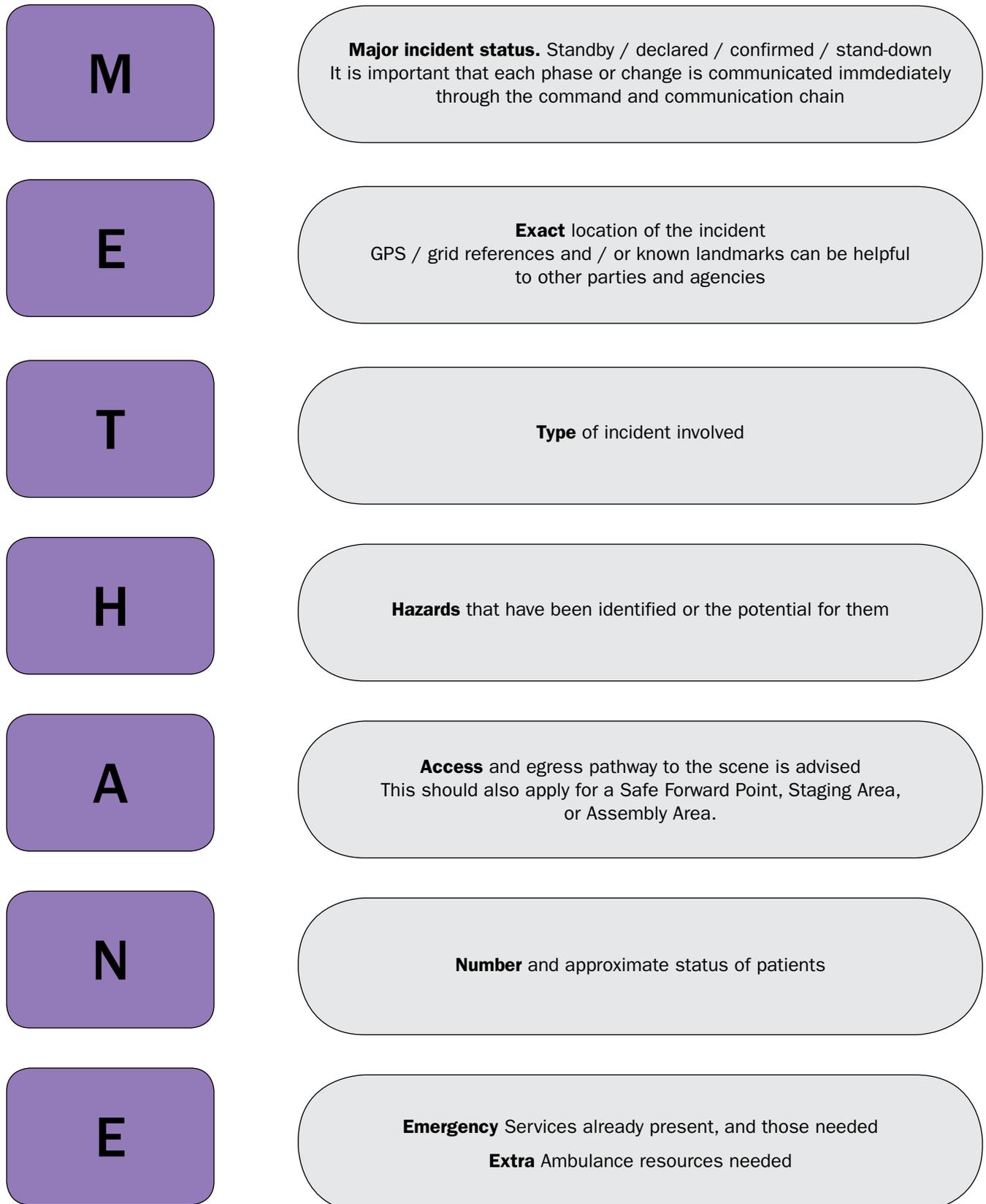
Updates and changes: These are communicated using a METHANE report providing the up-to-date information. It is not necessary to repeat all previously stated information during an update. Where there has been no change state, for example "M., E., T., H., A., all no change. N. Number of casualties has increased to 15, all Triage Green. E., no change." *Declared*".

Ambulance Stand-down: It is important that these are also communicated using a METHANE report to provide a clear understanding of the situation and prevent confusion. For instance, it would cause great confusion to a receiving hospital to receive a stand-down message while patients were still in transit. In-transit patients are

⁴**Note:** Any Ambulance Officer is able to 'Declare' a Major Incident based on a thorough scene assessment and / or validated information from the Public and / or Emergency Services Partners.

covered in the numbers section. Examples of an inclusion in a stand-down METHANE report from the scene: "All patients have departed the scene for Hospital" Or "35 patients have departed the scene for Hospital. 25 non-injured have been moved by bus to the Rembrandt Motel by Police".

Figure 5: METHANE Report



3.4.3 Notifications to Health Partners

The Ambulance Services are required to communicate and coordinate with the local, regional and national health services regarding the transport of patients to the most appropriate health facilities. DHBs and the appropriate hospitals therefore require timely notification and accurate details of the incident.

The CCCS will develop and maintain procedures that:

- Inform the DHBs of possible and declared major incidents. This will be achieved by paging / texting information to DHB Operational Points of Contact⁵
- Facilitate teleconference/s between the Ambulance Service, receiving DHB/s and the CCCS to enable efficient information transfer. The teleconference numbers will be communicated to the DHBs on or prior to a declaration of a major incident.

The leader of the teleconference will be the Ambulance Commander, Ambulance Operations Manager and / or the Ambulance Service Duty Executive (Ambulance Service Controller) depending on availability and scale of the incident. The format of the teleconference shall follow a METHANE report plus information such as arrival times at the receiving health facilities. The teleconference will be a short briefing (5-10 minutes maximum). In-depth planning or clinical discussions should be held separately.

It is the responsibility of the DHBs to maintain their operational points of contact and to ensure information is cascaded to the appropriate operational staff and executive management within their organisations.

For incidents with large numbers of casualties, communications notifying the hospital of every arriving ambulance and status of patients being transported, may be suspended. This is owing to resource constraints in the receiving hospitals.

3.4.4 Information Management tools

At the scene, in the CCCS and in the ASEOC (Ambulance Service Emergency Operations Centre), comprehensive information management is required to ensure that coordination between partners, communication regarding resource provision and the appropriate and safe transport of casualties is maintained.

Level 1-2 incidents

To assist with this, the First Crew on scene, the Ambulance Operations Manager and the Ambulance Commander are provided with tools to provide quick reference to procedures and specific responses information, and access to appropriate forms.

These tools will be held in **Ambulance Major Incident Folders** in all ambulances. These folders will contain:

- An Ambulance Incident Command Notebook

- 1 set of triage tags / labels
- 1 Ambulance Operations Manager vest
- 1 Triage Officer vest
- Appropriate ambulance tactical plans for the local area

The Ambulance Incident Command Notebook should be used by all First Crews arriving on scene in major incidents, and then by Ambulance Operations Managers in the majority of Level 1 or 2 incidents where simple management structures are in place. The notebook provides:

At the Front (multiple copies of): METHANE reports, formats for command structures and communications networks, maps, Ambulance Action Plans (AAP), patient tracking, decision / communications logs, debrief checklist and Commanders report.

At the Back: Aide de memoire for responding ambulances and managers as to their initial roles, including triage algorithms.

See Appendix 6 for an example of notebook pages. There is ongoing developments relating to electronic patient information management. As tools come on line, Ambulance Services will incorporate these appropriately into their Major Incident Management.

Level 2-3 incidents

For more complex and prolonged incidents (Level 2 or 3) or where there is a comprehensive management structure in place for ambulance and also the incident as a whole, then an **Ambulance Incident Command Board** shall be used. The command board has the following:

- Event and Communications Log forms
- Incident and Ambulance Organisation Chart
- Situation Report forms (based on METHANE)
- Patient / Casualty Tracking forms
- Ambulance Action Plan form
- Ambulance Staff Tracking form
- Ambulance Resource Tracking form
- Small whiteboard/s plus pens.

See Appendix 6 for examples of forms.

Emergency Management Information Systems (EMIS)

The Ministry of Health and the Ministry of Civil Defence and Emergency Management both have EMIS (for example, E.Sponder). Ambulance Services currently access and utilise the Health EMIS.

For complex and prolonged responses, the use of an EMIS may be required at the scene by the Incident Management Team. Should this occur, the Ambulance Commander will need to request the appropriate resources from the ASEOC. For example, a laptop with mobile communications etc.

⁵The DHB Operational Points of Contact may differ from the DHB Single Point of Contact as specified in the NHEP. They may include emergency department clinicians or managers, duty managers, emergency planners, telephonists and/or executive managers. It is a DHB decision as to who should receive communications from the CCCS.

3.4.5 Integration with the Incident Management Team

It is a requirement of CIMS that the information systems of all responding agencies be integrated to provide a single set of information. This will enable the Incident Controller to maintain a comprehensive overview of the situation and therefore enable the development of appropriate incident action plans. To facilitate this, the Ambulance Commander will:

- Provide the Incident Controller with regular and comprehensive Ambulance Sitreps
- Action specific orders from the Incident Controller relating to the overall management of the incident while ensuring that appropriate patient care and ambulance staff safety is maintained
- Provide the Incident Controller with the Ambulance Action Plan (AAP) and modify the AAP if necessary for the improvement management of the incident while ensuring that appropriate patient care and ambulance staff safety is maintained
- Inform the Incident Controller of changes to Ambulance resourcing
- Request, through the Incident Controller, any non-ambulance resources required by Ambulance Services.

The physical placement of the Ambulance Commander with the Incident Management Team will facilitate the communication and coordination within the incident.

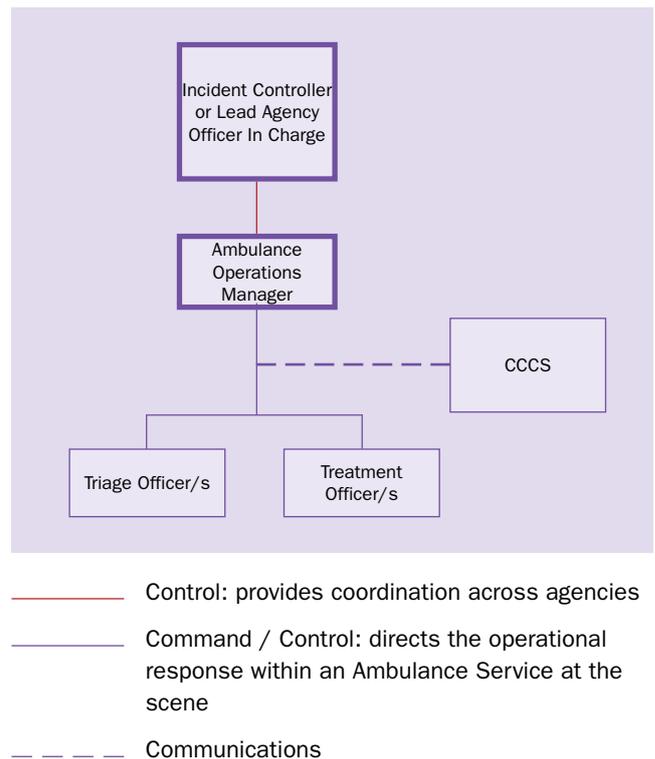
3.5 Command Structure and Scene Management

This section provides ambulance managers with a guideline as to the roles required and scale of structure that may need to be set up to manage two examples of incidents. These examples note the modular and expandable nature of CIMS.

3.5.1 Simple Command Structure

A simple command structure for normal operations and Level 1 incidents or Open, Simple, Restricted or Controlled incident of short duration (< 4hrs) and a small number of patients (< 6 patients). See Figure 6.

Figure 6: Simple Command Structure



CIMS components of control, logistics and planning / intelligence are undertaken by the Ambulance Operations Manager (AOM) and Operations are undertaken by the Triage and Treatment Officers.

Ambulance roles such as transport, communications etc, will be undertaken as part of other roles. The Safety Officer role is the responsibility of the AOM.

3.5.2 Comprehensive Command Structure

A Command Structure for long duration Controlled and / or Complex Incidents (Level 2 or 3), or simple / restricted incidents equivalent to Level 1 or 2 (short duration but with large numbers of casualties) will require the Ambulance Commander or Operations Manager to decide how the Ambulance and CIMS roles will be implemented and therefore the staffing required. This will need constant reassessment as part of the ambulance incident action planning processes. See Figure 7 for the structure.

It is recognised that the ability of an Ambulance Service to fill all roles or functions in a full CIMS structure may be limited. Therefore roles may need to be prioritised and / or combined to match the personnel available.

There are a number of priority roles that need to be in place immediately by ambulance officers, then roles may be able to be combined with priority roles, and others that may wait until more resources arrive. As a guide, the priority of responsibilities and roles should be:

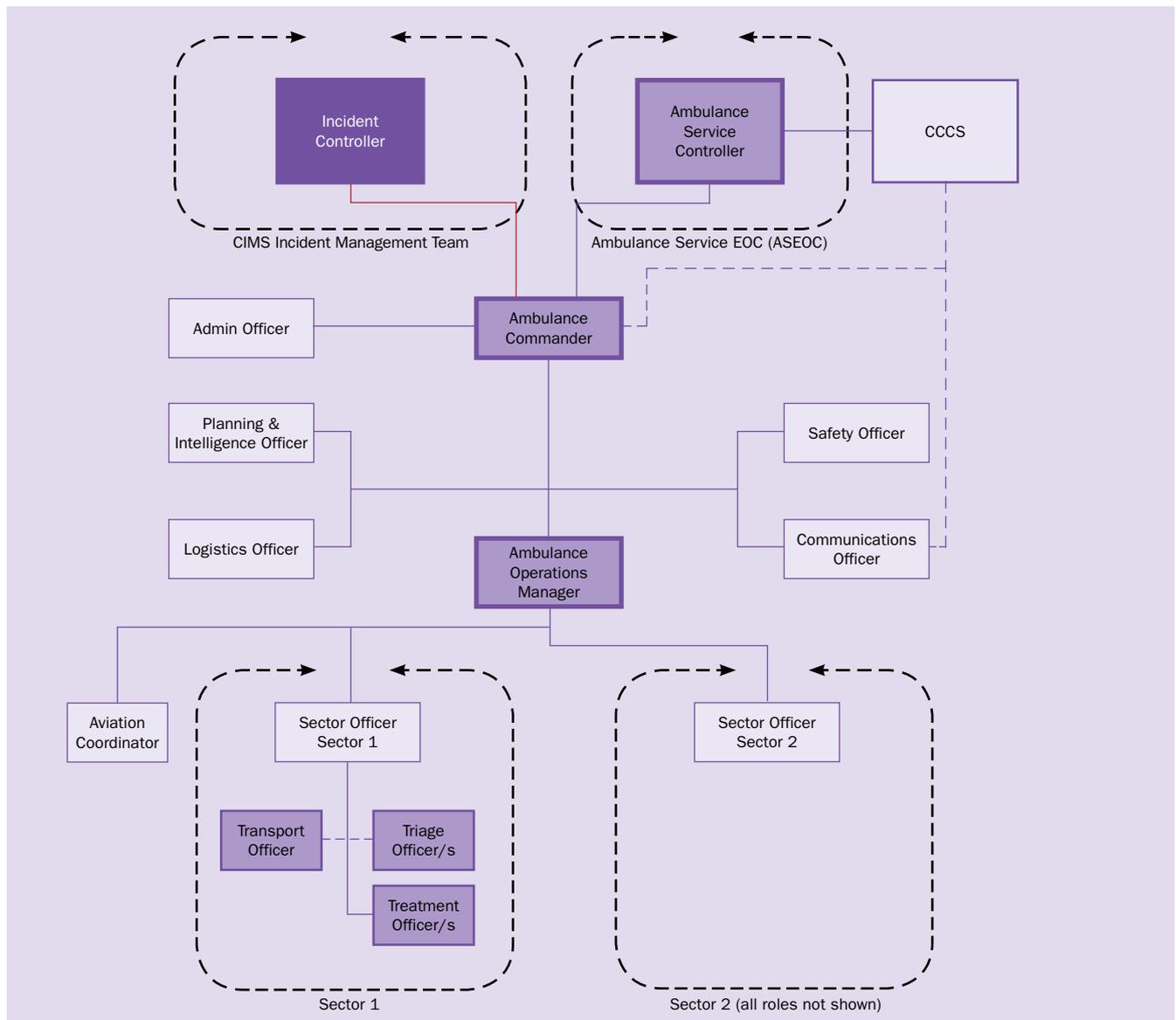
1. Incident management and coordination with partner agencies, including safety and communications
2. Triage
3. Treatment
4. Immediate transport (loading / parking) and logistical management

5. Longer-term logistics and planning and intelligence.

The following roles are discretionary and will be requested and deployed by the Ambulance Commander depending on the complexity (type, duration and scale) of the incident: Communications Officer, Aviation Coordination, and Administration Officer.

The Ambulance Commander will have to decide quickly to request support from the ASEOC via the CCCS to enable appropriate resources to be deployed from the most appropriate Ambulance Service.

Figure 7: Complex Command Structure



————— Control: provides coordination across agencies

————— Command / Control: directs the operational response within an Ambulance Service at the scene

- - - - - Communications

Priority roles in dark colours, other roles to be combined with priority roles or resourced depending on the incident and resource availability. This is a Commander decision.



3.6 Summary of scene roles and responsibilities

Key scene roles are summarised below. Task cards for all roles are in Appendix 7.

Ambulance Commander (AC): The officer responsible for scene management, all medical resources for complex and prolonged incidents. The AC will be part of the Incident Management Team (IMT) when an IMT has been established for controlled or complex incidents (Level 2 or 3 Incidents). The AC is responsible for the safety of all health and ambulance personnel on scene for this scale of incident. This is an incident management role and therefore shall not have patient care responsibilities. The AC is responsible to the Ambulance Service Controller.

Ambulance Operations Manager (AOM): The officer delegated with the responsibility to manage operational activities of the incident at the point of patient contact and the site role most commonly established for open simple, restricted or minor controlled incidents (Level 1 or 2 incidents). This is an incident management role and therefore shall not have patient care responsibilities. The AOM is to take on the role of Ambulance Safety Officer if one is not appointed.

Ambulance Sector Officer/s: A major incident may be sufficiently large to divide into sectors. A Sector Officer is responsible for managing a sector of an incident. They are responsible to the Ambulance Operations Manager.

Ambulance Safety Officer: The officer responsible for ensuring the overall safety of ambulance and other support personnel at the incident scene. Reports directly to the AC when established or more commonly to the Ambulance Operations Manager. Will work very closely with the lead agency or Incident Safety Officer if established.

Ambulance Triage Officer: Responsible for the triage of all patients in an incident or sector. In command of all

Triage Areas and is responsible to the AOM or Sector Officer.

Ambulance Treatment Officer: Responsible for coordinating patient treatment, liaising closely with the Transport Officer and the Triage Officer. To delegate tasks to all medical and other personnel at the Casualty Clearing Post. To report to the AOM or Sector Officer.

Ambulance Transport Officer: The officer responsible for all transport, loading and parking management in consultation with the AOM. Responsibilities include: allocating vehicles for transport, according to patient priority, ensuring that suitable access and egress is available into the ambulance loading point at or near the Casualty Clearing Point (CCP), for the efficient use of vehicles, establishing an appropriate ambulance parking area. Reports to the AOM or Sector Officer.

Ambulance Administration Officer: This officer will be assigned to the Ambulance Commander at the scene. The responsibilities will be to maintain the AC's decision and communications log, communicate on behalf of the AC, if appropriate, and act as the communications officer (if no specific person is appointed). There may be an Administration Officer attached to the AOM if resources allow.

Ambulance Communications Officer – on-site: The officer who establishes, and is responsible for, effective communications on-site. May be deployed from the CCCS or from the local Ambulance Service.

Ambulance Logistics Officer: This role is responsible for the systems and management relating to control, monitoring and re-supply of all personnel, materials and equipment at major incidents.

Responsible to the AC and may only be required for prolonged controlled or complex (Level 2 or 3) incidents.

This role will also work closely to the Incident Logistics Manager in such incidents.

The Ambulance Logistics support will be provided by the ASEOC in the majority of incidents.

Aviation Coordinator: This role will be provided by the Air Ambulance Service and is responsible for landing zones and safety of operations. This role is responsible to the Operations Manager/Commander for the coordination of all aviation resources at the incident scene.

Ambulance Planning and Intelligence Officer(s):

These roles are responsible for assembling, maintaining and analysing all information available relating to the ambulance and wider incident response. This will include:

- Resource summaries
- Analysis that will identify and prioritise issues of concern
- Development or revision Ambulance Action Plan (AAP) objectives and actions for approval by the AC.

Depending on the scale of the incident and the ambulance staff available these roles may be two persons or combined.

Responsible to the AC and may only be required at the scene for prolonged controlled or complex (Level 2 or 3) incidents. This Officer(s) will also work closely to the Incident Planning and Intelligence Managers in such incidents.

In the majority of incidents, the Planning and Intelligence roles will be provided by the ASEOC and will be responsible to the Ambulance Service Controller.

Medical, Nursing and allied Health personnel:

Appendix 7 also contains task cards for both PRIME⁶ doctors and nurses as well as for those health personnel who may volunteer or be assigned by their organisation to assist at the scene.

Ambulance Liaison: It will be important that communication is maintained directly with the receiving emergency departments, hospitals or DHBs, and / or the partner agencies, such as CDEM. The Ambulance Service Controller will appoint Liaison Officers to the appropriate facilities for the particular incident. A Liaison Manager may be required if there are a number of liaison points in place. This role is based in the ASEOC to support the Ambulance Service Controller with the information flow to and from partner EOCs. See Part 3 and Appendix 15 for task cards etc for the Liaison Managers or Officers.

3.7 Site Set up

There are consistent site or scene locations or facilities required by CIMS as well as those specialist facilities required by Ambulance. Below is a summary of these facilities and their roles. See Figure 8.

Incident Control Point (ICP)

The ICP is where the Incident Controller and members of the Incident Management Team direct responsibilities during an emergency situation.

Every incident will have an ICP. The ICP is critical to command and control and is the point where the Incident Controller will manage the whole incident.

For smaller incidents, the ICP may move with the Incident Controller. For larger incidents, the ICP may be a vehicle (fire appliance, police car or command unit), trailer, tent or building.

Ambulance Command Point (ACP)

The Ambulance Command Point is responsible for managing all ambulance activities at the scene and ideally should be co-located with, or very near, the ICP.

'Ambulance Command Point' will initially be the first ambulance vehicle on the scene, using a red flashing light. The only ambulance or health response vehicle to display a flashing light will be the scene Ambulance Command Point where it is safe to do so and where it does not conflict with other agency protocols (e.g. airport emergency plan).

Sectors

For complex and large scale incidents it may be necessary to divide a scene into sectors. This aids the management and accountability of the incident by breaking down the span of control and allowing individual operations.

Sectors may be defined by the Incident Controller for overall use, or by individual agency commanders for their agency's needs. Several numbering variations exist for sectorisation and common sense and logic should be applied, along with an understanding of the conventions that apply to other agencies. See Appendix 8 for examples.

A sector can also be established to fulfil a special purpose or field of operation. For example, a large Forward Triage Area may be considered a sector. Often the combined area of CCP and transport facilities is defined as a sector with a Sector Officer managing the Treatment Officer and Transport Officer and associated incident facilities.

Ambulance command within a sector lies with the Sector Officer who reports to the Ambulance Operations Manager.

Assembly Area

The Assembly Area is where resources are organised and prepared for deployment. It may include the provision of crew welfare and maintenance facilities. An Assembly Area would normally be located away from an incident at an established facility, for example, an ambulance station. Assembly Areas are for support rather than being operational.

⁶PRIME = Primary Response In Medical Emergencies.



Staging Areas

Staging Areas are locations where resources are gathered before being despatched to a Safe Forward Point or directly to an incident area. As an incident grows, there may need to be more than one Staging Area.

Staging Areas:

- Provide a safe location for resources awaiting assignment
- Keep track of resources
- Provide a check-in area for all arriving personnel
- Allow the Incident Management Team to plan for resource use
- Must be located in a safe area
- Should have separate entrance and exit routes
- Should be large enough to accommodate anticipated levels of resources
- Reduce traffic congestion.

Ambulance Parking Area

The place designated at the scene of a major incident (forward of the Assembly Point) where ambulances can park, thus avoiding congestion at the entrance to the scene or at the Ambulance Loading Point. These areas are also suitable for staff briefings, refreshments and re-stocking of equipment. This area may be part of an Incident Staging Area.

Safe Forward Point (SFP)

The SFP is a safe facility or location near the incident from which forward operations can be supported.

Landing Zone (LZ) or Helipad (HP)

Specific area that has been identified for safe arrival, landing and departure of helicopters. Consideration needs to be given to night operation requirements (i.e. lighting).

Forward Triage

Forward triage is carried out in the field to identify and triage patients in a priority order to their removal to a Casualty Clearing Point. In large scale incidents, where there are a number of sectors, forward triage may be required in each.

Triage wristbands / tags should be attached in the field, where possible, and re-assessed when patients enter the triage area.

Casualty Clearing Point (CCP)

This area is made up of two areas:

- **Triage Area:** This is normally a point positioned at the entrance of the CCP. It is essential this area does not become blocked – a continual flow of patients is essential. Patients should be re-triaged at this point (and tagged if not already attached) prior to their flow through to the appropriate priority sections in the treatment area. Uninjured patients and the deceased must be removed to two separate areas and not enter the treatment area.
- **Treatment Area:** This must be a safe area large enough to accommodate the anticipated number of casualties. It should be between the Triage Point and the ambulance loading area and should be separated into three sections:

Triage 1	Red
Triage 2	Yellow
Triage 3	Green

Specific priority areas should be designated by some colour identification e.g. coloured flags, tarpaulins or signage.

There may be more than one CCP

Ambulance Loading Point (ALP)

This is an area (preferably of hard standing) in close proximity to the CCP, where ambulances can manoeuvre and load patients.

Figure 8: Major Incident Footprint

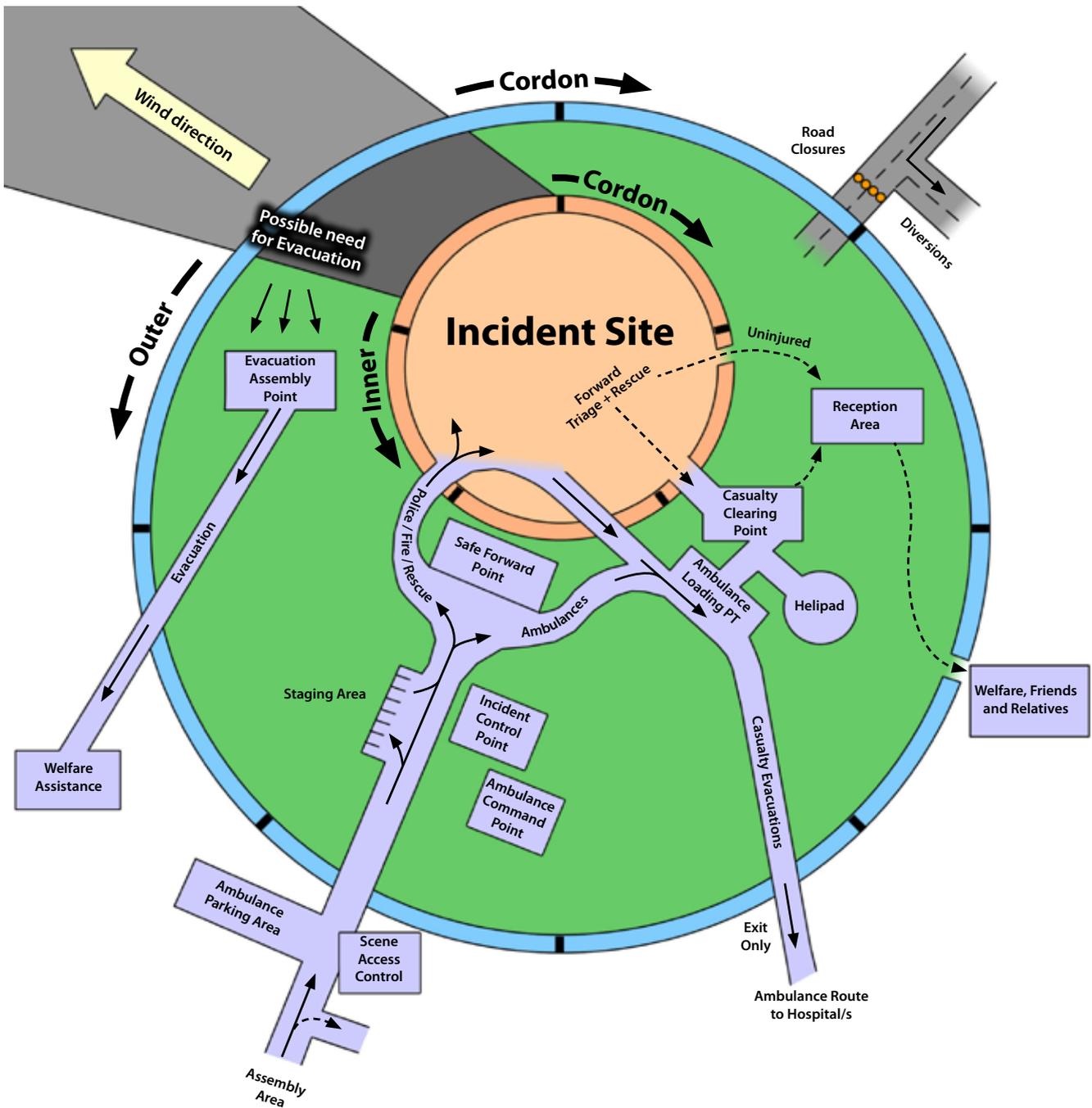
Scene Access and Egress

It is expected that the majority of casualties will be transported by road.

A considerable number of emergency and support vehicles will be travelling to and from the scene.

It is recommended that the Ambulance Commander/Ambulance Operations Manager, in liaison with the Police and Fire Commanders, establish clearly marked entry points and exit points to avoid congestion and improve vehicle flow.

All keys should remain in the ambulances unless specified otherwise.



3.8 Coordination with Health, Emergency Services and other Agencies

In mass casualty incidents it is unlikely that any single agency will have the required resources to meet the needs of a response. The CIMS approach provides for coordination across all responding agencies.

3.8.1 Health

A mass casualty incident may impact severely on the local, regional and national health system. The coordination of patient transport, according to priority, to the most appropriate health facility is therefore critical. All senior ambulance officers who may fulfil the Ambulance Commander or Operations Manager roles at scene are to be fully briefed on:

- Capacity and capability of the local and regional receiving health facilities
- Emergency plans of the local DHBs as they impact on Ambulance Service
- The communication channels with receiving health facilities or DHBs to coordinate patient transport
- The communication channels with Regional Health Coordination and / or National Health Coordination structures.

An Ambulance Service is responsible to ensure that Ambulance Commanders and Operations Managers have access to appropriate contact points for the local and regional health facilities and services.

For all Level 2 and 3 incidents, the DHBs will be informed via the notifications system as part of the activation of the ambulance response. DHBs can choose to be informed for Level 1 incidents. See Part 2 Sections 3.1 and 3.4.

3.8.2 Emergency Services and other Agencies

All senior ambulance officers, who may be appointed to the Ambulance Commander or Operations Manager roles at the scene, will need to have access to information on tactical ambulance responses for specific hazards in their operational area. These will be in the form of ambulance tactical plans and will be developed in coordination with other responding agencies and the 'owners' of the plans (for example, an airport company, stadium event management etc). These plans will be developed by the Ambulance Service and be accessible from the CCCS CAD system, with appropriate accessible backup copies.

It will also be necessary to coordinate with non-health organisations and perhaps access their resources and expertise. It is necessary for senior ambulance officers to be fully briefed on:

- The role, capacity and capability of the emergency services and non-government organisations (NGOs) e.g. Salvation Army and NZ Red Cross, private sector organisations and Civil Defence Emergency Management Organisations
- The communication channels with these organisations to be able to access appropriate resources.

An Ambulance Service is responsible to ensure that Ambulance Commanders and Operations Managers have access to contact points for appropriate agencies that have access to specialist support services⁷.

3.9 Media

Media representatives will arrive at the scene following a major incident. Media will also go to hospitals and any other site where there is a possibility of acquiring information on the incident.

An Ambulance Service will receive inquiries from the news media seeking information on the incident including the numbers of injured and deceased etc.

Ambulance officers will be aware of and follow their organisation's media policies. For all incidents, an Ambulance Service Public Information Manager (PIM) will be available to coordinate inquiries from the media with appropriate other agencies. This person will be based initially at the Ambulance Service EOC.

For large scale incidents, where there is a clear CIMS incident management team in place, all media inquiries and the release of information to the media will be managed by the Incident Public Information Manager responsible to the Incident Controller. Public Information Management will also be part of the CIMS Incident Action Plan.

For smaller incidents, the lead agency (for example, Police or Fire) may request all news releases be directed to their Public Information Managers or a Senior Officer.

In all cases Ambulance Services will coordinate media inquiries and release of information with the Incident Controller's Public Information Manager.

⁷**Note:** This does not necessarily mean an Ambulance Service maintaining lengthy lists of agencies etc. For example, many CDEM organisations have agreements with the NGOs and contacts with private sector service providers.

3.10 Resources and Equipment

All potential Ambulance Commanders and Operations Managers shall be made aware of the resources and equipment that may be available in their service area. These may include:

- Ambulance major Incident cache of medical materials and equipment
- DHB medical materials etc that may be accessible to a pre-hospital response
- Specialist materials, equipment, services and personnel from a partner emergency service or support agency that may be accessible to a pre-hospital response. For example, urban search and rescue (USAR) equipment, CDEM logistics.

There will be a defined procedure for an Ambulance Commander or Operations Manager to request resources as part of METHANE reports and Ambulance Action Plans sent to the CCCS and the ASEOC.

Ambulance officers shall be regularly trained in the deployment and use of ambulance major incident caches. These will also be used in major public events to improve familiarity with the materials and equipment.

In all emergency, PTS and event ambulances, there is an Ambulance Major Incident Folder. This folder contains role task cards, triage tags, aid memoires etc. See Part 2 Section 3.4.4. These folders will form part of the ambulance manifest and be audited as such.

To assist managers in the Ambulance Commander or Ambulance Operations Manager roles a number of tools have been developed. These include:

Ambulance Incident Command Notebook: See Part 2 Section 3.4.4 and Appendix 6.

Ambulance Incident Command Boards: See Part 2 Section 3.4.4 and Appendix 6.

3.10.1 Major Incident Vests

There are standard vests to identify ambulance incident management and roles at the scene of a major incident.

These need to be consistent across all Ambulance Services to ensure all ambulance roles are clearly identified.

See Appendix 9 for the details.

3.11 Specialist Operations

To be able to access patients quickly, Ambulance Services have developed skills and strong relationships with other emergency services and agencies to undertake specialist operations. There is a mix of local and national approaches to meeting the needs of patients, the local operational environment

and emergency services partners. All areas of operations require specific and specialised education and awareness. Many of these areas are used as part of local normal business but may also be required as part of a major incident response. These include:

- Land Search and Rescue
- Marine Search and Rescue
- Mines Rescue
- High Angle Rescue
- Helicopter response.

There are a number of national Special Operations Teams that may be deployed regionally or nationally. Below are summaries of their current roles.

Special Emergency Response Teams (SERT)

These teams are required to respond rapidly at the request of partner emergency services, Ambulance Service management and CCCS. SERT are deployed nationally. SERT Officers are under the command of the lead agency at the Scene, but remain under the control of the Ambulance Service. SERT operate with the following groups or areas:

Police Armed Offenders Squad (AOS)/Special Tactic Group (STG): The SERT team is trained to operate with these two groups. The distinction has been that Armed Offenders Squad (AOS) carries out all armed incidents and the STG deal with hostage situations and counter-terrorist activity. SERT trains with both of these groups and is regarded as part of the Police operation. The role is to provide clinical care in the hot/warm zone (see Appendix 1 for definition), SERT officers wear the same protective equipment as the police and use police radios during AOS/STG operations.

Land Search and Rescue (SAR): SERT often support Police by providing medical care to all searching personnel and the lost or injured party when found. These can be very labour intensive with a number of hazards. Care of the searching staff is the major role, including assessing and treating reactively and also monitoring staff during prolonged searches.

Marine Operations: SERT works closely with Police on security and mass casualty incidents at sea. Specific training includes water rescue and patient retrieval. SERT are also involved with the inter-service preparation and operation to intercept illegal 'boat people' with the role being to assess the health of passengers, organise evacuation, in the event of serious illness or injury and help in a decision-making role to quarantine the vessel if necessary. As with AOS operations, SERT officers also provide care to Police if required.

Urban Search and Rescue USAR

There are currently four USAR teams and these are deployed nationally. The ambulance sector provides the USAR Team Medics. This role is firstly to ensure health and welfare of the USAR staff. The treatment and extrication of trapped patients would be completed with consultation and active participation of the USAR Medic. USAR Medics may also be members of SERT. USAR Team Medics, when deployed, are under the command of the USAR Officer incharge.

Chemical Biological Radiological (CBR)

CBR trained officers work as part of AOS operations (as part of SERT) and / or Fire Service hazardous materials (HazMat) operations (as part of the Ambulance CBR Team). Both are deployed nationally. All officers are trained to Level 3 Chemical Protection, which involves the wearing of a chemical resistant splash suits and self-contained breathing apparatus progressing to use of chemical suits. CBR Officers are trained in decontamination procedures for both walking and stretcher patients and the problems associated with both. Level 2 protection is used at 'clandestine labs' (Clan labs) in association with ballistic equipment as part of an AOS operation.

CBR trained officers working in a HazMat operation are under the command and control of the Ambulance Commander or Ambulance Operations Manager on scene. In an AOS operation, the CBR trained officers are under the command of the lead agency at the scene.

Ambulance Rescue

There is currently one rescue squad, trained in 4WD, High Angle rescue, basic rescue techniques and swift water rescue. Team members are activated by CCCS and respond urgently to all cases. Specialist equipment includes 4WDs, ropes, abseiling hardware, PFDs (Personal Flotation Devices), throw bags, stretchers with mule wheel, winches, and an A-Frame for high angle rescue.

3.11.1 Activation of Ambulance Specialist Operations

A specialist response shall be activated in the following ways:

- By the Ambulance Commander or Ambulance Operations Manager at scene in consultation with the lead agency or Incident Controller. This will be done through the CCCS using normal processes and possibly in consultation with local Ambulance Service management. **OR**
- By Police or Fire directly via the CCCS for SERT, USAR or CBR resources. The CCCS will inform Ambulance Service management.

3.11.2 Pre-hospital Responses by DHBs and other organisations

There are Ambulance response procedures for PRIME⁸ Doctors and Nurses as part of a pre-hospital response.

There are currently few formal pre-hospital medical responses developed as part of DHB or hospital emergency plans. DHB and hospital emergency plans need to consider the deployment of these resources in support of the pre-hospital response and formalise the notification, activation, roles and responsibilities, training and equipping of these resources.

There is also a NZ Red Cross volunteer pre-hospital response capability that may be deployed if requested.

The Ambulance Commander may request specialist medical and nursing resources to assist with the general pre-hospital response and to undertake specialist procedures. There are clear doctor and nurse task cards as well as other task role cards in Appendix 7.

Note: In a pre-hospital response, all specialist medical, nursing and first aid resources working at the scene will be under command of the Ambulance Commander or Operations Manager.

3.11.3 Activation of Responses by DHBs and other organisations

Requests for health or medical support (from a DHB, for example) shall be done by the Ambulance Commander directly to the agency concerned and in coordination with the Incident Controller.

Requests for non-health support (from the Salvation Army, for example) or from a voluntary agency (from the NZ Red Cross, for example) shall be done by the Ambulance Commander to the Incident Controller.

4.0 Recovery

The process of recovery for an Ambulance Service is defined as the re-establishment of normal service delivery after a major incident. This process should start as soon as possible in the response phase and be aligned with Ambulance Service business continuity plans. Ambulance Services will be required to contribute to the overall recovery of the health services and community. It may also be that, dependent on the incident, there may be a new 'normality' for the community. Ambulance Services will have to realign themselves appropriately as part of the recovery process.

All logs and notes made during the incident will need to be correlated in case of possible public inquiries as to the effectiveness of the overall management of the response.

⁸PRIME = Primary Response In Medical Emergencies.

It is envisaged that even in a moderately sized major incident there will be an effect on staff, supplies, equipment, finance and vehicles. Areas requiring consideration for recovery will include, but should not be limited to:

- Staff welfare/debriefs
- Rosters
- Leave
- Operational review and learning
- Development of new models of operation where and when required
- Consumables (medical/fuel)
- Equipment
- Vehicles (servicing repairs etc)
- Finance and cost recovery.

Ambulance Service management is responsible for ensuring that the majority of the above areas are managed. This may require the appointment of a Recovery Manager. See Part 3.

4.1 Ambulance Debrief Processes and Tools⁹

4.1.1 Debrief aims and requirements

The aim of the debrief process is two-fold:

- To identify and acknowledge where the response went well and ensure that these experiences are shared
- To identify where improvements in the response is required and develop a plan of action to ensure that learning occurs.

An incident debrief and / or reporting is required:

- Following all Level 2 and 3 incidents
- A level 1 incident (or where a major incident should have been declared) where there has been one or more of the following:
 - Injury to or safety issues for Ambulance Officers
 - Poor clinical outcomes of patients possibly attributable to the Ambulance scene management
 - Communications failures or issues
 - Failure of SOPs or Tactical Plans that have impacted on response
 - Ineffective coordination between responding agencies

- Crews lacking expertise or skills
- Equipment failures
- Significant impact on non-operational departments of the Ambulance Service
- External criticism or triggers impacting perceptions of the ambulance response
- Or other issues that may trigger a response from the Ambulance Service's Reportable Events Management System.

4.1.2 Debrief and Reporting tools

An Ambulance Commander and staff who worked at the scene or in the CCCS as part of the response, will be required to take part in one or more of the following processes:

Hot or Scene debrief

This is the lowest level of debrief but may be the most important. All responding ambulance officers and communications staff should take part in this debrief. This is a relatively informal process and should follow the debrief template as noted in the Ambulance Incident Command Notebook. This should occur as soon as possible following the incident. See Appendix 6.

Ambulance Commander's After Action Report

For a significant incident, the AC will be required to complete an After Action Report. The aim here is to communicate the findings from the incident scene, including learning and acknowledging excellence. This report will contribute to the wider Ambulance Service debrief and reporting process. This should be completed within one month of the incident. An After Action Report Template is in Appendix 10.

Ambulance Service Debrief

This process will be managed by the Ambulance Service Controller and may be delegated to an Ambulance Service Recovery Manager (if appointed). This process will be more formal and will draw in all relevant staff; operations, communications (CCCS), and non-operations. This debrief should occur within two months of the incident. The guidelines and documentation for this level of debrief are in Part 3.

⁹This section draws on the NZFS Incident Management – Command and Control Technical Manual Aug 2009. Section 6 pages 1–19. The NZFS Special Operations support is gratefully acknowledged.