BAY OF PLENTY
DISTRICT HEALTH BOARD
HAUORA A TOI

Health Emergency Plan

Response and Recovery

2019 - 2022






Our Vision: Healthy, thriving communities
Kia Momoho Te Hapori Oranga

EMERGENCY ON CAMPUS

Dial 777

- **Normal routine maybe disrupted for the duration of the emergency**
- **If on duty, stay on duty until ALL CLEAR or otherwise instructed**
- **Restrict telephone use to essential communications only**
- **If a crime has been committed, or Police designate a Crime Scene, NOTHING is to be removed or touched.**
  - *The name and contact details of every person involved (patient/client, staff, visitors) are to be noted before anyone is allowed to leave. Usually the Police will manage this process.*

EMERGENCY RESPONSE
THE FIRST HOUR

Priorities:
- Safety of workers, patients and visitors
- Continuity of care
- Respond to infrastructure concerns
- Ongoing assessment

The Duty Nurse Manager (DNM) acts as the Incident Controller until the Senior Manager on Call (SMOC) assumes the role and control of the incident

DNM receives notification of, or identifies an emergency event

Situational Assessment (p.23):
- Confirm nature and scope of event
- Is the event within or outside current hospital capacity
- Identify resources currently available and needed
- What actions have been taken?
- Begin incident log

- Assure emergency notifications are made (777)
- Notify SMOC – provide situational report
- Notify senior leadership based on assessment

- With SMOC identify immediate actions
- Telephony to notify others as identified, provide them with a message to support call management (Notification list – attachment to HEP)

- Take initial actions
- Identify appropriate location for interim Ops Centre and notify key on duty personnel

- Maintain situational awareness identify what information is required and who can provide it
- Establish interim reporting schedule

Use incident specific checklist to:
- Make assignments to staff
- Create capacity/capability

Identify staff available to support actions, give assignments and establish a method of communication and communication content.

- Continue with planning and actions until handover to SMOC or other senior manager

- Provide up to date sitrep to SMOC
- SMOC establish IMT, positions and location

Document Control

1. Approval

This Plan is approved by:

Name: *Simon Everitt*

Signature:

Role: *Interim* Chief Executive Officer, Bay of Plenty District Health Board (BOPDHB)

2. Distribution

Numbered hard copies of this document are held:

- At Tauranga Hospital in the Emergency Operations Centre (EOC) and in the Emergency Response Trolley;
- At Whakatāne Hospital in the Secondary EOC and in the Emergency Response Trolley;
- In the Regional Emergency Management Advisor for the Ministry office in Tauranga;
- By the DHB Emergency Management Planning Team.

A PDF copy will be placed on the BOPDHB website and on the BOP Emergency Management Information System (EMIS) site.

3. Scope

This plan is to be used during the coordination of an emergency or incident that:

- Involves a serious threat to the health status of the community;
- Involves an increase in presentations to healthcare providers beyond normal capacity;
- Involves a loss of services that disrupts the provision of care;
- When a neighbouring DHB activates their Health Emergency plan or if the Ministry of Health requires activation.

4. Contribution to the Te Toi Ahorangi 2030 Toi Ora Strategy

In line with the Te Toi Ahorangi 2030 Toi Ora Strategy, this plan outlines how the DHB Emergency Planning team will give effect to te Tiriti o Waitangi and support Māori communities to attain Toi Ora by;

- Inviting representatives of Māori Health Gains and Development to participate in emergency planning, response and recovery activities
- Prioritising Māori health and our iwi partners for support with emergency planning and training
- Support the development of Emergency Plans for Marae
- Supporting the development of emergency management resources in te reo Māori
- Developing emergency management plans that protect tikanga and kawa.

5. Manual process and records management

Where any situation, that results in manual processes being adopted for any period, any paper record/document that is generated during the period of the manual process must be retained for later inclusion into the appropriate system, in accordance with normal BOPDHB records management process.

This plan will be used to manage any emergency requiring a coordinated 'health' response, whether or not a civil defence emergency has been declared.

RECORD OF REVISIONS This plan will be revised every three years and based on new guidance and lessons learned from emergency incidents or exercises. Older versions of this document will be kept in the Archived Folder on DocMan: http://docman/org/Emergency/Plans/Forms/Keywords.aspx		
Date of Revision	Summary of Revisions	Name of Reviser
March 2019	Review and restructure of plan	J. Peters Team Leader Emergency Planning

EXECUTIVE SUMMARY

The Bay of Plenty District Health Board (BOPDHB) Health Emergency Plan and the planning process support "resilient health services" through a consistent approach to coordination and communication across the health sector. Planning builds on the experiences of preparing for, building resilience to, responding to and recovering from a range of hazards within the Bay of Plenty.

The Crown Funding Agreement requires the BOPDHB develop and maintain a health emergency plan. Contracted providers are required, in their contracted agreements, to develop and maintain emergency service continuity plans.

The plan uses a comprehensive, all hazard risk-based approach to emergency management, intended to support all health stakeholders to better understand the risk context they are required to manage and in which they deliver services. This multi-disciplinary, cross sector, regional approach provides a foundation for providers to work together.

The main body of the plan focuses on identified hazards and the response concept of operations. This is supported by functional appendices that provide a consequence management framework and hazard specific appendices.
The plan provides the following:

- A framework to manage intermediate, short-duration events, and extended emergencies with both small and large health impacts across a resilient and sustainable health sector;
- An outline of the roles and responsibilities at all levels of health delivery;
- The systems, mechanisms, and tools to be used by the DHB when responding to an emergency event;
- A process to support, maintain, and restore the health status of the population served by the BOPDHB within its area of responsibility;
- A structure for the control and coordination of the health sector response;
- A communication network and procedures for alerting and working with health service providers at the time of an emergency or potential emergency.

The BOPDHB assists all parts of the health and disability sector of the Bay of Plenty to understand their roles in managing risks to their services and the communities they serve. The plan focuses on those risks described in the Bay of Plenty Civil Defence Emergency Management Group Plan (2018-2023) and describes the context in which health emergency management is planned for within the region.

The plan is built around the four "Rs" identified by the Ministry of Civil Defence and Emergency Management and defined below: reduction, readiness, response, and recovery. Additionally, BOPDHB supports a continuous quality improvement process that strives to meet identified standards and learn from experiences and the expertise of partners.

Reduction – Identifying and analysing long-term risks to human life and property from natural or man-made hazards and taking steps to eliminate these risks where practicable and where not, reducing the likelihood and magnitude of their impact.

Readiness – Developing operational systems and capabilities before an emergency happens. These include self-help and response programmes for the general public, as well as specific programmes for emergency services, utilities and other agencies.

Response – Actions taken immediately before, during or directly after an emergency, to save lives and property, "prevent the spread of disease as well as help communities to recover."

Recovery – Activities beginning after initial impact has been stabilised in the response phase and extending until the community's capacity for self-help has been restored.

PART 1: INTRODUCTION

Definition of a 'Health Emergency'

An emergency is an occurrence, actual or imminent, which endangers or threatens to endanger life, the environment, the economy, critical infrastructure or the health of the public. By their very nature, the consequences of emergencies are difficult to predict and can happen anywhere, at any time, with little or no warning. An emergency can vary in scope, intensity and impact. However, we can ensure that we have an adequate understanding of the nature of hazards that our communities, health services and partner s face and that we are all as prepared for them as possible. We all have a role to play in building resilience to hazards and reducing vulnerabilities before, during and after emergencies.
(Source: National Health Emergency Plan 2014)

A regional health emergency is defined as an emergency event with health consequences which involves the whole region or when a local DHB is overwhelmed and not able to manage the local response.

This plan is directed at workers in the BOP DHB and external health providers and their personnel so that they can plan accordingly based on the hazards and risks in the areas in which they practice and for the population they serve. The plan is regional in its approach and seeks to provide the foundation for helping health providers work together.

Plan

The BOPDHB Health Emergency Plan consists of three foundational elements (see attachment):

- A concept of operations for response and recovery providing information on hazards, the scope of work (geography and demographics), a systems description and the framework and process for how the DHB will be organized to respond and how the DHB plans.
- Functional Annexes which provide a framework for specific functions undertaken as a consequences of emergency events, with detail specific to each hospital.
- Hazard Specific Appendices which provide a checklist to support responding workers faced with a specific identifiable hazard.

PART 2: Understanding the Region, Population and Hazardscape

The Area and Population to which this Plan Applies

The plan covers the geographical area shown as the shaded areas in Figure 1. The district includes Waihi Beach in the North but not Waihi township, which is in the Waikato District Health Board area. The district boundary in the North West runs along the Kaimai ranges. The district includes Waihau Bay and Cape Runaway in the East but not Potaka which is in the Tairawhiti District Health Board area. The southernmost towns in the district are Murupara, Minginui and Ruatahuna.

The BOP DHB serves an estimated resident population of 226,530 (2016/17 Estimate MOH) with a catchment area that encompasses 5 territorial authorities. These include:

- Western BOP (2,121 km2);
- Tauranga City (168 km2);
- Whakatāne District (4,442 km2);
- Kawerau District (22 km2);
- Opotiki District (3,105 km2).

For convenience districts are sometimes combined as follows:

- Western BOP includes Western BOP and Tauranga City;
- Eastern BOP includes Whakatāne, Kawerau, and Opotiki.

The population is projected to grow in line with overall NZ population growth with most growth occurring in Tauranga City. Overall The Western BOP accounts for 77% of the areas total population and Eastern BOP 23%. The Western BOP is expected to see the largest growth in population with the Eastern BOP seeing negative growth.

The area encompassed by the Bay of Plenty DHB is home to a diverse population including large Māori and rural communities in the Eastern BOP. In the DHB about a quarter of the population live in areas with high NZDep06 scores. Nearly a quarter of the population are Māori the proportion is nearly 50 percent in the Eastern BOP, but the population numbers of Māori are higher in Tauranga. Residents living in more deprived areas may have poorer health outcomes and may be less resilient to emergencies as they have fewer resources. Overall the DHB population is markedly over represented in high deprivation scores.

The Bay of Plenty is home to 18 iwi:

Ngāi Te Rangi	Ngāti Manawa
Ngāti Ranginui	Ngāti Whare
Te Whānau ā Te Ēhutu	Waitahā
Ngāti Rangitihi	Tapuika
Te Whānau ā Apanui	Whakatōhea
Ngāti Awa	Ngāti Pūkenga
Tūhoe	Ngai Tai
Ngāti Mākino	Ngāti Whakahemo
Ngāti Whakaue ki Maketū	Tūwharetoa ki Kawerau

The traditional boundaries of these iwi are “mai i ngā kurī ā Whārei ki Tihirau,” a whakatauāki from the eponyumous ancestor Muriwai. There are 126 marae in the Bay of Plenty DHB region.

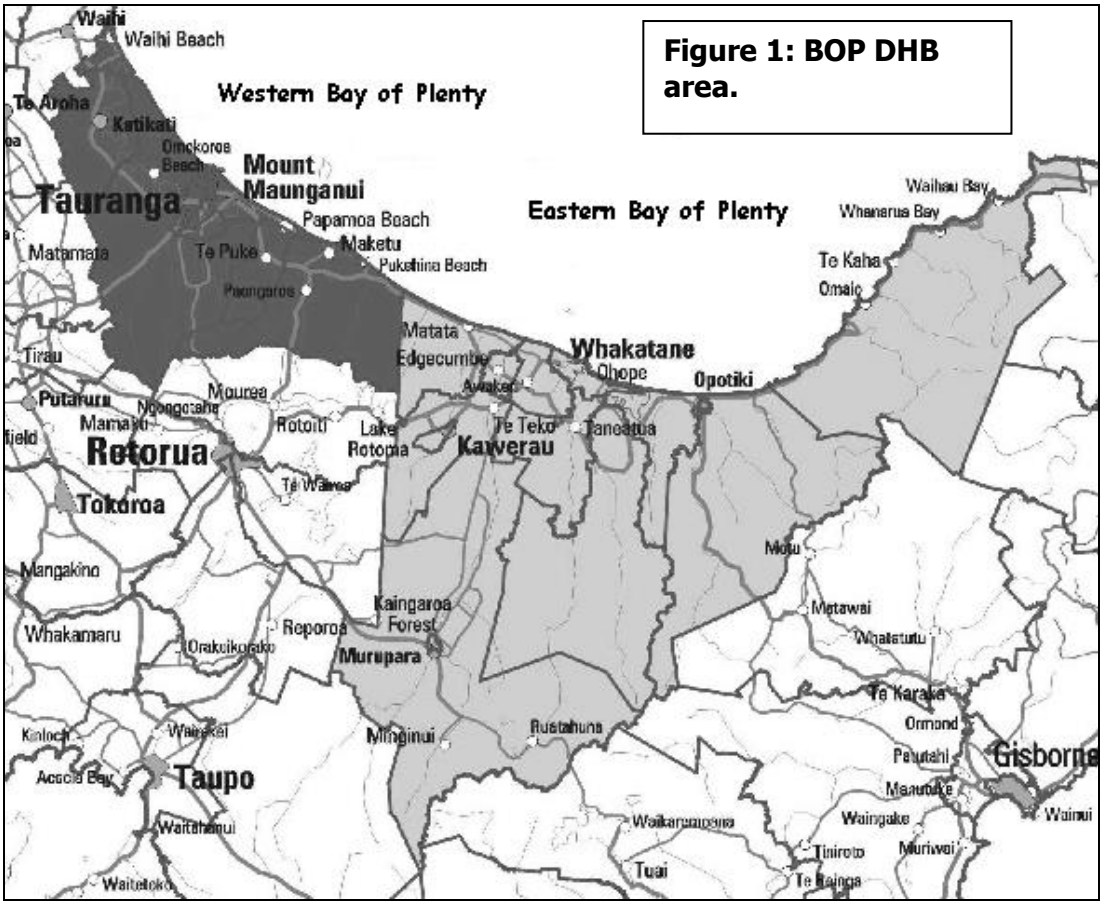


Figure 1: BOP DHB area.

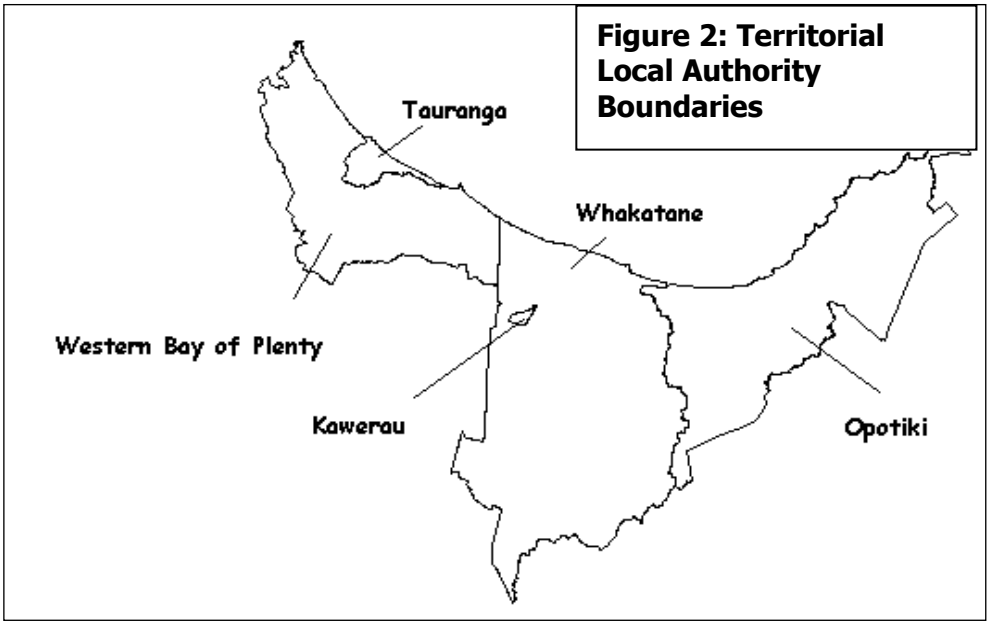


Figure 2: Territorial Local Authority Boundaries

Overview of Geographical Features

The area comprises 12,241 square kilometres of land and 9,509 square kilometres of coastal marine. The prominent features of the region include:

- 18 offshore islands such as Matakana, Tuhua (Mayor) and Whakaari (White Island-an active volcano). Matakana, Rangiwaea and Mōtiti Islands all have resident populations.
- Mauao & Putuaki (Mt Edgecumbe)
- A number of harbours, Tauranga, Ohiwa
- Estuaries including: Maketu, Little Waihi, Whakatāne, Waiotahi & Waioeka/Otara

- 8 major rivers including: Wairoa , Kaituna, Tarawera, Rangataiki, Whakatāne, Waioeka, Motu and Ruakokore rivers.

Geology

Volcanism has occurred sporadically within the Okataina Volcanic Zone in the region over the last seven million years. The BOP has active geothermal features and New Zealand's most active volcano, Whakaari. Bay of Plenty lies above an active plate boundary – where the Pacific Tectonic Plate is being sub ducted beneath the Indo-Australian Plate which causes episodic volcanism, faulting and earthquakes.

Climate

The region has a temperate climate with warm humid summers and mild winters. Winter usually has more rain and is the most unsettled time of year. In summer and autumn, storms of tropical origin may bring high winds and heavy rainfall from the east or northeast.

Bay of Plenty Hazardscape

The natural and technological[1] hazards facing the Bay of Plenty are many and varied, including active volcanoes, extensive geothermal areas and several earthquake fault lines. In addition, flooding, plant and animal disease and large storm inundation events, coastal erosion, storm surges and tsunami are perceived as threats.

Potential hazards that occur as a result of human activity include agricultural emergencies; industrial processes; urban fires; public health crisis; infrastructure failure and hostile acts. Major industries in the BOP can create hazards as well as being exposed to hazards e.g. large-scale industrial sites such as the Port of Tauranga, the Kawerau Mill and others create the potential for hazardous chemical emergencies to occur.

The geographic size of the region, coupled with the distribution of rural communities linked primarily by road, emphasises the need for emergency management systems that consider the need for self-reliance, while working to a wider co-operative framework. The region is bisected by major gas, electricity, and telecommunication grids and rivers. The BOPDHB is further challenged by its boundaries being different to those of Environment BOP and the other emergency services providing services to the region.

BOP DHB Risk Management Planning Process

The BOPDHB Risk Management Planning process is used to identify the risks to the DHB and to assist to develop the various emergency response plans. For more information reference Attachment A: How We Plan – the 4 Rs.

Identifying and Analysing Hazards

The hazards that have been identified for the region are listed below. It should be noted that this is a general summary and does not identify the unique and specific levels of risk in different localities within the area covered by the BOPDHB. Health providers are expected to conduct a risk assessment for their.

[1] Technological hazards are non-natural hazards, namely those hazards created as a result of human activity, that have potential to create an emergency situation. The line between natural and technological events is not always clear cut, therefore an arbitrary classification has been made

Hazard Prioritisation

Prioritisation of regional hazards has taken place as part of integrated CDEM planning. Emergency Management Bay of Plenty (EMBOP) identifies hazards and their priorities based on the likelihood of them occurring and the consequences. Hazards in the Bay of Plenty are divided into high, medium, and low priorities as follows:

High Priority Hazards

- Tsunami – local
- Human pandemic
- Tsunami – distal
- Volcanic – local
- Dam failure
- Major accident (marine/port)
- Earthquake – severe
- Plant and animal pests & diseases
- Drought*
- Wind storm (including tornado)*
- Storm surge*
- Flooding – river/stream

Medium Priority Hazards

- Coastal erosion
- Lifeline utility failure*
- Hazardous substances release*
- Slope instability (landslide, debris flow, slumping)*
- Civil unrest/terrorism
- Major transport accident (air road, rail)
- Flooding – urban/rural*
- Volcanic – distal
- Rural fire
- Volcanic – Caldera unrest

Low Priority Hazards

- Geothermal
- Urban fire
- Regional deformation (long-term)*

The Bay of Plenty Civil Defence Emergency Management Group Plan identifies hazards most likely to occur, indicated above by an asterisk (*).

Likely impacts and issues could include:

- Casualties
- Public health issues (e.g. water quality, epidemic)
- Building failure
- Contamination (e.g. chemical)
- Failure of electricity, gas, water, sewerage and information technology services
- Failure of critical supplies
- Public panic
- Social impact
- Transportation issues (need for/lack of resources)
- Transportation networks fail/are closed
- Mental health issues
- Isolation of patients/clients and staff

System Description

The following describes the system within which the BOPDHB operates including key partnerships in planning for and responding to emergencies and events. Details of health provider roles and responsibilities are outlined on pp 33-39.

Bay of Plenty District Health Board

Health services are provided by a wide range of independent providers and the DHB Provider Arm. Hospital and related health services are provided by two secondary hospitals located in Tauranga (349 beds) and Whakatāne (110 beds).

In addition services are provided through three health centres: Opotiki Health Centre (4 general bed and 1 maternity bed unit), Te Kaha and Murupara health centres, and district nursing and mental health and addiction services.

Independent providers working in the community are comprised of rest homes, primary health organizations, and organizations providing health and disability services (approximately 200).

Through Toi Te Ora - Public Health Service, the BOPDHB also hold the contract for the provision of public health services within the Lakes District Health Board, which takes in the Rotorua and Taupo Territorial Authority Districts.

The fit between national, local, and Civil Defence Emergency Management (CDEM) and Ministry of Health planning is illustrated below in Figure 3: **Framework for Health Emergency Management Plans**

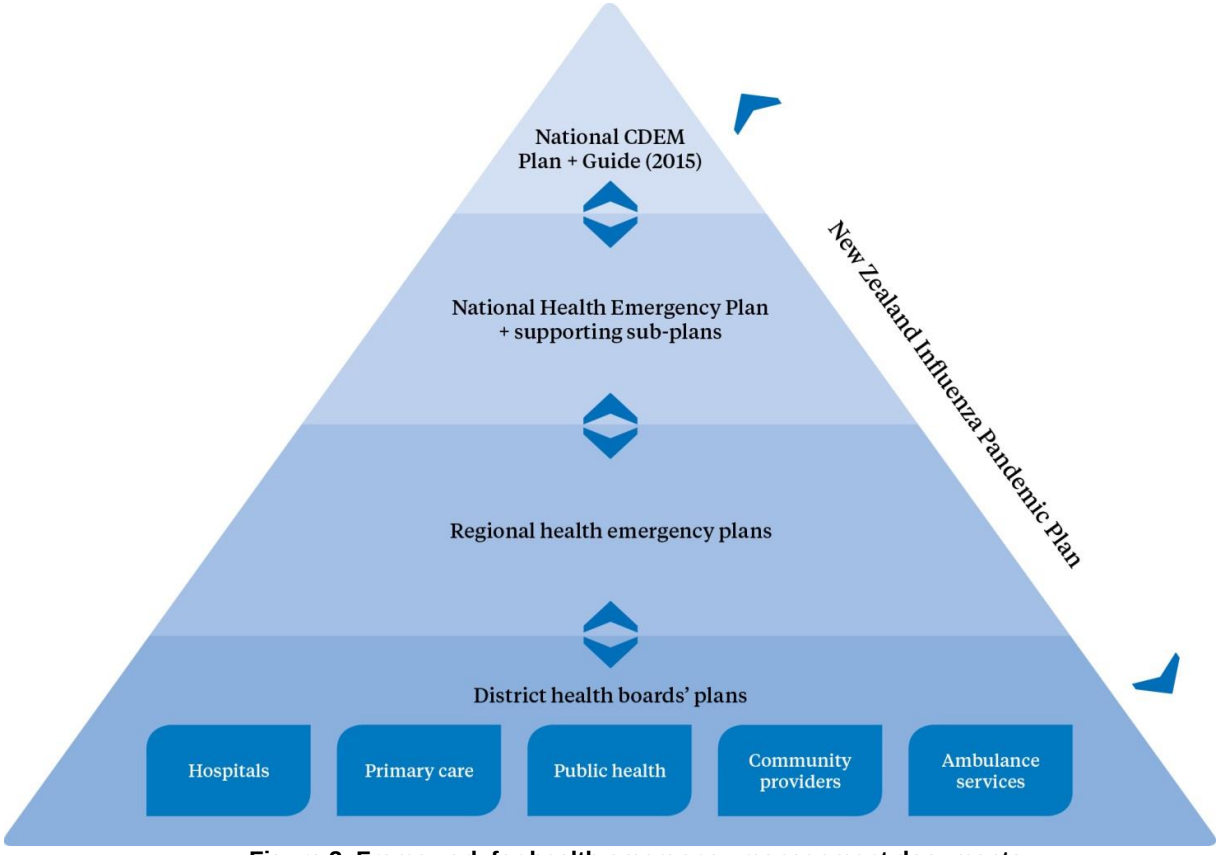


Figure 3. Framework for health emergency management documents

National and Regional Context

The National Health Emergency Plan (NHEP 2015) requires DHBs to work in regional clusters for the purposes of coordinating the response to a national or regional health emergency. The

five ‘Midland’ DHBs maintain a regional HEP. The relationship between BOPDHB and regional/national health emergency planning is illustrated in the section below
NZ Health & Disability Emergency/ CIMS structure (Figure 4)

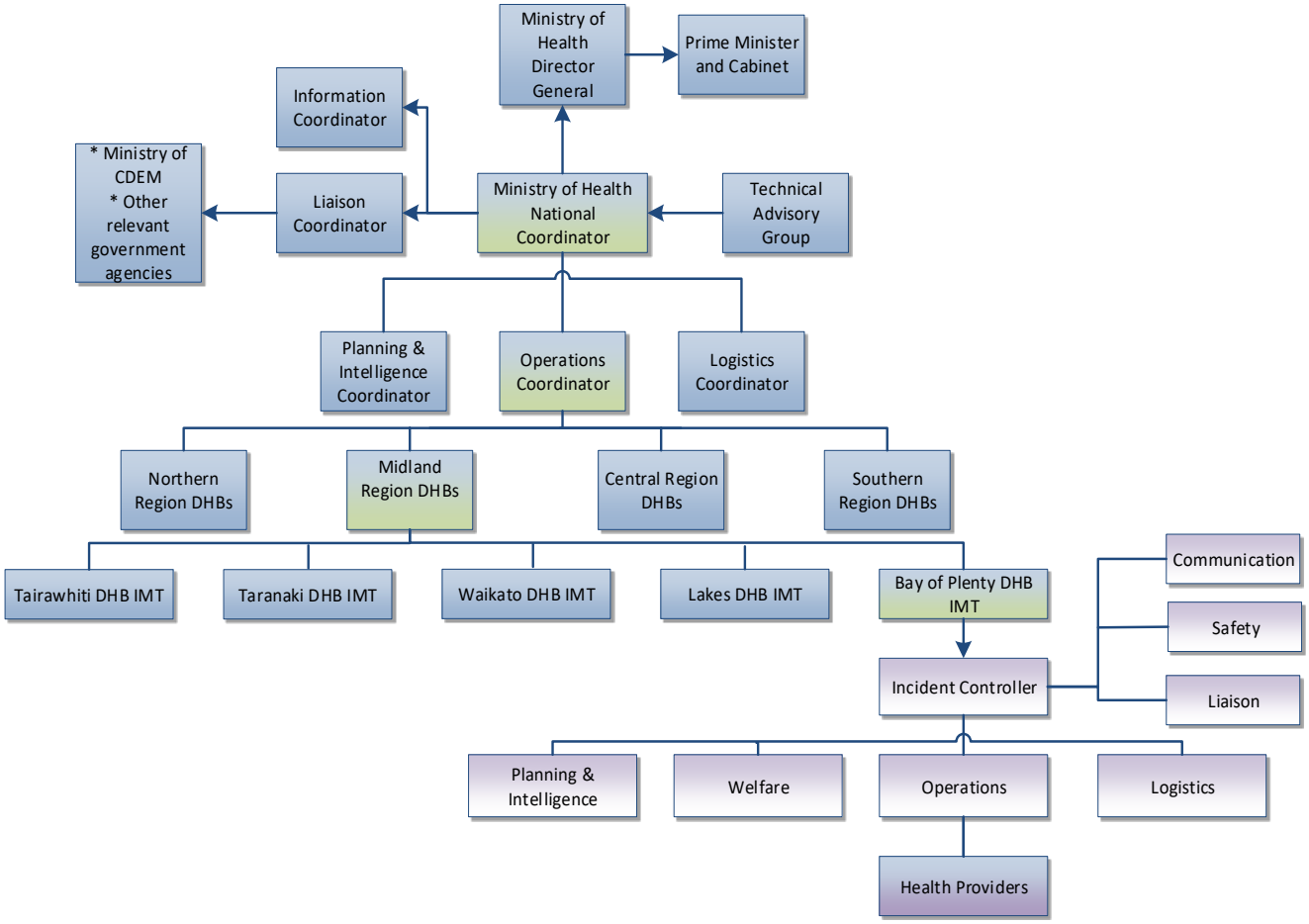


Figure 4: NZ Health& Disability Emergency/CIMS Structure

The Civil Defence and Emergency Management Act designates District Health Boards as emergency services which are required to be active members of their regional Civil Defence and Emergency Management Groups. The Act designates responsibility for the provision of health care services in an emergency, as well as the restoration of the health status of a community, to Health. The Act also requires DHBs to actively engage with other response agencies in planning and exercise activities and to coordinate the health response. In addition, following an emergency, DHBs are responsible for the coordination of Psychosocial Support to the community in coordination with the Civil Defence Welfare function.

Bay of Plenty District Health Board Planning Relationships

The BOPDHB liaises with and provides support and advice to district-wide health providers by:

- Provides planning templates and support in completing and testing them
- Develops and facilitates an annual exercise plan
- Provides operational support to major incidents
- Establishes, tests and maintains DHB and provider arm Health Emergency Plans
- Facilitates debriefs and post-incident reviews with the accompanying after action reports and follow up improvement plans

In addition the BOPDHB liaises with other DHBs and the Ministry of Health and represents the DHB in national activities as appropriate. This work is done through the following activities:

- Representation on the Midland Region Health Emergency Management Group forum
- Representation at national meetings

- Involvement with Ministry of Health led national emergency management projects as able and appropriate
- Attends special interest meetings as required

The BOPDHB recognizes a complex range of partners as key to successful planning to respond to an emergency. For a full systems description see Attachment A How We Plan – The 4 Rs.

Legal and Fiscal Obligations

The requirement for the BOPDHB to develop and maintain a health emergency plan is stipulated in its Crown Funding Agreement. The requirement for contracted providers to maintain service continuity plans is stipulated in their funding contracts with BOPDHB. During response and recovery activities, providers must document their response actions and keep a record of all costs incurred during response and recovery activities. Costs should first be billed through normal or pre-arranged funding agreements.

For DHB incidents, DHBs will cover the costs of a major incident up to 0.1% of its allocated budget. Following that, costs will be recovered via application to the Ministry of Health or, if relevant, the lead agency.

Legislative Requirements and Reference Documents

This Plan meets the requirements placed on service providers by:

- NZ Public Health and Disability Act (2000)
- Health Act (1956)
- Civil Defence and Emergency Management Act 2002
- National Civil Defence Plan 2006 section 9 (Revised 2015)
- Health and Safety in Employment Act (2015)
- The Law Reform (Epidemic Preparedness) Bill (2006)
- Ministry of Health (2006) Operational Policy Framework 2018-2019
- National Health Emergency Plan: A Framework for the Health and Disability Sector (2015)
- National Health Emergency Plan Infectious Diseases
- The New Zealand Influenza Pandemic Action Plan (2010)
- BOP CDEM Group Plan 2018 - 2023

Assumptions

The BOPDHB, as an emergency service, recognises that they have a role in responding to emergencies of all kinds. The following assumptions reflect an all-hazards approach and provide insight into the role of the DHB during emergencies:

- The BOPDHB is the lead agency for emergencies directly affecting the two hospitals;
- Emergencies of a biological nature such as pandemic, other emerging infections are managed in partnership with Toi Te Ora – Public Health Services;
- The BOPDHB recognises the unique role Toi Te Ora plays in protecting the health of the population of both the Bay of Plenty and Lakes Districts and supports them in that role;
- The BOPDHB recognises Emergency Management Bay of Plenty as the convening entity for emergency response in the Bay of Plenty;
- The BOPDHB will participate in a supporting role during an emergency response for all other hazards based on the situational assessment and the needs of the population and external health providers;
- All partnering agencies identified in this plan are responsible for the development of agency-specific plans and standard operating procedures that support their roles and responsibilities;
- The BOPDHB uses the Coordinated Incident Management System (CIMS) to respond to all incidents;
- The scope of a response is guided by the initial and ongoing situational assessments;

- The BOPDHB is in compliance with all Ministry of Health standards as set out in legislation and the Operational Policy Framework;
- The BOPDHB will activate its business continuity plans to free up resources from day to day operations as deemed necessary through the situational assessment.

PART 3: RESPONSE – CONCEPT OF OPERATIONS

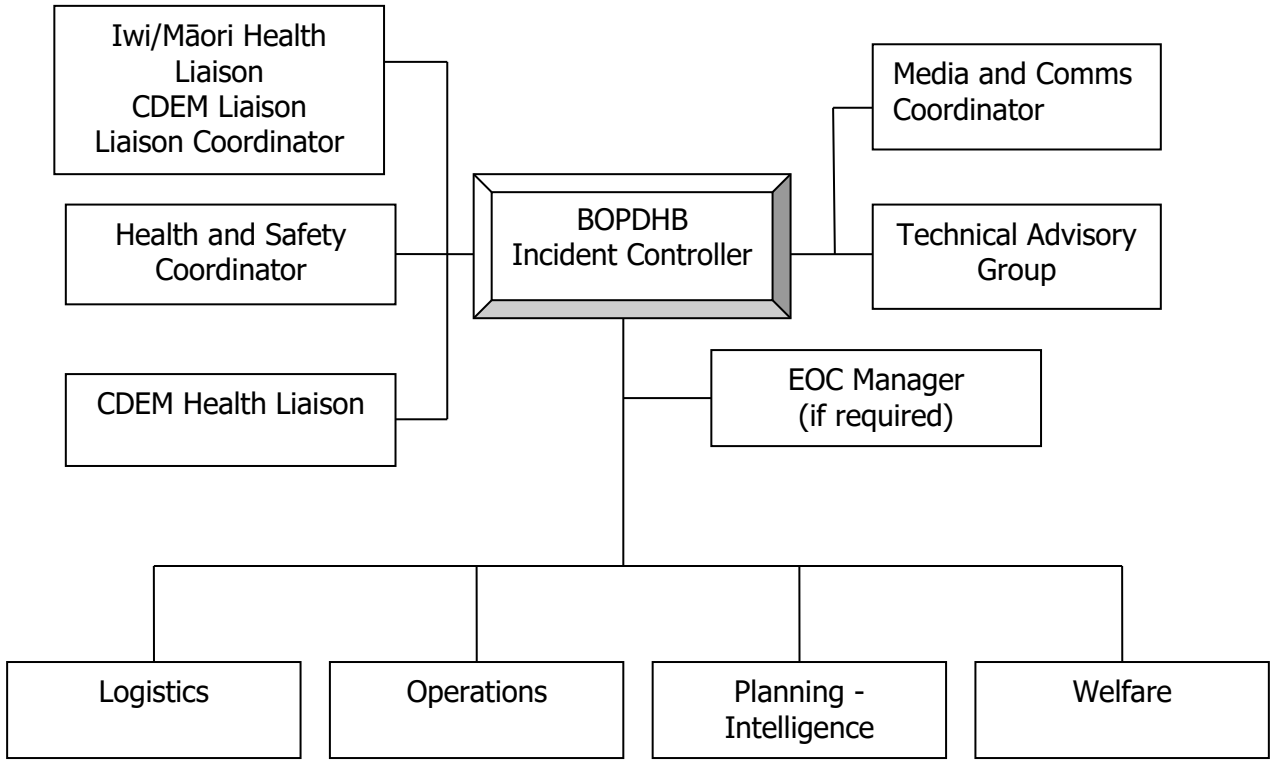
A comprehensive BOPDHB response to an emergency event involves the following elements:

- Notification and/or recognition of an emergency
- Situational assessment
- Initial notification
- Activation
- Command and Control
- Response
- Recovery and organisational learning

Command and Control - CIMS

The BOPDHB follows the Coordinated Incident Management System (CIMS) in all response operations. Additional resources to support Incident Management Team are in Annex I including the following:

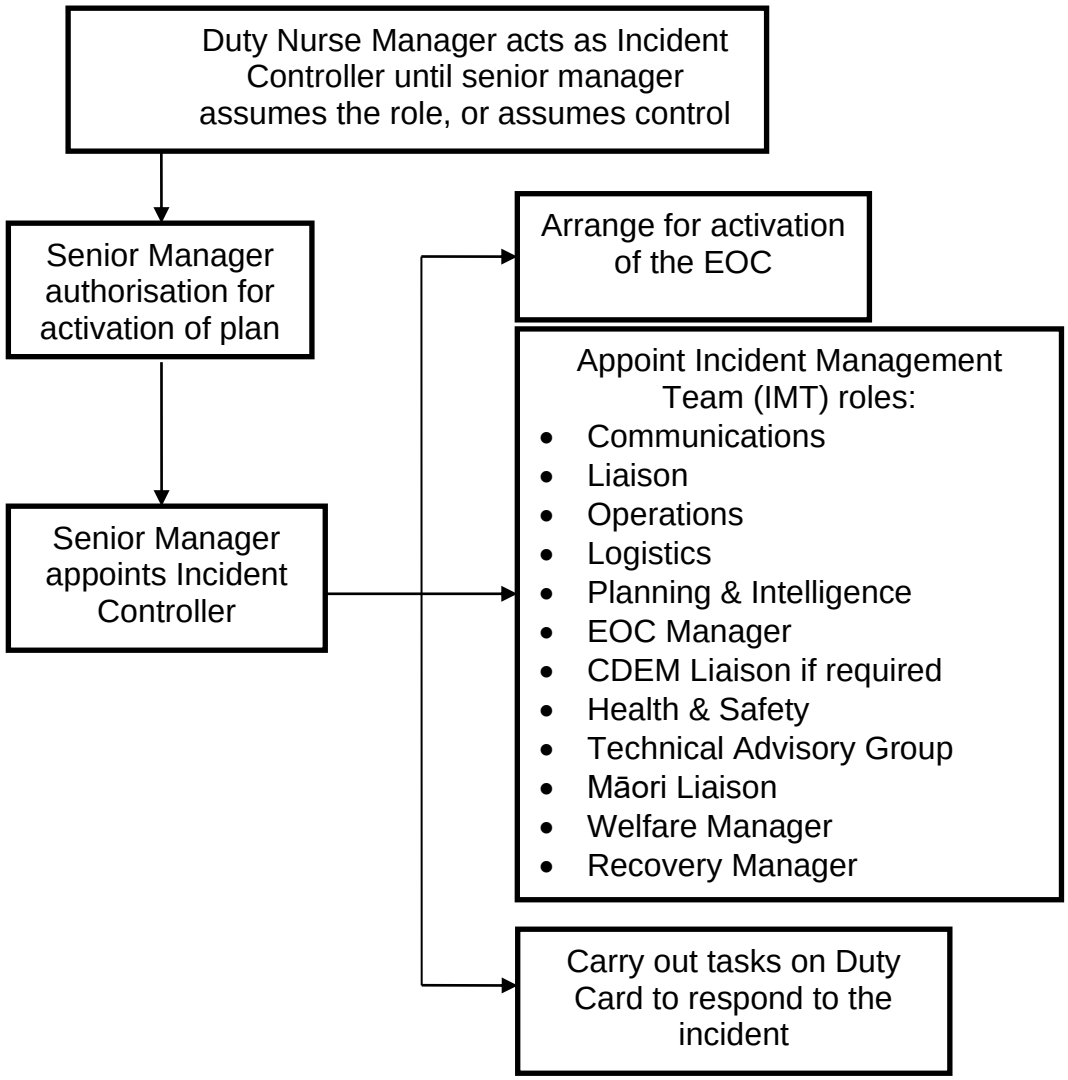
- Incident role cards
- Major Incident Log
- Incident Action Planning document
- Sitrep Form
- Information specific to Whakatāne and Tauranga EOC management



If an Emergency Operations Centre (EOC) is stood up in Whakatāne concurrent with the Tauranga EOC the incident structure will be the same with the exception of there being a Deputy Incident Controller in Whakatāne. The Whakatāne EOC will be called the Secondary EOC.

EOC Activation

EOC activation follows the flow chart below with the decision to open the EOC being made by a Senior Manager who will then identify the Incident Controller.



DHB/ Tauranga Hospital EOC
Location: Ground floor Property Services Building
Access: Day & Night: pin (Emergency Planners have the number) Security and Property Services can also open the EOC by key if required.
Resources: Emergency Response Trolley in main reception (Duty Managers & Emergency Planners have access keys)
Alternate Location: Kauri Room 2nd Floor Building 24

Whakatāne Hospital Secondary EOC
Location: Dawson Building Teleconference Room Meeting Room 1
Access: Day & night: via Duty Manager
Alternate Location: Manuka Room Podville

Financial Arrangements and Funding Tracking

BOPDHB will ensure that an expenditure management system will have been put in place during the management of the incident allowing a transparent tracking of emergency expenses. To assist with tracking of costs associated with the response, an emergency cost centre has been set up by the DHB to be used during an emergency event. This cost centre will be activated by the Chief Financial Officer or designate, when the HEP is activated.

The Logistics manager will record and track resources/expenditure on a master sheet, The BOPDHB will cover the costs of the response in alignment with arrangements for government financial support for emergencies set out in the Operational Policy Framework (OPF). These provisions apply whether or not there is a state of emergency in force.

Details of the operation of the emergency cost centre are included in the Incident Management Team (IMT) Desk file in the Emergency Operations Centre (EOC) and in Annex I CIMS and EOC Guidance.

Roles & Responsibilities by Alert Codes

The role of the Ministry in an emergency is national co-ordination of health and disability services. The Ministry shall also co-ordinate any international response for the health and disability sector, in partnership with the Ministry of Foreign Affairs and Trade and MCDEM.

The primary response for the management of an emergency lies with the affected local provider, which may be the local DHB, or the DHB regional group if a regional emergency plan is activated. At each phase of an emergency there are specific actions to be taken at the local, regional and national level. Table 1 summarises the key roles and responsibilities at the local, regional, and national level during each alert code.

During all phases the BOPDHB does the following:

- Coordinates and manages the health sector response in its particular areas
- Liaises with other agencies at the local level and within the region
- Provides the region and the Ministry with required information

Table 1: Alert Codes

Phase	Example situation	Alert code	Regional Responsibilities	Local Responsibilities
Information	Confirmation of a potential emergency situation that may impact in and/or on New Zealand. For example a new infectious disease with pandemic potential, early warning of volcanic activity or other threat.	**White**	• Not activated in code white. • Conducts business as usual	• Monitors situation and obtains intelligence reports and advice from the Ministry. • Advises all relevant staff, services and service providers of the event and developing intelligence. • Liaises with Ministry regarding media statements. • Reviews local and regional HEPs. • Prepares to activate emergency plans. • Liaises with other emergency management agencies within the region.
Standby	Warning of imminent Code Red alert. For example a possible emergency in New Zealand such as an imported case of a new and highly infectious disease in New Zealand without local transmission or initial reports of a major mass casualty event within one area of New Zealand which may require assistance from unaffected DHBs	**Yellow**	• Not activated in code yellow. **NB** In some circumstances a single regional coordination team may be activated without the national plan moving to the red phase. This may occur when a health related emergency is localised and likely to remain so or when the Ministry considers activation of the NHEP is not currently required.	• Prepares to activate DHB emergency operations centre. • Identifies the need for and appoints an Incident Management Team (IMT). • Prepares to activate regional coordination • Advises and prepares all staff, services and service providers. • Manages liaison with local agencies. • Monitors local situation and liaises with the Ministry. • Prepares to activate flu clinics/CBACs and triage as necessary. **NB** in certain types of emergencies (such as pandemic) public health services may fully deploy whilst clinical services remain on standby to provide assistance if required, and mount a clinical response.
Activation	Major emergency in New Zealand exists requiring immediate activation of HEPs. For example a large scale epidemic or pandemic or major mass casualty event requiring assistance from outside the affected region	**Red**	• Activates regional incident management structure and identifies a regional coordinator. • Coordinates the regional health response. • Communicates with the Ministry, regional DHBs and other agencies' regional emergency structures. • Coordinates regional intelligence gathering.	• Activates DHB EOC. • Activates DHB IMT. • Manages DHB primary, secondary and public health service response. • Liaises with other agencies at a district level • Activates Flu Clinics/CBACS and triage as necessary. • Provides regional coordination centre with DHB/community health intelligence. • Assesses need for psychosocial support • Appoints a recovery manager
Stand-down	Deactivation of the emergency response. For example end of outbreak, epidemic or emergency. Recovery activities will continue.	**Green**	• Stands down regional coordination. • Participates in debrief. • Updates plans.	• Stands down DHB EOC and the IMT • Focuses activities on health recovery issues in the DHB region. • Facilitates debriefs. • Provides management and Ministry with information following

Phase	Example situation	Alert code	Regional Responsibilities	Local Responsibilities
				debriefs. • Updates plans.

Notification/Recognition of an Emergency

The BOPDHB may receive notification of an event external to its system through the following methods:

Single Point of Contact System

The Single Point of Contact system provides 24-hour, seven days a week communication between DHBs their public health units and the Ministry. The system is based on a group e-mail that the Ministry uses to send messages to a single contact e-mail address within the 20 DHBs. BOPDHB single point of contact e-mails, when received, generate emails that cascade to a group maintained by the Emergency Planning Team.

The email generates a text message to the duty nurse managers' cell phones for both Tauranga & Whakatāne Hospitals, to ensure Duty Nurse Managers away from their computers receive the information as soon as possible.

(EACC) External Notifications Procedure

The St John National Emergency Management Team has set up a single point of contact system with the 20 DHBs, in the form of an electronic paging/text notification to provide notification of a major incident. The BOPDHB single point of contact message goes to the Tauranga & Whakatāne Duty Nurse Managers and the Emergency Planning Team. This system is tested on a monthly basis.

There are three levels of notification with the Ambulance District Operations Manager or delegate determining the level:

- Level 1: medium impact on normal operations – most DHBs request notification at this level
- Level 2: high impact on normal operations
- Level 3: severe impact on normal operations

If a major incident is declared a teleconference may be requested depending on the scale and complexity of the event. This allows St. John to provide situational awareness at one time and avoid receiving multiple calls. Each DHB is to have only 2 persons on the call.

Notification will be given to all DHBs in a region at one time even if the incident is only in one DHB. In addition, notification directly to the Emergency Department may occur for smaller events.

For external partners in the Bay of Plenty, the Duty Nurse Manager number is provided as the first point of contact for emergencies at a facility or in the community that may impact the healthcare system, for example, external health providers, major hazard facilities and other partners.

- The initial alert for personal health incidents may be signaled through the Tauranga or Whakatāne Duty Nurse Managers, the GP or PHO Liaison Manager.

- The Initial alert for a public health incident may be signaled through the on-call health protection officer or the on-call Medical Officer of Health. Notification to the broader DHB will be via the single point of contact and to a member of the Emergency Planning Team

Recognition of an Emergency

In some cases the recognition that there is an emergency is made by BOPDHB workers. The definition of a "health emergency" includes but is not limited to the following:

- Any event that threatens to impact the ability of either hospital to be able to continue to provide care

- A serious threat to the health status of the community or a part of the community creating casualties that may overwhelm the DHBs ability to respond as business as usual
- Presentation to a healthcare provider of more casualties or patients than they are staffed or equipped to treat
- Loss of services which prevent healthcare facility(s) from providing care for patients

Initial and Ongoing Situational Assessment (see attachment)

An initial assessment is done to determine the scope of the event and next action steps. Below is guidance on components of the assessment to be used when the emergency is first recognised and throughout the situation:

- Details/scope of the emergency;
- Is the event within or outside the hospitals current capacity?
- Current hospital status;
- What actions have already been taken;
- What resources have already been committed;
    - What support is required
    - Where is the support required
    - When is the support required
    - Where to report and to whom
- Likely hazards that may be encountered en-route;
- What are the major risks;
- Which emergency plan has been activated.

Internal Notifications

The Duty Nurse Manger arranges notification of relevant personnel using the Emergency Notification List (Attachment to HEP) as a guide.

1. Consider all communication options and coordinate with Telephony
2. Notification messages are to include details of the situational assessment (see above)
3. Notification must be acknowledged with date and time of acknowledgement recorded
4. Use the established single point of contact email cascade to make notifications.

Notification to partners

The DHB will make notification across the BOPDHB to both internal and external partners including but not limited to the following (see attached notification lists):

- Ministry of Health (GETMOH)
- Midland Regional Emergency Management Advisor
- Primary Health Organizations (PHOs) who then notify general practices
- External Health Providers
- Iwi representatives and rūnanga
- Emergency Management Bay of Plenty (EMBOP) who will notify relevant councils
- Police, Fire and Ambulance

In an unexpected sudden event a teleconference involving affected parties may be held as soon as possible to establish the ongoing communications and response framework.

Formal liaison should be established for local or regional response. This includes the provision for a health liaison representative at the group and local CDEM EOCs. The liaison will communicate and disseminate interagency information with the DHB EOC.

Activation of the Health Emergency Plan (HEP) - Triggers

All or part of this plan will be activated for the following reasons:

- When a local, regional or national incident meets the definition of a "health emergency", that is, when usual resources are overwhelmed or have the potential to be overwhelmed for example;
    - A serious threat to the health status of the community such as:
        - Expected influenza epidemic/pandemic;
        - Predicted volcanic ash fall;
        - Major flooding;
        - Expected mass casualty.
    - Presentation to a healthcare provider or hospital of more casualties or patients than they are staffed or equipped to treat, of which the cause may be:
        - major transport accident;
        - hazardous substances spill resulting in many casualties;
        - earthquake resulting in many casualties;
        - tsunami;
        - infectious diseases.
    - Loss of services which prevent healthcare facility(s) from providing care for patients such as the following:
        - extended loss of electricity, loss of water supply, loss of waste water service;
        - transport strike resulting in non-delivery of critical medical supplies;
        - industrial action;
        - major weather event causing casualties or disrupting provision of health services (flooding landslides etc).
- When a neighbouring DHB activates the regional HEP;
- When the Ministry of Health, after activating the NHEP, requires the DHBs to activate their local/regional plans.

All external health providers can activate their HEP in these circumstances.

Procedures for Activation of the BOPDHB HEP (Annex I CIMS and EOC Guidance)

The Duty Nurse Manager is instructed to:

1. Notify the Senior Manager on call;
2. Take control until the Senior Manager takes over;
3. Begin the incident log;
4. Begin the communication process; (see notification list attachment)
5. Senior Manager signs authorization for activation of the HEP (Annex I).
6. Log into EMIS
7. Quickly establish a battle rhythm – see Annex I CIMS and EOC Guidance
    - Establish a working incident management team. Role cards are available in Annex I. Role jerkins are stored in the EOC.
    - Establish regular briefing times (mandatory for key CIMS roles) – briefing template can be found in the EOCs and in Annex I.
    - Establish action planning and situation reporting cycle – see Annex I.

Functional Areas of Responsibility

The following identifies functional and hazard specific plans that have been developed to support a response by the BOPDHB. Each function is supported by a plan that identifies common principles and processes and acknowledges the differences between the Eastern and Western Bay of Plenty through Whakatāne Hospital and Tauranga Hospital attachments.

CIMS and EOC Guidance – Annex I

This annex provides guidance to the set-up and running of the EOC. Documentation includes the role cards, and documentation templates.

Communications – Annex II

The formal communication structure used by key health agencies is part of the CIMS structure and operates from the BOPDHB EOC. Communications includes the development and dissemination of critical information both within the health sector, to other organizations and to the public with a focus on providing critical accurate messaging in a timely manner.

Communications staff works closely with partners to coordinate messaging to assure consistency and accuracy including Toi Te Ora – Public Health Services, communications representatives from local councils and the Ministry of Health.

The Public Information Management (PIM) group within the CIMS structure will work with the Iwi/Māori Liaison to craft and disseminate messages to Iwi. The PIM section will seek input and feedback from Māori to assure the message meets the needs ot the community.

Communications encompasses both the act of communicating information and the technology or systems used to communicate and receive information. Communications staff will monitor media to understand the situation and message appropriately. Messaging to BOPDHB workers, partners and the community will happen via different methods including but not limited to the following:

- Social media
- Print media
- Radio and TV

The BOPDHB has a Communications Team that manages both corporate communications and the management of messaging at the time of an emergency. We will also be cognizant of the role that can be played by Māori media, including iwi radio stations and Māori Television.

DHBs are responsible for communicating directly with other local emergency agencies that may be involved in the response, including CDEM groups, ambulance, police and fire services. In an unexpected sudden event a teleconference involving affected parties may be held as soon as possible to establish the ongoing communications framework.

Formal liaison should be established for local or regional response. This includes the provision for a health liaison representative at the group and local CDEM EOCs. The liaison will communicate and disseminate interagency information with the DHB EOC.

The DHB CDEM health liaison representative desk file including role card and communications equipment is available in a series of grab bags located in the DHB EOCs.

During a health led incident the DHB EOC should provide for accommodation of a CDEM liaison representative at the BOP EOC.

Mass Casualty Response (surge) Annex III

The Ministry of Health defines a mass casualty or surge incident as one in which there is a serious threat to the health of the community or a disruption in health services, or causes (or is likely to cause) numbers or types of casualties that require special measures to be implemented by responding agencies such as the DHB, ambulance services and the Ministry of Health.

The Ministry of Health identifies such incidents as being either no-notice events such as an earthquake, an explosion, serious transportation accident, tsunami or any combination of the aforesaid or a rising tide event in which the onset is slower and sometimes difficult to detect such as a large outbreak of a communicable disease or a hazardous substance exposure.

The mass casualty plan may be activated in either of the above cases and will require the DHB to initiate the following:

- Activation of the EOC and an incident management team;
- Implement systems and process for triage, diagnosis and treatment;
- Implement plans to develop hospital bed and healthcare capacity to sustain patient care including expansion of specialty care as needed e.g. orthopaedics or burn care;
- Patient tracking capability to support family reunification;
- Support to family and whanau;
- Information management and communication within the DHB and with the public

Agreements with External Health Providers to Increase Surge Capacity

BOP DHB has signed a Memorandum of Understanding (MOU) document with Grace Hospital in Tauranga in order to provide extra surgical services for a mass casualty or major service failure for Tauranga or Whakatāne Hospitals. This MOU can be found at: http://docman/org/Emergency/Plans/Grace%20Hospital%20MOU%2031%20August%2009.doc

The DHB also has MOUs signed with the following practices to provide extra capacity during a mass casualty or major service failure at Tauranga Hospital:

- Accident & Healthcare located on Second Avenue, Tauranga;
- The Doctors Tauranga located on Devonport Road, Tauranga;
- The Doctors Bayfair located at Girven Road, Mount Maunganui.

Psychosocial Response – Annex IV

Psychosocial support is the process of meeting a person's, and a community's, emotional, social, mental, cultural and spiritual needs. The Ministry of Health is designated as the responsible agency for coordinating the delivery of psychosocial support to affected communities.

The BOPDHB partners with Civil Defence in providing services through the Welfare Section of the incident management structure. Agencies and organizations have been identified to provide psychosocial support services. The BOPDHB also undertakes the provision of Psychological First Aid Training for partners to support this activity. If the DHB is activated in this capacity a health liaison will be sent to the local council EOC.

Care of Vulnerable Populations

The definition of vulnerable populations is broad and therefore consideration of all of these groups in the planning process is important. Vulnerable populations may include but not be limited to the following:

- Those with healthcare conditions that compromise their ability to be able to respond to an emergency
- People living with a disability
- Those who are economically disadvantaged
- Infants, children and the elderly
- Racial or ethnic minorities
- Those for whom English is their second language

In particular the Ministry of Health recognises infants and babies as vulnerable at the time of an emergency and has prepared the following documents to guide support related to infant feeding for parents with babies from 0-12 months of age:

- Ministry of Health position statement: Infant Feeding in an Emergency for Babies Aged 0-12 months
- Feeding Your Baby in an Emergency: For babies aged 0-12 months (for consumers)
- Guide for DHB Emergency Management Staff: Infant feeding in an emergency for babies aged 0-12 months

- Roles and Responsibilities: infant feeding in an emergency for babies aged 0-12 months

The following website is a link to all four documents.
https://www.health.govt.nz/news-media/news-items/feeding-your-baby-emergency

Welfare Services and Psychosocial Recovery

The CDEM Group is responsible for the coordination of welfare services through the Welfare Coordination Group. The implementation of welfare arrangements through the coordination of resources and facilities will be managed through the CDEM Incident Controller, local and/or group welfare managers.

The Ministry provides strategic advice and guidance to the Government, CDEM agencies and the health and disability sector through the Office of the Director of Mental Health. The Ministry will represent the health and disability sector on the National Welfare Coordinating Group.

It is expected that DHBs will lead the wider local groups responsible for delivery of services that meet the psychosocial needs of a community after an emergency. It is expected DHBs will be represented on welfare coordinating groups to provide advice, guidance and lead agency responsibilities for psychosocial recovery.

The DHB is responsible for:

- Coordinating a regional health response including health personnel
- The assessment of health and disability requirements
- Working collaboratively with support agencies to coordinate delivery of relevant welfare functions to meet community psychosocial needs

Decontamination – Annex V

Decontamination is the removal or neutralising of a hazard from either a person or the environment to prevent further harm and promote recovery.

Upon recognition of a potential or actual hazardous substance exposure the patient should be separated from others and decontaminated with warm water; all clothing/shoes must be bagged, labelled and removed from the area. If there are multiple victims call 111 and request the Fire Service.

Incidents in which there is an exposure to a hazardous substance can occur anywhere in both rural and urban settings, in a workplace, at home or in the community. The Bay of Plenty has 15 major hazardous facilities (MHF) most of which are located along Totara Street at the Port of Tauranga, Mount Maunganui or in Kawerau. The BOPDHB, Toi Te Ora – Public Health Service and partners interact with the MHF to understand the types of exposures that may happen and the scope of impact to workers and the surrounding environment and population.

Fire and Emergency New Zealand (FENZ) have protocols for managing such incidents with Hazmat units with specialized equipment, personal protective equipment (PPE), decontamination units and spill management equipment. FENZ is responsible for containing releases and decontaminating people who are exposed to hazardous substances. In the Bay of Plenty the Hazmat Unit is located in Greerton.

The BOPDHB recognises that an incident may occur in which FENZ is not notified, the incident is too large, or exposed persons self-transport to the Emergency Department. In addition persons exposed as a result of wind flow and the deposition of substances outside of the initial scene may present to the hospital.

Both Tauranga and Whakatāne hospitals have decontamination equipment, PPE, and teams to initiate decontamination. Success in managing the self-deployed persons will depend on early recognition in order to minimize contamination of the ED and other patients.

Evacuation- Annex VI

Evacuation may be necessary because of a natural disaster, fire, terrorist threat or the loss of structural integrity of the building. Because many patients may be medically unstable and dependent on mechanical support equipment, complete evacuation is initiated only as a last resort and must be planned and orderly. Full or partial evacuation of either Tauranga or Whakatāne hospital may be either horizontal or vertical dependent on the cause. A full evacuation may require that patients are moved to a safe location either within the area or outside of the Bay of Plenty. Key principles for evacuation include:

- The decision to evacuate will be made by senior management, FENZ and/or another emergency service
- The muster point will be determined by the Duty Nurse Manager or Incident Controller
- Individual evacuation bags will be prepared to accompany each patient including but not limited to the following:
    - Medical notes, medicines, personal items
- Evacuation follows this order:
    - First: ALL patients/persons in immediate danger
    - Second: Ambulant patients and visitors
    - Third: Patients requiring guidance or some assistance
    - Last: Fully dependent patients
- Alternate care sites for evacuated patients will depend on the capacity of receiving facilities at the time of the emergency
- All departments are required to arrange an alternate location as part of business continuity planning.

Management of National Reserve & Pharmacy – Annex VII

The DHB stores department maintain the national Ministry of Health reserve supplies of specialist emergency equipment to ensure that it is available if needed. The stock with an expiry date is used within the hospital and replaced with new stock so that it does not expire.

It is the role of the EOC Logistics Manager to seek approval for transfer of any supplies from the National Reserve Supplies from other DHBs to BOP DHB must be obtained from the Ministry of Health. Once approved, arrangements for receipt of the supplies can be made via the Purchasing/Supplies/Stores Dept Manager Ext 8402 or designate. Details required for receipt of supplies include:

- The name of the produce and product number;
- Where it is to be delivered to;
- When it will arrive;
- A contact name and phone number of the person who is to take receipt of the goods following arrival;
- Who the cost of transfer is to be charged to;
- Whether there is any specific instructions re transfer – e.g. maintain cold chain.

A record of the numbers, type, destination, and date of the stock transported will be recorded by the Purchasing/Supplies/Stores department and reported to EOC Logistics and on the quarterly report to the Ministry of Health.

The BOPDHB Pharmacy maintains a supply of antiviral medications provided by the Ministry of Health.

Emergency Vaccination and Community Based Assessment Centres Annex VIII

Should a pandemic vaccination campaign be thought necessary the Ministry of Health will publish guidance for DHBs, who will be tasked with implementing vaccination campaigns when required.

New Zealand has stores of sufficient needles and syringes, sharps containers, and other vaccination equipment and supplies to mount a mass vaccination campaign. These supplies will be mobilized as necessary to support any pandemic vaccination campaign.

Depending on availability, vaccine may be restricted to priority groups, front line health workers and emergency services, or it may be offered to the general public.

BOPDHB has a three staged plan to deliver vaccinations:

1. Targeted pandemic (Health care workers and those at risk of complications.)
2. Restricted seasonal (Health care workers; those at risk of complication; not to healthy people over 65; no private market.)
3. Normal seasonal. (Normal seasonal groups; all people; open to private market.)

The rollout of the stages will be supported by the combined efforts of Provider Arm, General Practice, pharmacies and DHB Communications staff. Public Health Nurses who are experienced in such vaccination programmes will also support vaccination initiatives as required.

Planning and Funding and Health and Safety are responsible for coordination and maintenance of any vaccination programme within BOPDHB.

Communication staff will work with Planning and Funding and Health and Safety to promote vaccination programmes

When considering vaccination programmes the option of prescribing vaccine to high risk individuals presenting at Hospital ED should not be excluded

Community Based Assessment Centres (CBAC)

If necessary a CBAC may be located in the DHB Education Centre (see pandemic appendices). It is preferred that the BOPDHB support the PHOs and primary care doctors offices in being able to properly manage the surge in those seeking care as a result of an emerging infectious disease such as influenzae. This will allow the doctor to have a complete picture of the patient and provide appropriate care. Issues to be considered include:

- Doctors office infection control protocols
- Maintenance of protective equipment for staff
- A system for separating ill from well patients in the waiting room
- System to monitor the wellbeing of staff

Multiple Mortality Annex IX

An emergency may occur that may result in multiple deaths. It may cause mortuaries and funeral directors to be inundated to the point where their resources are stretched beyond capacity. An event with multiple deaths may also be part of a law enforcement response requiring careful tracking and handling of bodies and the need for post mortems.

The processes to manage multiple mortalities beyond the capacity of the normal system would only be used during an emergency when workload exceeds the ability for conventional funeral activities. This includes the ability to hold services and the availability of supplies such as caskets.

The management of multiple deaths requires the coordination of a number of agencies including but not limited to the following:

- New Zealand Police are involved as agents for the coroner.
- Births Deaths and Marriages are responsible for maintaining the registers and receiving certification of the death.
- The Ministry of Justice has responsibility for the coronial system. Normal coronial processes would be expected to continue for other deaths (eg, homicide) during the pandemic.
- The Department of Labour is responsible for health and safety in the workplace, including for funeral directors, pathologists, etc.
- The Ministry of Health is responsible for public health issues and burial and cremation legislation. Medical Officers of Health and Health Protection Officers in District Health Board public health services may implement many functions on behalf of the Director-General of Health.
- Territorial authorities are responsible for registering mortuaries and providing cemeteries. There may be resource implications for funeral directors, territorial authorities and managers of denominational burial grounds, as well as pressure on space requirements.
- Regional councils and territorial authorities are responsible for ensuring compliance with the Resource Management Act 1991. This may have implications for the establishment or extension of cemeteries and burial grounds, the installation and operation of cremators, etc.
- Funeral directors will carry out their existing role. Funeral directors will still be available to transport bodies and complete their usual documentation.

- Multiple deaths as a result of a communicable disease will require consultation with Toi Te Ora – Public Health Services to minimize risk to those who may be handling remains.

Staging and Management of Workers and Volunteers Annex X

Each hospital will identify a location to stage and support workers as they arrive to support a response. This will allow for the assignment of workers where they are most needed and the opportunity to provide psychosocial support.

Processes for Provision of workers for other DHBs or Regions
Requests for staff to support an emergency response may be received via the Ministry of Health National Health Coordination Centre, EMIS, or directly from another DHB. Requests should be directed to the CEO or designate for approval. Once approved, the Incident Controller will direct the request to Logistics for action. Logistics will require:

- Information re qualifications and specific skill set of staff required;
- Numbers of staff required;
- Dates required and shifts to be filled;
- Location of deployment (hospital, clinic, community setting);
- If accommodation is required;
- Who will cover the cost of accommodation and meals etc;
- Details of where and who the staff are to report to on arrival;
- Details of any safety requirements/information eg what to do during an earthquake.

When the above details have been obtained Logistics can approach department managers, who must approve specific staff absences from the service. The Manager will approach specific staff and request their participation in the deployment. Deployment is to be purely voluntary.

Release of staff. (NB the Department Manager must ensure that existing services are not depleted due to staff deployment.)

- Travel, (including taxi chits) accommodation and meal costs will be covered by the department sending staff;
- Travel arrangements to be made by the department sending staff via existing processes;
- A record of deployment expenses is to be provided to logistics once deployment has been completed.

Criteria for staff willing to be deployed:

- Must have the required current qualification, current practicing certificate and skill set;
- Must be healthy and fully immunised;
- Have had some days off prior to travel as overtime will not be covered;
- Have approval from their department manager to cover travel costs as outlined above;
- Provide contact numbers, including next of kin;
- Agree to the terms of deployment and sign the deployment letter;
- Must agree to a minimum 2 week deployment period excluding travel time.

Logistics will be responsible for:

- Ensuring the staff deployment record/spreadsheet remains current.
- Sending a copy of the staff deployment record to the Chief Financial Officer (CFO) so that insurance can be arranged for the staff deployed;
- Sending a copy of the staff deployment record to People and Capability so that a letter of appreciation and a certificate can be sent when they return from deployment;
- Ensuring staff deployed receive a letter containing the details of deployment including dates, who to report to, contact details of who to contact if they have any issues, what to take, shifts they will be required to do, specific safety information and insurance details;
- Tracking and recording overall staff deployment expenses.

The Emergency Planning Team, or designate, will follow up with staff who have returned from deployment to offer a debrief interview. Any suggested changes are to be included in the final incident debrief and considered by the Emergency Planning Team for inclusion in the Health Emergency Plan.

Processes for Receipt of Support Staff from other DHBs

Approval for staff to be deployed from other DHBs to BOP DHB to assist in an emergency response must be obtained from the CEO or designate. Staff requests should be made via the National Health Coordination Centre, via EMIS.

Specific details of the staff required must be completed, this includes:

- Qualification and skill set required (including current practicing certificate);
- Dates required and shifts to be worked;
- Location of deployment (hospital, clinic, community etc);
- Arrangements for accommodation. (The requesting department will be required to cover accommodation costs. Accommodation may be arranged via the Non- Clinical Support Manager.

A pre-deployment package will be developed to include:

- A letter outlining where and who to report to as well as specific information relating to orientation, safety information, the support network and expense claims;
- Toi Te Ora - Public Health Service ‘Helpful Tips and local Information for Visitors to BOP’ (available on the Toi Te Ora – Public Health Services website);
- Maps of the department/hospital/city;
- Any other information relevant to the situation.

People and Capability will be responsible for providing orientation to the DHB, passes, computer access and support during the staff deployment.

Volunteers

The DHB has a number of volunteers, who provide assistance at the Tauranga Hospital site. The DHB Volunteer Coordinator is responsible for coordinating volunteers who tale on a variety of roles for example, as concierge and hospital guides. There are also St John Volunteers coordinated by the Ambulance Volunteer Co-ordinator; these are Friends of the Emergency Department (FEDs) to assist in both emergency departments in Tauranga and Whakatāne Hospitals. There is a potential for these volunteers to be engaged in assisting during an emergency. This will be coordinated via the volunteer coordinators and the incident management team.

Spontaneous volunteers not affiliate with either of the above organizations will not be managed by BOPDHB but will instead be referred to Civil Defence.

Hazard Specific Appendices

Information and operating specific to the primary hazards in the Bay of Plenty can be found in the appendices to this plan as well as in a desk file in the EOC and in the Emergency Planning work area. Each document provides checklists and information relevant to each hospital. Hazards included are as follows:

- Pandemic Influenza
- Tsunami
- Earthquake
- Flooding
- Fire
- Volcanic Eruption
- Major Hazardous Facilities

Table 2: Health and disability sector roles and responsibilities in response and recovery

Service	Planning and Response responsibilities
1. District Health Board The District Health Board's role in an emergency is guided by: • The Civil Defence Act 2002 • The National Civil Defence Guidelines • The MoH National Health Emergency Plan 2015 • The MoH Operations Policy Framework OPF Section 3.10	**The DHB will ensure that they:** • Coordinate the local health and disability sector response to and recovery from emergencies. Ensure appropriate coordination of all health and disability service providers and close liaison with civil defence and recovery management at regional and local levels. • Coordinate the provision of psychosocial support, specialist public health, mental health and addiction services and advise government and non-governmental s and primary health s on the type and nature of services needed for ongoing psychosocial support. • Liaise with local welfare agencies to assist vulnerable populations including the young, elderly or disabled who may be isolated or orphaned as a result of the hospitalisation or death of their caregiver • Ensure that hospitals and health services are able to function to the fullest possible extent during and after an emergency. • Continue their services and manage any increased demand. • Reshape services and funding to meet changes in demand.
2. Public Health Services Public Health Services' role in an emergency is guided by Section 10 of the PH Handbook. The BOPDHB Public Health Service (Toi Te Ora Public Health Service) will oversee those matters that impinge upon the health, health protection, disease prevention and statutory Public Health response to the BOP population.	**The Public Health Service will:** • Through an analysis of the hazards and risks posed by the situation, be able to identify and assess the extent of public health problems, the delineation of the area and population affected, and estimate the resources needed for the initial response; • Coordinate with the BOPDHB Emergency Operations Centre and/or Emergency Management Bay of Plenty (EMBOP) as needed. • Communicate with relevant people about the assessment of the emergency situation and ensure appropriate management of the public health aspects; • In liaison with the Media and Communications Coordinator, communicate with the community on all matters relating to public health. During a declared state of emergency all information, releases and distributions are to be approved by the appropriate Civil Defence Controller. This includes the preparation of press releases for distribution via or on behalf of the Emergency (Civil Defence) Controller; • Ensure all obligations can be met and there is regular monitoring of staff awareness, staff training is provided, emergency resources are ready for deployment and exercises are conducted; • Maintain up to date epidemiological data. The Public Health Service response will also, as required, address and/or advise on the following issues:

	• Drinking water quality control and treatment; • Food safety and mass feeding facilities; • Control of sewage and other wastes, rodent control and the disposal of human as well as organic masses; • Shelter for evacuees and hygiene standards; • Control of infectious diseases; • Control and disposal of hazardous substances; • Radioactive hazards; • In association with the Police, emergency disposal of the dead; • Ensure there are efficient processes for disseminating health warnings and messages.
3. Māori Health The Bay of Plenty District Health Board area has 18 iwi and 126 marae and the highest number of Māori health providers. The Emergency Planning Team will partner with Māori Health Gains and Development identify and implement strategies to prepare and build resilience within the BOP Māori population.	**Māori Health will:** • Participate in emergency planning, response and recovery activities • Ensure all appropriate staff have completed CDEM training • Work with the Emergency Planning team to prioritise Māori health and iwi for support with emergency planning and training • Work with the Emergency Planning Team and Civil Defence to support the development of Emergency Plans for Marae • Support the development of emergency management resources in Te Reo • Work with the Emergency Planning Team to develop emergency management plans that protect tikanga and kawa • At the time of an emergency provide a Māori/iwi Liaison to the EOC and Maori Cultural support to critical areas in the hospital such as the Emergency Department, a Family Reunification Centre, ICU and others • At the time of an emergency work with the Public Information Manager to develop messaging that meets the needs of Māori
4. Private Hospitals and Healthcare Facilities (Grace Hospital, Opotiki Health Centre, Te Kaha Health Centre, Murupara Health Centre) **Note:** When the resources of public hospitals are fully committed, private medical facilities may be called upon to assist with surgical operations and other treatment within their capacity to provide. This will be	**Secondary Hospitals will:** • Maintain service continuity plans to minimise disruption to services through the loss of staff and the loss or impairment of buildings or utility services; • Plan for a graduated response, including the evacuation of patients; • Ensure the emergency plan is integrated locally and regionally and is aligned with public health and other emergency services; • Manage capacity to accept those needing hospital care as a result of the incident; • Participate in an alternate communications network linking key healthcare facilities, including Tertiary Hospitals, and CDEM s;

coordinated by the BOPDHB. BOPDHB has a memorandum of understanding with Grace Hospital for this purpose. http://docman/org/Emergency/Plans/Grace%20Hospital%20MOU%2031%20August%2009.doc In a declared emergency, the Hospital Incident Controller will need to maintain close cooperation with the Police and/or Civil Defence Emergency Management Groups, in order to ensure that comprehensive registration of patients is completed.	• Have arrangements for access to essential supplies during an emergency; • Ensure all obligations can be met and there is regular monitoring of staff awareness and training; • Ensure readiness of resources; • Provide for incident review and Critical Incident Stress Debriefing (CISD) of staff; • Private hospitals will plan to admit low activity patients transferred from public hospitals; • Private hospitals will be prepared to make facilities available for public hospital patients; • Private hospitals will be prepared to make medical equipment and supplies available for public hospitals.
5. Mental Health Services Disastrous events cause psychological stress and may impair the mental health of both those immediately involved and the wider community. **Note:** Psychological support to the wider community is supplied through a diverse range of health and welfare agencies. The DHB will be responsible for the coordination of the delivery of services following an event.	**Mental Health Providers will:** • Develop, maintain and activate service continuity plans to minimise disruption to services through the loss of staff or the loss or impairment of buildings or utility services; • Ensure all obligations can be met and there is regular monitoring of staff awareness and training; • Ensure readiness of resources; • Make provision for the psychological needs of patients and the extended community affected by a disaster; • Provide for incident review and Critical Incident Stress Debriefing (CISD) of staff; • Support the Civil Defence welfare response
6. Disability Support Services (DSS) Note: These include services supporting both physically and intellectually disabled people.	**DSS will:** • Develop, maintain and activate service continuity plans that minimise disruption to services through the loss of staff, impairment of buildings or utility services; • Ensure all obligations can be met and there is regular monitoring of staff awareness and training; • Ensure readiness of resources; • Work closely with social services departments, agencies and voluntary s, especially in relation to social and psychological support; • Provide for incident review and Critical Incident Stress Debriefing (CISD).
6. Ambulance Services The Ambulance Service will plan to retain the capacity to respond to other calls for assistance outside the disaster scene. The degree to which the routine function of the Ambulance Service is affected will depend upon the severity and type of event. In response to more severe events the Ambulance National Major Incident and Disaster Plan proposes extra resources being brought in	**Each ambulance service will:** • Prior to an emergency, participate in an alternate communications network that links key health facilities and emergency management s; • Develop, maintain and activate service continuity plans to minimise disruption to services through the loss of staff or the loss or impairment of vehicles, buildings or utility services; • Ensure the emergency plan is integrated with the DHB and the regional emergency services; • Ensure all obligations can be met and there is regular monitoring of staff awareness and training; • Ensure readiness of resources;

from outside the region. **Note** During a full scale disaster the need to prioritise the use of limited ambulance resources in the best way and to satisfy competing demands will preclude their use beyond the network of Emergency Medical Centres and Casualty Collection Points.	• Participate in coordinated planning, training, exercising and response arrangements with complementary or neighbouring providers and emergency management s; • Maintain its own emergency plan, command structure and communications in order to liaise with the appropriate controller(s); • Provide for incident review and Critical Incident Stress Debriefing (CISD) of staff.
7. New Zealand Blood Service	The New Zealand Blood Service (NZBS) routinely supply blood and blood products to Tauranga and Whakatāne Hospitals via Path Lab. NZBS have in place emergency response plans to ensure continuity of supply blood and blood products if demand should suddenly increase. The hospitals have contact numbers for a 24 hour callout service. It is expected that blood products will reach Tauranga hospital within 1.5 hours of the initial call and Whakatāne Hospital within 2.5 hours.
8. Aged Care	All healthcare providers contracted by the BOP District Health Board and Ministry of Health are expected to develop emergency plans which identify: • **How** the provider as a whole will respond to a crisis at any of its facilities or services, **who** has the coordination role, **where** they will operate from, and, where relevant, **what** the role and responsibilities are of each department; • A facility plan, which sets out the structure and process of how that facility will respond to any crisis. Key roles are identified and persons who will fill those roles are identified; • Action cards, setting out the duties of those key people are prepared so a considered systematic response is assured no matter who is on site and filling that role when the crisis occurs; • How the provider will contact the BOPDHB to provide information on the facility situation • How the service or facility can provide support to a community emergency; • Identifies risks and hazards; • Monitors staff awareness, outlines how training will be provided and ensures resources are available, including emergency supplies to enable them to respond; • How the facility will participate in coordinated planning and exercising of plans; • How they will communicate with the DHB or other emergency services if normal lines of communication are not available; • How they will maintain their business continuity plans.
9. Non-Governmental s Note: These are non-Ministry/DHB funded s that	Non-government s, under the Civil defence Emergency Act, are also required to have plans and resources in place to ensure that they can respond to an emergency in an integrated and effective

provide health services to members of the community, such as Plunket, Red Cross, Cancer Society.	manner. **NGOs, Pacific s and Iwi Provider s will:** • Develop, maintain and implement service continuity plans that minimise disruption to services through the loss of staff, impairment of buildings or utility services; • Ensure all obligations can be met and there is regular monitoring of staff awareness and training; • Ensure readiness of resources; • Work closely with social services departments, agencies and voluntary s, especially in relation to social and psychological support; • Provide for incident review and Critical Incident Stress Debriefing (CISD) of its own staff; • Support a Civil defence welfare response.
10. Civil Defence	If a Civil Defence Emergency is declared, overall management of such is the responsibility of the Group and/or Local Civil Defence s(s). The main role of Civil Defence is to maintain contact with BOPDHB through the appointed Regional and District Health Liaison Officers and to facilitate requests for resources, not available from BOPDHB or other health sources, when advised or requested by the Regional Health Liaison Officer.

11. Primary and Community Services[2] Following a major incident some people may require primary health care or community health services immediately, in the long term, or both. Incidents, where the major response will lie with primary and community healthcare services include those where: • There are large numbers of people needing health care, advice or reassurance following exposure to a hazardous substance in the environment. • There are people needing health care, social and psychological support because they are indirectly affected by an incident in their community or because their relatives have been involved in an incident elsewhere. • Patients are transferred or discharged home early, in order to free up acute beds for the treatment of casualties injured in the incident. • People are evacuated from their homes or workplaces, which are threatened by toxic hazards or flooding, or buildings are deemed unsafe, to Civil Defence centres set up by local authorities.	**Primary and Community Services will:** • Develop, maintain and implement service continuity plans, appropriate for their situation, to minimise disruption to services through the loss or impairment of buildings or utility services. • Identify risks and hazards. • Agree to mutual aid agreements with like providers. • Ensure there is an efficient system for rapidly notifying staff or for staff recall. • Ensure there is access to essential emergency supplies. • Following a major incident, whenever possible continue to provide their services, to meet the essential needs of their patients or clients and others who, as a result of the emergency, are unable to access their usual provider. This includes Community Pharmacies, where possible, opening their premises and providing their normal dispensing and retail services to both their usual customers and the general public unable to reach their normal supplier. • Have planned to participate in a response to: a) Meet the need for care and advice to uninjured casualties or those with minor injuries; b) Meet changes in workload arising from any early discharge arrangements in hospitals to free up beds; c) Meet the health care needs of people at reception or Civil Defence centres; this could include: • replacing missing medication; • undertaking health screening; • the provision of information and advice to the public; • the provision of social and psychological support in conjunction with social services. d) Plan to increase their ability to accept and treat casualties (GPs and Medical Centres). e) Ensure all obligations can be met and there is regular monitoring of staff awareness, training and exercises undertaken as well as readiness of resources. f) Participate in alternative communications networks that link principal health care facilities with CDEM & the DHB g) Provide for incident review and Critical Incident Stress Debriefing (CISD) of staff. h) Report to funders on request about readiness and response to an emergency.
12. Community Medical Laboratories Medical Laboratories are expected to assist the health response through, where possible, continuing their normal diagnostic services.	**Community Medical Laboratories will**: • Develop, maintain and implement service continuity plans to minimise disruption to services through the loss of staff or the loss or impairment of buildings or utility services; • Ensure all obligations can be met and there is regular monitoring of staff awareness and training (including exercises) and readiness of resources. • Work closely with healthcare providers responding to the emergency to facilitate the treatment of those affected by the event and provide for incident review and Critical incident Stress Debriefing

[2] Includes GP Practices, medical centres/A&M Clinics, Community Pharmacies, Māori Health Services and other healthcare services provided in the Community.

	(CISD) of staff.
13. Community Radiology Services Radiology Services are expected to assist the health response through, where possible, continuing their normal diagnostic services.	**Community Radiology Services will:** • Develop service continuity plans to minimise disruption to services through the loss of staff or the loss or impairment of buildings or utility services; • Ensure all obligations can be met and there is regular monitoring of staff awareness and training (including exercises) and readiness of resources • Work closely with healthcare providers responding to the emergency to facilitate the treatment of those affected by the event. • Provide for incident review and Critical Incident Stress Debriefing (CISD) of staff.
14. Ministry of Health The Ministry is responsible for developing and maintaining the National Health Emergency Plan (NHEP) which is the umbrella plan incorporating specific plans, such as the NHEP: NZ Influenza Action Plan, Multiple Complex Burn Action Plan etc.	**The Ministry of Health will, where appropriate:** • Monitor any developing emergencies. • Activate the national health emergency response capabilities and process and the National Health Coordination Centre as appropriate. • Coordinate and manage the health and disability sector response during and recovery from emergencies that have significant regional or national impacts. • Coordinate health responses with those led by other national-level agencies, including the designated lead agency and relevant support agencies. (See more on the Ministry's role as a support agency under 'Lead and support agencies'.) • Act as lead agency in an all-of-government response to a health emergency such as an epidemic or pandemic. (See more on the Ministry's role in this capacity under 'Lead and support agencies'.) • Provide managed release of resources and support to New Zealand Medical Assistance Team deployments.

PART 4: RECOVERY – CONCEPT OF OPERATIONS

(Activities that begin after the initial impact of the incident has been stabilised, and extends until normal business has been restored.)

Planning for Recovery

Recovery activities commence while response activities are in progress. As directed in the NHEP the DHBs will implement plans for recovery after the initial impact of the emergency has been stabilised. Appointment of a recovery manager should occur in the response phase. The responsibility of the recovery manager is to ensure that early planning is acted on in order to restore essential health and disability services as soon as possible.

Template for Recovery Planning is available in the Appendix I CIMS and EOC Guidance.

Standing Down the Health Emergency Plan

The date and time of the official stand down or deactivation of an emergency response, will be determined by either the local or regional agency in consultation with the Ministry. Some basic points that should have been passed before deactivation can be declared are;

- The emergency response role has concluded
- The immediate physical health and safety needs of affected people have been met
- Essential health and disability services and facilities have been re-established and are operational
- Immediate public health concerns have been satisfied
- It is timely to enter the active recovery phase.

When the Ministry is satisfied, it will issue a code green alert to signify the end of the response.

Recovery is a developmental and remedial process encompassing the following activities:

- Minimising the escalation of the consequences of the disaster;
- Rehabilitating the emotional, social, spiritual and physical wellbeing of individuals within communities;
- Taking opportunities to adapt to meet the physical, environmental, economic and psychosocial future needs;
- Reducing future exposure to hazards and their associated risks;
- Coordination of the key activities between the main stakeholders.

Recovery arrangements include those activities that address the immediate problems of stabilising the affected community and assure that life support systems are operational. The recovery arrangements in this plan focus on facilitating and coordinating the short / medium term disaster recovery activities for affected community / communities to a point where:

- The immediate health needs of those affected have been met;
- Systems have been established / re-established to assist individual and community self-sufficiency;
- Essential services have been restored to minimum operating levels;
- Psychosocial needs have been identified with processes developed to address them.

See Annex I CIMS and EOC Guidance, for Recovery Action Plan Template.

Recovery Arrangements

Recovery activities will incorporate (as required):

- Activate the Psychosocial Support Plan if not already done and coordinate the delivery of Psychosocial support for the affected community;
- Consider the need for psychosocial support for workers;
- Overseeing the physical reconstruction of facilities;

- Reviewing key priorities for service provision and restoration;
- Financial implications, remuneration, and commissioning agreements;
- Staffing and resources to address the new environment;
- Socio-economic effect of the incident on staff and the health providers;
- Very Important Person (VIP) visits;
- The DHB's role in funerals, memorials and anniversaries;
- Staffing levels, welfare and resilience;
- Ongoing need for assistance from other DHBs or other agencies;
- Equipment and re-stocking of supplies;
- Liaising with and supporting external health providers;

Once into the medium term the recovery manager may see benefit in identifying long term needs including:

- Mid-long term community support and medical services;
- Long term case management;
- Long term public health issues;
- Long term psychosocial support measures.

Psychosocial recovery – Annex VII Psychosocial Support

Recovery encompasses the psychological and social dimensions that are part of the regeneration of a community. The process of psychosocial recovery from emergencies involves easing the physical and psychological difficulties for individuals, families / whanau and communities, as well as building and bolstering social and psychological wellbeing. Psychosocial support is therefore an important issue to incorporate into recovery planning. Psychosocial support ensures an individual's emotional, spiritual, cultural, psychological and social needs are addressed in the immediate, medium and long term recovery following an emergency. This includes those who may be providing psychosocial support services as well as those who may be receiving them.

Psychosocial recovery planning is intersectoral in nature, requiring coordination between agencies at national, regional and local levels, and spans all the phases of emergency management, including planning.

BOPDHB Emergency Planning Team and representatives from the Mental Health Service will work with CDEM Group and local welfare managers to develop a plan for the coordination of the delivery of psychosocial support services within the region.

The Recovery Manager will work to assure that BOPDHB workers have the opportunity for critical incident stress debriefing and ongoing support through EAP services.

Recovery Manager

The BOPDHB CE will appoint a BOPDHB Recovery Manager and/or a Health Recovery Liaison Officer. A duty card for Recovery Manager is attached in Annex I CIMS and EOC Guidance.

Recovery activities will be physically implemented at a local level, while the BOPDHB Recovery Manager will affect the coordination of region wide and external resources to meet the local need. Health will work with a large number of other agencies during the response and recovery phases.
The need for a local approach to implementing recovery 'on the ground' is necessary partly because of the geographical spread of the region and partly because of the disparate nature of the communities likely to be affected.

Funding Tracking and Reconciliation

During Recovery, all the costs tracked in the course of the response will be reconciled in order to provide a summary and in case of audit. The Logistics Manager will have on a master sheet; a record that has

tracked resources/expenditure on will work with the designated Recovery Manager to complete the documentation.

The DHB will cover the costs of the response in alignment with arrangements for government financial support for emergencies set out in the Operational Policy Framework (OPF). These provisions apply whether or not there is a state of emergency in force.

Evaluation of the Emergency Response

The Ministry and the DHB are responsible for conducting debriefings and an internal review of their plans following an incident, exercise or activation of the HEP.

The aim of the debriefing is for staff to communicate their experiences of a particular exercise or incident, so that lessons can be identified and plans can be modified to reflect those lessons and best practice.

Debriefing is a quality improvement activity that also provides an opportunity to;

- Thank the staff
- Provide positive feedback
- Improve the performance and the ability to respond to a future event, rather than assign blame.

Debriefings are subject to the Official Information Act 1982, and privacy principles apply.

Consideration should be given to the community's need for debriefing, which will be dependent on the type and scale of the emergency. DHBs public health units and PHOs may be actively involved.

Details of the framework for a debrief are in Annex I CIMS and EOC Guidance.

Table 3: Glossary of Terms for the BOPDHB Health Emergency Plan

Abbreviation	In Full
4R's	Reduction, Readiness, Response, Recovery
BOPDHB	Bay of Plenty District Health Board
CD	Civil Defence
CDEM	Civil Defence Emergency Management
CDEMG	Civil Defence Emergency Management Group
CEG	Coordinating Executive Group
CIMS	Coordinated Incident Management System
CISD	Critical Incident Stress Debriefing
CYFS	Children, Young Persons, and their Family Service
DHB	District Health Board
DNM	Duty Nurse Manager
EMC	Emergency Medical Centre
EMIS	Emergency Management Information System
EMG	Emergency Management Group
EMOG	Emergency Management Operations Group
EOC	Emergency Operation Centre
ERT	Emergency Response Team
ESCC	Emergency Services Coordinating Committee
GECC	Group Emergency Co-ordination Centre
GEOC	Group Emergency Operations Centre (BOP & Lakes wide)
GP	General Practitioner
HCC	Health Coordination Centre
HEP	Health Emergency Plan
IMT	Incident Management Team
IPA	Independent Practitioners Association
KPI	Key performance Indicator
Local EOC	Local Emergency Operation Centre (District Level)
MAF	Ministry for Agriculture and Forestry
MAOP	Mutual Aid Operating Protocol
MCDEM	Ministry of Civil Defence and Emergency Management
MHEMG	Midland Health Emergency Management Group
MIRT	Major Incident Response Team
MOU	Memorandum of Understanding
NHCC	National Health Coordination Centre
OPF	Operational Policy Framework
PHO	Primary Health
Primary Health Services	Primary Health Services are those providing universally accessible first level contact with the health system
SEOC	Secondary Emergency Operations Centre
SMOC	Senior Manager On Call
SOP	Standard Operating Procedure
TA	Territorial Authority (District Council)
TAG	Technical Advisory Group

Table 4: Definitions

Civil (Defence) Emergency	The Civil Defence and Emergency Management Act 2002 defines an emergency as 'a situation that: • Is the result of any happening, whether natural or otherwise, including without limitation, any explosion, earthquake, eruption, tsunami, land movement, flood, storm, tornado, cyclone, serious fire, leakage or spillage of any dangerous gas or substance, technological failure, infestation, plague, epidemic, failure or disruption to an emergency service or lifeline utility, or actual or imminent attack or warlike act and • Causes or may cause loss of life or injury or illness or distress or in any way endangers the safety of the public or property in New Zealand or any part of New Zealand and • Cannot be dealt with by the emergency services or otherwise requires a significant and coordinated response under this Act. Note: An emergency service means the New Zealand Police, New Zealand Fire Service, National Rural Fire Authority and District Health Boards
Consequences	The outcome of an event expressed qualitatively or quantitatively, being a loss, injury, disadvantage or gain. There may be a range of possible outcomes associated with an event.
Emergency services Committee	A committee organised and managed by the Police, with representatives from local council, local utility companies and emergency services. In a major incident this committee would coordinate local emergency response.
Emergency Operations Centre	An established facility where the response to an incident may be supported and controlled.
Hazard	A source of potential harm or a situation with a potential to cause loss.
Health Services Emergency	Any event which: • presents an unexpected serious threat to the health status of the community • results in the presentation to a healthcare provider of more casualties or patients in number, type or degree than it is staffed or equipped to treat at that time • causes loss of services that prevent a healthcare facility from continuing to care for those patients it has Disastrous events having a significant impact on healthcare providers will not necessarily be declared a civil defence emergency.
Incident Management Team	The group of incident management personnel carrying out the functions of Incident Controller, Operations Manager, Planning/Intelligence Manager, Logistics Manager, Public Information Manager and Welfare Manager.
Likelihood	Used as a qualitative description of probability or frequency.
Major Incident	Any event which: • presents a serious threat to the health status of the community; or • results in the presentation to a healthcare provider of more casualties or patients in type, number or degree that they are staffed or equipped to treat at that time; or • leads to or represents the loss of services which prevent healthcare facility(ies) from continuing to care for patients
Primary Health Services	Primary Health Services are those providing universally accessible first level contact with the health system.
Public Health Emergency	An unexpected adverse event that overwhelms the available public health resources or capabilities at a local or regional level. Public Health emergencies may or may not be declared civil defence emergencies. A non-civil defence public health emergency can be declared by a Medical

	Officer of Health when authorised by the Minister of Health, under the provisions of section 71 of the Health Act 1956. Many incidents that will have significant impact on the health sector will not be declared civil defence emergencies.
Risk	The chance of something happening that will have an impact upon service delivery. It is measured in terms of consequences and likelihood.
Service Continuity Plans	Back-up or contingency plans for unforeseen or unpreventable events, so that the service provided can be continued.

Table 5: Regional Risks and Consequences

Hazard	Likelihood	Consequence/Impact	Mitigation
Flooding	Possible	Disruption of roading, property damage in low-lying areas, potential for public health hazards due to disruption of sewage systems or release of hazardous substances, loss of reticulated water supplies, loss of electrical supply in affected areas, isolation of services, staff, clients and communities. In the unlikely event the Matahina dam failed following an earthquake, the Rangataiki Plains would be flooded. A flood protection system is in place to prevent flooding from most rivers. If this system were to fail extensive flooding could occur.	• Raise health provider and staff awareness • Business continuity plans • Early alert systems for providers and staff • Alternative sites to relocate to • Resources and plans in place to enable evacuation if necessary • Additional essential supplies and water stored • Ability to support staff and clients if they cannot get home
Coastal storm/ extreme weather event	Almost certain	Includes wind, rain and electrical. May be expected at any time of the year, however, the potential for tropical cyclone conditions to occur increases over the November to March period. Disruption of road, rail and air traffic, disruption of essential services, landslip, localised flooding, tree fall, wind, water and airborne debris damage to structures, heavy seas and storm surge, coastal erosion	• Raise health provider and staff awareness • Early alerts for staff and providers • Business continuity plans • Information on flip charts & in plans • Alternative sites to relocate to - MOU • Resources and plans in place to enable evacuation if necessary • Additional essential supplies, food and water stored • Exercise response plans • Ability to support staff if they cannot get home • Ability to call extra staff/volunteers or redeploy if staff cannot get to work
Volcanic Activity	Possible	Ashfall will cause the major problems, dependent on wind direction at the time of eruption. Possible loss of life, respiratory, eye and skin problems, widespread damage to property, disruption of utility services, damage to roading and bridges, long-term effects on agriculture and horticulture, psychosocial and economic impacts. It is expected the Eastern BOP and central North Island will be more affected than the Western BOP. Previous sources of ashfall in the BOP were from the Okataina volcanic centre, the Taupo volcanic centre, the Rotorua caldera, Mayor Island and the central North Island volcanoes.	• Raise health provider and staff awareness • Business continuity plans • Information on flip charts & in plans • Early alert systems for providers and staff • Alternative sites to relocate to - MOU • Resources and plans in place to enable evacuation if necessary • Additional essential supplies, masks, food and water stored • Ability to support staff if they cannot get home • Volcanic eruption resource folder in EOC.

Hazard	Likelihood	Consequence/Impact	Mitigation
Public Health Emergency	Possible	Large scale health emergency that may infect 40% of the population over an 8 week period, with a 2% death rate. Would severely affect health services ability to provide existing services and adequate treatment for those who cannot be cared for at home. Includes pandemics-epidemics requiring community quarantine	• Raise health provider and staff awareness • Business continuity plans • Early alert systems for providers and staff • Staff training flu prevention and infection control updates provided • Provision of personal protective equipment • Promote immunization for staff and clients • Additional essential supplies, food and water stored in the event of supply chain disruption or cluster control measures enforced. • Ability to call extra staff/volunteers or redeploy if staff cannot get to work
Wild fire / rural fire	Possible	Loss of life, burns, smoke inhalation, exhaustion. Destruction of homes, disruption to utility services, pollution of waterways and water supplies. Evacuation of homes. Greatest risk from fire is in rural areas, especially forest areas, both native and exotic. Risk increased during long, dry periods. Fires may start following volcanic activity, lightning strikes, high winds, floods and earthquake causing electrical shorts.	• Raise health provider and staff awareness • Fire plans, training and evacuation exercises • Business continuity plans • Information on flip charts & in plans • Alternative sites to relocate to - MOU • Resources and plans in place to enable evacuation if necessary
Tsunami – local, regional or distal	Possible	Loss of life, personal injury, structural damage (especially near the coast), damage to coastal roads, rail routes and bridges, disruption and /or loss of utilities, damage to small craft at moorings, potential for grounding of shipping within the harbour. Fires and chemical pollution from chemical spillage around the harbour. Greater potential for loss of life during summer months due to influx of holidaymakers close to the coast.	• Raise health provider and staff awareness • Early Alerts for staff and providers • Business continuity plans • Information on flip charts & in plans • Alternative sites to relocate to - MOU • Resources and plans in place to enable evacuation if necessary • Additional essential supplies, food and water stored • Exercise response plans • Ability to support staff and clients if they cannot get home • Ability to call extra staff/volunteers or redeploy if staff cannot get to work

Hazard	Likelihood	Consequence/Impact	Mitigation
Earthquake	Possible	Loss of life, personal injury, disruption of utility services, disruption to communication systems, damage to buildings, roads, bridges, landslip, fires, tsunami in low-lying coastal and harbour areas, interference with most types of transport, possible need to relocate people from the affected area.	• Raise health provider and staff awareness • Quakeproof the working environment • Business continuity plans • Information on flip charts & in plans • Alternative sites to relocate to - MOU • Resources and plans in place to enable evacuation if necessary • Additional essential supplies, food and water stored • Exercise response plans • Ability to support staff if they cannot get home
Utility Failure	Likely	Extended loss of essential utilities such as water, electricity sewerage and communication systems could result in life threatening situations for people in the community with compromised health. Water and sanitation disruption could result in a public health emergency. Utility failure could be precipitated by earthquake, volcanic eruption, storms, flooding, tsunami and fires.	• Raise health provider and staff awareness • Business continuity plans • Alternative methods of communication • Additional essential supplies, food and water stored in the event of supply chain disruption. • Ability to call extra staff/volunteers or redeploy if staff cannot get to work
Hazardous Substance Spills	Unlikely	May include fire, explosion, and release of toxic fumes and or contamination. An event may be localized or wide-spread, short- or long-term and may occur in high or low population areas. Spill may occur during production, transport or storage. Likely to pose a significant threat to life, health and environment.	• Raise health provider and staff awareness • Business continuity plans • Hazard identification & register • Instructions on flip charts. • Staff training re PPE and use. • Provision of personal protective equipment.
Transportation Crashes	Probable	Loss of life, personal injury, disruption to transportation. May be hazardous substance spill if carrier involved in accident. Risk of fire and explosion with subsequent injuries, loss of utilities if accident damaged utility network. Flow on effect to hospitals, leading to a surge in demand for services. More likely to happen in inclement weather conditions. May be air, road, rail or ,cruise ships. (Between October and April approximately 80 cruise ships visit Tauranga carrying up to 2700 passengers and 1200 crew each. On occasion more than one cruise ship may be in port at any one time).	• Raise health provider and staff awareness • Mass casualty plan & regional plans. • MOUs with Grace Hospital & three local GP services to increase capacity • Early alert systems for providers and staff • Emergo training for hospital staff • Additional essential surgical supplies, • Ability to call extra staff/volunteers or redeploy

Hazard	Likelihood	Consequence/Impact	Mitigation
Industrial explosion	Possible	Loss of life, burns, respiratory problems, chemical contamination, toxic gas cloud, structural damage, may require evacuation of homes and businesses. Most likely at industrial sites and the wharf.	• Raise health provider and staff awareness • Mass casualty plan
Civil unrest / terrorism	Rare	Could include, bombs, public transport attack, bio-terrorism, major disruption to utilities. Primary motive is to create fear and confusion with major disruption. Intelligence sources may be able to provide some warning or indication of type of terrorism.	• Raise health provider and staff awareness • Instruction on flip charts • Mass casualty plans • Regional coordination