LAKES DISTRICT HEALTH BOARD

Lakes District Health Board

Health Emergency Plan

2021- 2022

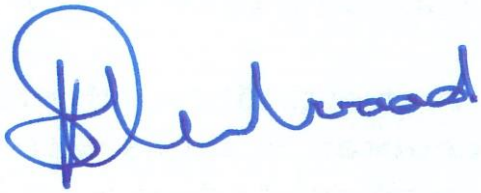
(Interim Plan)

Prepared by: Emergency Management
October 2021

DOCUMENT CONTROL

Approval

This plan is approved by:

Nick Saville-Wood **Chief Executive** **Lakes District Health Board (Lakes DHB)**	

Distribution

Hard copies of this document are held:

- Rotorua Hospital in the Duty Manager's office and in the two emergency cupboards
- Taupō Hospital in the Site Manager's office and in the two emergency cupboards
- Regional Emergency Management Advisor for the Ministry of Health office in Hamilton
- DHB Emergency Management office.

A PDF version is available on the Lakes DHB website.

EXECUTIVE SUMMARY

The Lakes District Health Board (Lakes DHB) Health Emergency Plan (HEP) has been developed as a requirement of the Ministry of Health (MoH) Operational Policy Framework (OPF) for District Health Boards. The OPF is one of a group of documents, collectively known as the *"Policy Component of the District Health Board Planning Package"*, that sets out the accountabilities of District Health Boards (DHBs). The HEP provides a consistent approach to coordination, cooperation and communication across the health sector when responding to an incident.

The plan is a strategic document that establishes the link with specific national, regional and local health emergency plans and procedures. It aligns with the National Health Emergency Plan (NHEP) framework in order to manage a resilient and sustainable health sector during any potential or significant health or civil emergency.

The plan follows a comprehensive emergency management model (Reduction, Readiness, Response, Recovery). It outlines how a response to an incident will be activated, and managed using the nationally mandated Coordinated Incident Management System (CIMS) current third edition.

The plan illustrates how the DHB intersects with the emergency management arrangements in place at national, regional and local levels. It provides the format for the coordination, direction and support of health-related community responses to a very large scale or extended emergency such as pandemic disease and is underpinned by various operational plans such as pandemic and emerging Infectious diseases, major burns, mass casualty and hospital emergency response plans.

TABLE OF CONTENTS

List of Tables

List of Figures

INTRODUCTION

Emergencies can happen anywhere and at any time. They can be caused by severe weather, infectious diseases, tsunami, earthquakes, terrorist incidents, industrial accidents, major trauma incidents and technological incidents. The very nature of an emergency is unpredictability and can change often rapidly in scope and impact. When an emergency happens it can threaten public safety, the environment, the economy, critical infrastructure, and the health of the public.

Emergency preparedness is progressive. It requires continuously moving the public and local agencies towards greater resilience. This ongoing and often uncertain progression must involve careful pre-planning, designing of response actions, testing and evaluating the processes, and updating all plans. To ensure continuing resilient health services access and delivery during any potential or significant health or civil emergency, careful planning is critical to protecting and supporting the public, healthcare workers and health care providers.

The plan specifically focuses on key themes arising from the National Health Emergency Plan (NHEP) which include:

- Building resilience to unpredictable health emergency events across all service providers
- Using a recognised risk based approach for planning for and managing through an event
- Strengthening the focus on risk reduction
- Building resilience to hazards and reducing vulnerabilities before, during and after emergencies
- Ensuring a **"whole of sector"** approach

The plan follows a comprehensive emergency management model, and incorporates lessons learned from major national incidents, many of which are recent in New Zealand. Executing the plan is reliant on combining expertise (capacity) and capabilities at all levels and across all agencies in order to fulfil the directives of the NHEP. The key requirement is that DHBs are responsible for arrangements and partnerships to:

- develop collaborative and consultative plans
- manage and actively mitigate risks
- build capabilities to collectively contribute responses to and from emergencies

Acknowledgement

This plan has been developed with input from:

- Counties Manukau District Health Board (HEP 2018-2021)
- 3DHB (Wairarapa, Hutt Valley & Capital Coast DHBs (HEP 2020-2025)

Rationale

DHBs and their respective Public Health Units[1] (PHUs) are required by the National CDEM Plan to develop and maintain plans for significant incidents and emergencies. These plans are required to identify how services will be delivered in a civil defence or related emergency and acknowledge the role of DHBs as both funders and providers of health services. The National CDEM Plan requires DHBs to provide adequately for public, primary, secondary, tertiary, mental and disability health services. DHB HEPs must include integrated and regional response arrangements; they are aligned with plans of other agencies, for example ambulance, fire, police, local authorities and Civil Defence Emergency Management Groups (CDEMGs). In their response to an emergency incident DHBs must use the

[1] For Lakes DHB this rests with Toi Te Ora Public Health

coordinated Incident Management System(CIMS)[2], which forms the basis of operational multi agencies response in New Zealand.

Purpose of the plan

The purpose of the plan is to illustrate the emergency management arrangements in place at national, regional and local levels to maintain a resilient and sustainable health sector during any potential or significant health or civil defence emergency.

This plan provides a common framework for planning, prioritising, structuring and delivering health services during, and recovering from any emergency affecting the health of the people of the Lakes DHB community. It provides a resource to assist in the response to an emergency, minimise the impacts of the emergency on the health of individuals and the community, facilitate the recovery process, and help to build a resilient community and health and disability sector.

Intended audience

All relevant stakeholders and strategic partners, who contribute to building resilience, are collaborative in planning and joint execution of plans, from the outset of the emergency to the end of recovery i.e. all agencies and partners involved in health service delivery across the Lakes region, (emergency services, local government, welfare services agencies, lifeline utilities and non-government agencies); and the general public.

Key Objectives

Equity for Māori is an overarching goal of Lakes DHB

Te Tiriti o Waitangi and Health Equity

Lakes DHB is committed to improving health equity for Maori in the region. Lakes DHB implementation of the Te Tiriti o Waitangi (The Treaty of Waitangi) principles of partnership, participation and protection is through a shared understanding that health is a 'taonga' (treasure).
During an emergency response, it is essential that Lakes DHB continues to work in partnership with Ngāti Tūwharetoa and Te Arawa iwi through Māori Health to ensure that tikanga, kawa and Māori values are included in the DHB response and maintain the New Zealand Health System strategy of Pae Ora.

Plan Objectives

- To identify the risks to health services based on the hazardscape identified by the Bay of Plenty and Waikato Civil Defence and Emergency Management (CDEM) Groups and ensure these risks are incorporated in all emergency planning.
- To ensure a state of readiness for any emergency that may affect the health of the community.
- To ensure a planned, consistent, effective and sustainable response to, and recovery from immediate, short duration and extended emergency events at the local, regional, and national level.
- Provide for Lakes DHB coordination, direction and support for a health response within the region or nationally
- To provide a planning framework for all funded health services and providers within the Lakes DHB health system.

[2] The **New Zealand Co-ordinated Incident Management System** (CIMS)[1] is New Zealand's system for managing the response to an incident involving multiple responding agencies

Guiding principles

The guiding principles from the NHEP to effectively prepare for and manage health related risks and consequences of significant hazards and events:

- **Comprehensive approach**: Encompass all hazards and associated risks, and inform and enable a range of risk treatments concerned with reduction, readiness, response and recovery.
- **Integrated all agencies approach**: Develop and maintain effective relationships amongst individuals and organisations, both in the health and disability sector and with partners, to enhance collaborative planning and operational management activities at all levels (local, regional and national).
- **Stakeholder engagement**: Facilitate stakeholder input to and understanding of the full spectrum of risk identification, reduction, readiness, response and recovery activities and arrangements.
- **Hazard risk management**: Take a contemporary all-hazards approach based on sound risk management principles (hazard identification, risk analysis and impact analysis).
- **Health wellness and safety**: Maintain an emergency management structure that supports, to the greatest extent possible, the protection of all health workers, health and disability service consumers and the population at large.
- **Health equity**: Establish, maintain, develop and support services that are best able to meet the needs of patients/clients and communities during and after an emergency, even when resources are limited, and ensure that special provisions are made for priority populations and hard-to-reach communities so that emergency responses do not create or exacerbate inequalities.
- **Continuous improvement**: Undertake continuous improvement, through on-going monitoring and review, updating capabilities, plans and arrangements using an evidence-based approach. Continuous improvement incorporates education, professional development, exercising, post-operational debrief, review, evaluation and ethical practice.

MANAGEMENT AND GOVERNANCE

The requirement for Lakes DHB to develop and maintain a Health Emergency Plan is stipulated in its Crown Funding Agreement.
The requirement for contracted providers to participate in the development of the District or Regional Health Emergency Plans and to maintain service emergency and continuity plans is stipulated in their funding contracts with Lakes DHB.

DHB funding – Operational Policy Framework (OPF)

The Operational Policy Framework (OPF) states that the DHB emergency management function is to be funded by sustainable funding provided for the purpose through the Crown Funding Agreement and other Ministry contracts, plus any additional DHB funds required to meet legislative and Ministry requirements relating to emergency planning and management.

All DHB-funded services are covered by the OPF. These include provider-arm services (personal and mental health), primary care services, laboratories, pharmacies and other referred services, public health units, and much of disability support services.

Funding required to be met through the need to respond to an emergency will be covered by the DHB as per the OPF. If the funding exceeds 0.1 per cent of the DHB's total population based funding (PBF), the Crown will determine on a case-by-case basis, and in consultation with the DHB, whether:

- the DHB is able to fund additional services purchased
- to provide the DHB with additional funding
- there will be any negative effects on the DHB's baseline services.
- The Ministry will be closely involved in Crown decisions on whether to provide DHBs with additional funding to cover the cost of additional services required during a health emergency response. In almost all cases, such services will be funded through existing pathways. All existing contracts contain provisions for variation of funding arrangements or additional funding, should this become necessary in exceptional circumstances, such as a major mass casualty incident or a pandemic.

Identifying what the 0.1 percent figure represents and tracking the emergency response-related expenses directly related to it will require comprehensive financial involvement from the start of any emergency. Detailed, realistic and fully completed accounts will be necessary to support any funding discussions between DHBs and the Crown. During an emergency response a finance representative is to be included in the incident management team, they will track extraordinary costs incurred. It is strongly recommended that this involvement commence at the beginning of any emergency response.

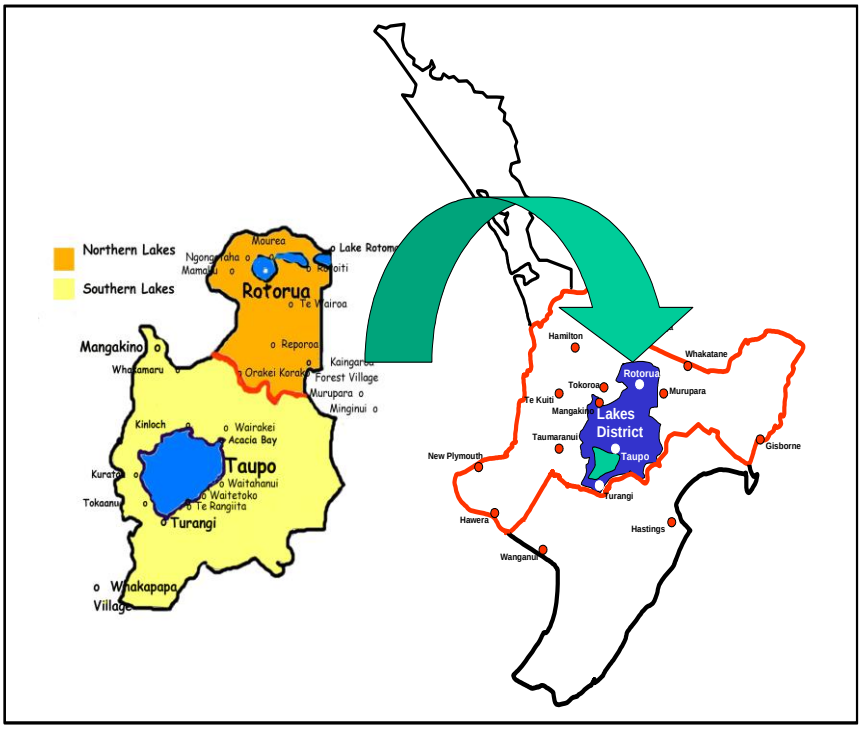
As part of primary or provider-arm services, an emergency response might require DHBs to establish special facilities or services, such as community-based assessment centres or staff vaccination programmes. These services are covered by this section.

The potential range and scope of DHB activities during an emergency response will require close financial monitoring. Section 25 of the Public Finance Act 1989 provides authority for the Minister of Finance to approve the incurring of expenses or capital expenditure necessary in the event of a defined emergency. Early notification by the Ministry of Health to the Treasury will help obtain rapid approval from the Minister of Finance in the event of such an emergency. The Ministry's corporate finance staff should be contacted urgently if such emergency funding is required.

SUPPORTING INFORMATION

Local/Regional community profile

Map 1: Lakes District Health Board Area



The area encompassed by this plan includes the districts of Rotorua and Taupō.

The Lakes DHB district is located in the heart of the central North Island; the geographical area includes a diverse and complex range of volcanic and natural hazards. The district includes large tracts of forestry, lakes and farmland. The primary industries in the area are tourism and forestry.

The district is bordered by the Waikato DHB in the north, Bay of Plenty DHB in the east and Mid Central DHB in the south. Rotorua is considered the northern end of the Lakes boundary and Mangakino is the most southern point. The Lakes DHB serves an estimated population of just over 110,000 and covers 9,570 square kilometres. Māori are 35% of the Lakes DHB Population, higher than the National average. Māori are over 50% of the 00 – 24 year age group. Two thirds of the Māori population residing in the Lakes DHB area are under 45 years of age.

The district stretches from Mourea in the north, to Mangakino in the west, down past Turangi in the south and across to Kaingaroa village in the east and is the only DHB not to have a coast line. The major centres of population are Rotorua and Taupō. There are a number of smaller communities in the district with the larger of these being Mangakino and Turangi.

Iwi within Lakes DHB

Multiple iwi lie within the Lakes DHB region, with the various Te Arawa iwi in the north (Rotorua area), Ngāti Tūwharetoa in the south (Taupō Turangi area), Ngāti Kahungungu ki Wairarapa in the west (Mangakino area) and Ngāti Manawa in the east (Kaingaroa Village area). Te Roopu Hauora o Te Arawa (TRHOTA) is the Te Arawa Iwi Governance Board, and current relationships with Tūwharetoa occur through the Ariki Ta Tumu Te Heuheu's office.

Services

Health services are provided by a wide range of independent providers (Lakes Prime Care, GP services, and contracted services for age-related care and mental health community providers) and, the DHB Provider Arm (Lakes DHB's provider of hospital and related health services includes two secondary hospitals located in Rotorua and Taupō, district nursing and mental health services.

Strategic relationships

Local Authorities (LAs)

Lakes DHB has an obligation to build and maintain relationships with multiple agencies, including local government. These LAs play a vital role in emergency management and hold principal accountability for Civil Defence under the Act. Lakes DHB falls into two regional Civil Defence Emergency Management Groups (CDEM) emergency operating areas: Waikato and Bay of Plenty CDEM groups. This requires multiple relationships and multi–agency planning and exercising to ensure an effective and coordinated response. Lakes DHB is both a statutory emergency service and a CDEM partner and is represented on the following CDEM committees and works in partnership with key multi-agency groups.

Table 1: DHB Emergency Management Stakeholder Committee Representation

Committee	Goal	Meeting Frequency
Bay of Plenty Civil Defence Coordinating Executive Group (CEG)	The CEG is responsible to the CDEMG to provide advice, implement the decisions of the group, and to oversee the development of the CDEMG plan. *Lakes DHB is represented at the Waikato CEG by the Waikato DHB Emergency Manager*	3 meetings per annum
Waikato Civil Defence Coordinating Executive Group (CEG)		
Bay of Plenty Regional Emergency Management Coordinating Committee	To establish strategic relationships across response agencies which support in connected response planning, and results in rapid and effective response management.	Quarterly
Bay of Plenty Welfare Coordination Group	To provide a mechanism for collaboration and coordination between agencies that work together to plan for and establish arrangements for the effective delivery of welfare services through agreed welfare programmes. Health is responsible for the coordination of the sub function Psychosocial Support. *Lakes DHB is represented at the Waikato WCG by the Waikato DHB Emergency Manager*	Quarterly
Waikato Welfare Coordination Group		
Bay of Plenty Civil Defence Lifelines Group	To reduce the vulnerability of the region's Lifeline Utilities to local, regional and national emergency events." *Lakes DHB is represented at the Waikato CEG by the Waikato DHB Emergency Manager*	Quarterly
Waikato Civil Defence Lifelines Group		
Waikato Region Civil Defence Coordinating Executive Group (CEG)	Provides a mechanism for collaboration and coordination between agencies that work together to plan for and establish arrangements for the effective delivery of welfare services through agreed welfare programmes.	Quarterly

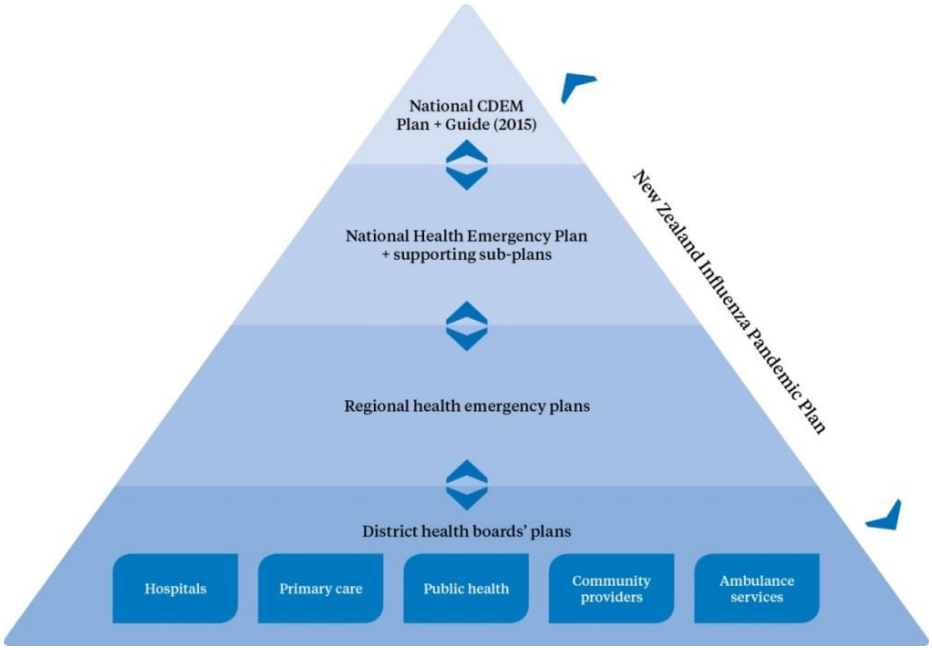
Rotorua and Taupo Emergency Services Coordinating Committee And Area Hazmat Coordinating Committees	Emergency services comprise the New Zealand Police, New Zealand Fire Service, the National Rural Fire Authority, the rural fire authorities and health and disability services, that act together to plan for and respond to any emergency.	Rotorua quarterly Taupo biannual
Rotorua Airport Joint Emergency Operations Committee	Airport services, NZ Police, Fire & Emergency, St John, Red Cross, Air New Zealand, and the Coastguard.	6 monthly

DHB planning relationships and links to National Health Emergency Pan

The alignment between national and local, and CDEM and Ministry of Health planning is illustrated below.

The National Health Emergency Plan (NHEP) requires DHBs to work in regional clusters for the purposes of coordinating the response to a national or regional health emergency. The five 'Midland Region' DHBs maintain a regional HEP. The relationship between Lakes DHB and regional, national and local health emergency planning is illustrated below.

Figure 1: Framework for health emergency management documents



Emergency Management Framework

The National Emergency Management Agency (NEMA) planning in New Zealand is a requirement of the CDEM Act (2002), and is included in the 2015 National CDEM Plan.

The CDEM Act specifies the role and function of CDEM organisations and the role of government organisations including DHBs and PHUs[3].

[3] Appendix 1: Reference Documents and Legislative Requirements

Emergency Management Approach

The HEP incorporates the 4 Rs

The **4 Rs** of comprehensive emergency management are defined as:

Reduction – Identifying risks to human life and property from hazards and taking steps to eliminate these risks if practicable or, if elimination is not practicable, reducing the magnitude of their impact and the likelihood of their occurring.

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, and to help communities to recover.

Recovery – The coordinated efforts and processes used to bring about the immediate, medium term and long term holistic regeneration of a community following an emergency.

Figure 2: 4R's Cycle of comprehensive emergency management

HAZARDS AND RISKS

A **hazard** is a potential or existing condition that may harm people or may damage property or the social, economic, cultural or natural environment. Hazards may have many potential consequences including death, injury, illness, and damage to property or the previously mentioned environments. Even where a hazard does not directly affect health or infrastructure, disruption to critical services can have serious consequences which can in turn endanger community health and safety and disrupt the continuity of health services.

Risk is a function of the hazards to which a community is exposed and the vulnerabilities of that community, modified by the level of resilience of the community at risk. **Vulnerability** refers to the degree to which an individual, organisation, community or system is unable to anticipate, cope with, resist or recover from the impact of hazards. **Resilience** refers to their capacity to prevent, reduce, prepare for, respond to and recover from the impacts of hazards.

Risk Profile

The Taupō Volcanic Zone crosses the region from Lake Taupō to Whakaari (White Island), it marks the subduction zone's resulting volcanic and earthquake activity.
The major features of this zone are active volcanoes, an extensive geothermal area and a number of active fault lines. The region is therefore susceptible to earthquakes and volcanic eruptions. The Taupō Volcanic Zone is extremely active on a world scale: it includes three frequently active cone volcanoes (Ruapehu, Tongariro/Ngauruhoe, White Island) and 2 of the most productive caldera in the world (Okatina and Taupō). The Taupō Volcanic Zone

The region has strong farming, horticultural and forestry industries. The region is therefore susceptible to the effects of drought and plant and pest diseases

Psycho-social risks can arise from the impact of any emergency, from casualty and non-casualty events such as drought and stock disease. Droughts in particular are known to cause a breakdown in the psychosocial wellbeing in the farming community.

At the national level, the *National Hazardscape Report*, published by the Officials' Committee for Domestic and External Security Coordination (ODESC 2007), identifies and considers the range of natural and artificial hazards that have relevance to New Zealand from national and regional perspectives. The report identifies the following 18 types of hazards, all of which have the potential to cause emergencies that require coordination or management at the national level:

- earthquakes
- volcanic hazards
- landslides
- tsunami
- coastal hazards (for example, storm surge and coastal erosion)
- floods
- severe winds
- snow
- droughts
- wildfires
- animal and plant pests and disease
- infectious human disease pandemics (including water-borne illnesses)
- infrastructure failure
- hazardous substance incidents (including chemical, biological and radiological)
- major transport accidents (air, land and water)
- terrorism

- food safety (for example, accidental or deliberate contamination of food).

Appendix 2 sets out an outline analysis of the consequences of these hazards.

Comprehensive Risk Assessment

Risk results, when hazards negatively interact, or have the potential to negatively interact with communities. Risk is therefore the sum of a hazard and the elements of the community that are vulnerable to that hazard.

For example, an earthquake is a hazard but is only a risk if it affects people, infrastructure, livelihoods etc. (vulnerable elements).

Risk = Hazard x Vulnerability

Risk can also be considered as the likelihood of harmful consequences arising from the interaction of hazards with the community and the environment.

Risk = Likelihood x Consequences

This can be visually depicted as below[4]

Figure 3: Risk matrix

		Hazard Effect/Consequences			
		1 (Minor)	2 (Moderate)	3 (Major)	4 (Maximal)
		First aid case; exposure to minor health risk; little to no economic costs incurred.	Medical treatment; lost time injury; reversible impact on health; exposure to major health risk; economic costs are low.	Loss of quality of life; irreversible health impact; economic costs are moderate.	Single/Multiple fatalities; health impact is ultimately fatal; economic costs are high.
Likelihood		Risk Ranking			
4 (Almost Certain)	The incident occurs with regularity and will continue to occur (>75% likelihood)	7 (M)	11 (H)	14 (EX)	16 (EX)
3 (Likely)	The incident has occurred frequently, and is expected to occur (30-75% likelihood)	4 (L)	8 (M)	12 (H)	15 (EX)
2 (Possible)	The incident has happened at some time (infrequently), and will occur under some circumstances (10-30% likelihood)	2 (L)	5 (M)	9 (M)	13 (H)
1 (Unlikely)	The incident has happened in the past (rarely), and may occur in exceptional circumstances (<10% likelihood)	1 (L)	3 (L)	6 (M)	10 (H)

[4] Risk management of emergency service vehicle crashes in the United States fire service: process, outputs, and Recommendations. Bui et al. BMC Public Health (2017) 17:885 DOI 10.1186/s12889-017-4894-3

The risks identified will have implications for the health sector.
These may include the following:

- stretched medical services
- widespread social and psychological disruption and isolation
- workforce issues
- strain on public health resources
- reliance on primary care providers to undertake initial treatment and triage of the injured
- requests made from the NGO sector for hospital staff assistance
- medical supplies not readily available (demand exceeds supply)
- lifeline disruptions i.e. power, telecommunications, waste management, water supply, disruption to roading and the disruption to medical supplies

Mass casualty events require significant planning both locally and regionally. These risks are addressed across the emergency management planning process and include actions to ensure a state of readiness for health emergencies. Taking a multi hazard approach which incorporates the Bay of Plenty and Waikato Civil Defence Emergency Management Groups risk register formed the basis for the Health risk analysis. More information can be found in their group plans below:

Bay of Plenty Region Civil Defence Group Plan	https://www.bopcivildefence.govt.nz/media/1292/bopcdem-group-plan-2018-2023.pdf
Waikato Region Civil Defence Group Plan	https://www.waikatoregioncdemg.govt.nz/policy-and-plans/group-plan/

REDUCTION

The objective of risk reduction is to avoid or mitigate adverse consequences before they occur and to realise the sustainable benefits for society of managing risks at acceptable levels.

The principles of reduction are to identify and analyse risks that are significant. Steps are then taken to eliminate these risks where practicable and where not, to reduce the likelihood and the magnitude of the impact. Health services have only limited influence on the probability of a hazard occurring, other than for specifically health related hazards, such as contagious diseases and exposure of health services and staff to physical risks.
However, the health and disability sector does have the ability and opportunity to lessen the vulnerability of the community and health services to hazards more generally, and to mitigate the consequences for them. Health services can achieve these outcomes through a range of actions within the broad strategies of:

- reducing community exposure and vulnerability to hazards – surveillance and intervention
- reducing organisational susceptibility to hazards – business continuity management
- building organisational resilience within the health and disability sector to the impact of hazards
- employing response interventions that constrain incidents from escalating to emergencies.

Health equity

When planning for and responding to emergencies a key factor is to ensure plans identify vulnerable clients/groups and the inequitable impact of disasters on lower socioeconomic groups. Consideration must be given to the Māori and Pasifika population with relationships developed, and consultation with leaders in these communities. Engagement with the Māori and Pacifika community within Lakes DHB is on-going through the DHB Māori Health Team and Iwi representatives.

Planning to reduce risk

Lakes DHB and its health providers have a responsibility to develop emergency and business continuity plans for their services in order to continue to provide health services during and emergency to the best of their ability.

They are also required to understand both the hazards and risks they face, engage in risk reduction planning and delivery, monitor and review the effectiveness of their risk reduction over time.

Including risk reduction objectives within business continuity management plans and programmes is a primary contributor to effective risk reduction and resilience building.

> Refer: National Health Emergency Plan; Appendix 1: Self-assessment checklist for a health emergency plan (*this checklist check list has been developed to assist with development, maintenance of health service emergency plans, programmes and capabilities.)*

Hazards for which health services have particular responsibility (although they may not necessarily lead to an associated response) include communicable diseases, extreme weather (heat or cold), hazardous substances, radiation exposure, ionising sources, drinking-water, exotic organisms of public health significance, and primary and secondary health consequences of all other hazards.

Many events have the potential to become a health emergency. These may result in one or more providers being potentially or actually overwhelmed. Each emergency brings its own individual conditions. Emergency events can escalate to the point where they will impact on the health sectors ability to provide health and disability services.

Risk reduction activities

This involves and requires a work programme to review, revise and update business continuity and operational plans on a regular basis. It includes technology plans, surge capacity plans and service continuity plans, in addition to the development and testing of policies to support best practice emergency management. This activity is complemented by membership of and participation in the Civil Defence Emergency Management Groups and Health Sector Groups identified in table one.

Activities designed to lessen vulnerabilities within the community and across health services and include:

Monitoring and review

- Monitoring and review of the effectiveness of risk reductions over time.
- Effective use of available resources- e.g. level of resourcing to enable stakeholder engagement in planning at all levels.
- Strengthening the emergency management focus and developing a strategy to strengthen engagement and relationships with the provider arm and community providers.
- Surveillance of emerging hazards and changing risks.

Safe working practices

The DHB implements safe working practices, this includes:

- patient and staff safety
- chemical handling and storage
- radiation (e.g. treatment and imaging)
- infection prevention and control

Protecting the well-being of the community

Lakes DHB and Toi Te Ora Public Health (Toi Te Ora) will collaboratively plan and provide services to prevent ill health and improve the health and wellbeing of the community.

Key Interagency collaboration and communication

Lakes DHBs is both a statutory emergency service and Civil Defence partner agency and has a responsibility to work with its respective CDEM Group(s) and their member local authorities in the development of comprehensive risk reduction strategies. (As per table one)

Lakes DHB Emergency Management Group within the Quality Governance Risk & Compliance Coordinator are responsible for developing and maintaining relationships to ensure a cooperative and coordinated multi agency response to any emergency. Relationships are developed by participation at meetings and regular liaison with other emergency organisations; St John, Waikato & Bay of Plenty CDEM Groups, Rotorua and Taupō Civil Defence, Police and Fire Emergency NZ (FENZ), along with government and non-government organisations such as Red Cross, Salvation Army and multicultural society.

Primary Health Organisations (PHO)

Two PHOs operate within Lakes district they are: Rotorua Area Primary Health Services and Pinnacle Midlands Health. The Emergency Management Coordinator continues to work towards strengthening communication, facilitates CIMS training courses for joint participation with DHB staff and health providers. Assistance is available for primary care services to develop and exercise their emergency response and business continuity plans. The PHOs provide a conduit for passing messages to general practices within their organisation during an emergency via the Medinz platform.

Health provider stakeholders

The development, maintenance and exercising of plans is outlined in health providers contract with Lakes DHB, this helps to ensure that essential health services will continue to be delivered during health

or civil defence emergencies. A stakeholder template is available on the Lakes DHB website and assistance is available for providers to develop and exercise their emergency response and business continuity plans.

Toi Te Ora Public Health (Toi Te Ora)

- Toi Te Ora is the public health unit for both Bay of Plenty and Lakes DHBs. Lakes DHB works collaboratively with Toi Te Ora to plan strategically across the 4 R's of emergency management. Meetings are held regularly with the Health Protection Officer who responsible for emergency management, and is an active member of the Midland Health Emergency Management Group. As required, meetings and planning sessions are also held with the Medical Officer of Health. Bay of Plenty and Lakes DHB emergency management to ensure plans are aligned with Toi Te Ora and across both the DHBs. air quality
- disease prevention and control measures
- drinking water quality and quantity
- hazardous substances, including environmental contamination
- management of the deceased
- pests
- psychosocial welfare
- radioactive substances
- waste management and minimisation
- wastewater treatment and disposal
- water quality (includes water for sanitation and drinking, fresh and marine recreational water)

Midland (Te Manawa Takī) Health Emergency Management Group

The five DHB emergency management managers within the Midland Region (Lakes, Bay of Plenty, Tairawhiti, Taranaki, and Waikato), along with a representative from Toi Te Ora Public Health, St John Ambulance and the Ministry of Health Midland Regional Emergency Management Advisor meet on a monthly basis either in person or via video conferencing. This group works to achieve a consistent approach to emergency planning and communication across the region.

READINESS

The objective of emergency readiness is to build the capacity and capability of the health and disability sector to respond to emergencies and to assist the recovery of the community and health services from the consequences of those emergencies.

Introduction

Readiness involves ensuring operational systems and capabilities are developed before an emergency occurs. The expectations are that the Lakes whole of health system is ready and able to activate a coordinated appropriate response and recovery; and all partner agencies are ready and able to participate the response. This includes both public and private health providers, where appropriate.

A readiness focus applies to the **"whole of health sector"** approach and is intended to:

- Promote resilient communities.
- Give confidence to service providers, the public, staff, patients and residents in care.
- Position the health services to rapidly restore operations to the fullest level possible (noting progressive restoration may mean services operate differently in a post event environment).
- Prepare services to operate in a changed environment for the long term.

Planning for readiness

Development of health emergency plans (HEPs)

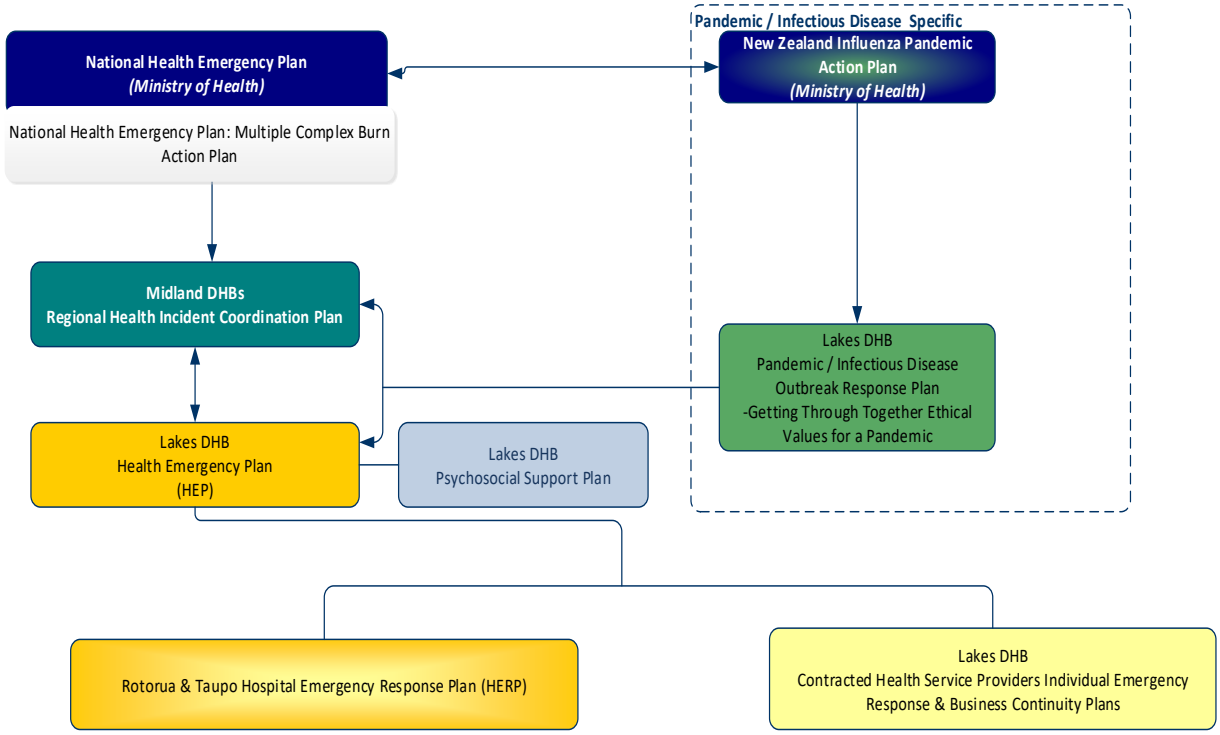
Planning is an integral part of the readiness process and is key to reducing the heath impacts of emergencies. Planning is essential to ensuring an effective response and optimal recovery. The development, maintenance and exercising of the HEP ensures that essential primary, secondary, tertiary, mental health, disability support and public health services will continue to be delivered and prioritised during health emergencies, civil defence emergencies, large casualty causing incidents, major weather events or natural disasters.

Lakes DHB requires all contracted providers of health services to maintain an emergency and business continuity plan. Providers are required to analyse their risks and identify how they can mitigate individual business continuity issues. They are required to have plans and resources in place that ensure their emergency response is integrated and coordinated with the DHBs. The plan includes processes for how service providers will seek additional support or assistance from the DHB if required. Their plan should be exercised with the DHB Health Emergency Plan.

Refer: National Health Emergency Plan; Appendix 2: Suggested content for a health emergency plan

Overview of Plans

Figure 4: Plans relationships



Ministry of Health (MoH) Emergency Management Plan(s)

This coordination is managed from the National Health Coordination Centre (NHCC). See Appendix 4 for links to plans

The MoH role is to:

- Coordinate the health response to national health emergencies or the health role in other national emergencies.
- Coordinate support for the health response to regional and local emergencies.

Midland (Te Manawa Taki) Region Health Emergency Plan

The Midland (Te Manawa Taki) Regional Health Emergency Plan (MRHEP) outlines the processes to be implemented should the health response to an incident, or potential incident, need to be coordinated across all or part of the Midland region. It provides a generic process for the management of regional incidents, and provides for a consistent approach to coordination, cooperation and communication across the Midland region DHBs.

The MRHEP can be activated by notification from:

- The DHBs and/or Public Health units – when responding to an incident that requires regional assistance, management and coordination where their resources are overwhelmed; or have the potential to be overwhelmed.
- The MoH – when the NHEP is activated requiring DHBs to activate their HEP. This may be in response to a national incident or in support to another health region.
- The Ambulance Communication Centre – when an incident or potential incident requires or is likely to require a regionally coordinated response from DHBs and other service providers.

Lakes DHB Emergency Plan(s)

The DHBs role is to:

- provide an integrated response to emergency events
- ensure continuity of care to the fullest possible extent
- reduce/mitigate the impact of emergency events on continuity of service.
- coordinate the health response to any emergency in its region of responsibility or in support of any other region on request.

In addition to the HEP, there are specific plans

- Pandemic / Infectious Disease Outbreak Plan
- Lakes DHB Psychosocial Support Plan
- Lakes DHB COVID Resurgence Plan
- Rotorua and Taupō Hospital Emergency Response Plan (HERP)
- Mass Casualty Plan
- Wards and departments have department emergency response & service continuity plans; where applicable these contain relocation options and evacuation plans.
  (Full plans are available from the emergency management office and on the intranet/emergency management section).
- Community health provider's emergency and business continuity plans

Priority populations

Health equity

When responding to emergencies the inequitable impact of disasters on vulnerable communities and lower socioeconomic groups must be considered, in particular for the Māori and Pasifika population, consultation and engagement with leaders in these communities is paramount. During an emergency response a member of the Māori Health Team acts in a key role of the incident management team.

When resources are limited during and/or after an emergency, consultation should occur with the affected communities and the services that are best able to meet the needs of the communities are developed, established, supported and maintained for the duration of the need.

Communities should be actively involved in all aspects of resilience-building and preparedness planning, implementation and review. It is important to:

- understand that communities are made up of dynamic and networked groups of people
- engage with communities proactively and meaningfully
- support and build on networks and activities that already exist both within and between communities
- ensure that emergency health and welfare services address the specific needs of individuals, families, whānau and communities where practicable
- enhance self-reliance for all individuals, families, whānau and groups in communities.

Vulnerable communities

Barriers and challenges that may inhibit the resilience of communities and individuals can include: age; physical, mental, emotional or cognitive status; culture; ethnicity; religion; language; geography; and socioeconomic status.

Consideration must also be given to what provisions can be made for vulnerable people and hard-to-reach communities to ensure emergency responses do not exacerbate existing inequalities or create new inequalities or vulnerabilities. Although everyone is at risk of harm during an emergency, due to their circumstances some groups or communities are less able to take advantage of risk reduction

opportunities, or have more limited access to preparedness planning, response and recovery resources and activities, and are therefore at greater risk of harm both during and after an emergency.

The definition of vulnerable populations is broad and therefore special consideration of all of these groups when planning and responding to an emergency is important. Vulnerable populations may include but not be limited to the following:

The DHB provides community based care to many people such as those:

- in aged residential care
- receiving home based support services
- receiving home renal dialysis
- under the care of the Disability Support Services
- under the care of MHAIDS

In addition, many persons throughout the community will need alternative support if they are:

- without access to information, technology, or who require alternative assistance to maintain an independent lifestyle
- are economically disadvantaged
- infants, children and the elderly
- racial or ethnic minorities
- if English is their second language
- low socio- economic areas and homeless people
- living in geographically isolated areas
- people with addictions
- holiday makers/tourists

Staff training and education

The DHB and health providers are required to ensure that staff are trained sufficiently in order to respond appropriately during an emergency event.

Lakes DHB Emergency Management provides:

- Information to new Lakes DHB staff relating to emergency planning and response is available on the online learning platform.
- An online CIMS in Health training package provides an opportunity for DHB staff, and staff from key providers to gain an overview of how CIMS is used to respond to a health incident.
- In-house training for the national emergency management web based system.
- Initial CIMS and emergency management introduction for all senior staff.
- Support for relevant staff to attend NEMA CIMS 4 and Intermediate courses along with specific CIMS role training.
- Facilitation of table top or scenario based exercises, along with a bi-annual St John Emergo simulation exercise.
- Incident Management Team processes and resources are maintained to ensure the team is able to set up and respond promptly
- Support for emergency managers to receive emergency management, risk and business continuity planning training.

RESPONSE

The objective of the health and disability sector is to provide health services during emergencies to minimise the impacts of the emergency on the health of individuals and the community.

Introduction

Response involves those actions taken immediately before, during and after an emergency to save lives. It also involves helping communities to recover by mobilising and deploying health resources immediately prior to, or during an emergency, in collaboration with other services and agencies by doing the following:

- the continuation of essential health services
- enabling safe and equitable access to service people's health needs
- the relief and treatment of people injured or in distress as a result of the emergency
- the avoidance or reduction of ongoing public or personal health risks to all those affected by the event
- upholding a governance structure to respond effectively

Response to a health emergency

In a health related emergency such as a community outbreak or pandemic, Health is the lead agency.

The Director-General of Health on behalf of the Minister of Health has overall responsibility for health and disability matters in all phases of emergency management. The role of the MoH is to coordinate the operational emergency response. The Ministry will initiate and coordinate any national emergency response for the health sector.

Activating a response

The HEP will be activated when there is a pending or a possible serious threat to the health of the community. This could be from a natural disaster, infectious disease outbreak, major transport accident, extended loss of a lifeline utility etc. A notification with the requirement to activate the HEP may also come from a variety of sources, via either Ministry of Health, Public Health Unit or CDEM.

The decision to activate significant aspects of an emergency health response and coordination capabilities should be made by executive managers, other senior managers or clinicians with delegated authority to do so.

A key aspect of all responses is to communicate any changes in the level of activation and share information on the hazard, impact and response within health services and with partner agencies and recovery organisations.

DHBs are required to notify the Ministry of Health of any activation where the Emergency Operations Centre (EOC) is established to manage an event. Notification can be made through normal reporting mechanisms, or if the event is out of hours through the MoH's emergency 0800 number. This will enable the appropriate levels of support to be provided to the affected DHB(s) if required. Depending on the type and scale of activation a number of other services and representatives may require notification, this is set out in the Hospital Emergency Response Plan

Key roles and responsibilities in response

District Health Board

Co-ordinates the Health response - including primary / secondary and community services. Communicates and works with response agencies and other government. Supports the civil defence welfare response at a regional and local level.

A DHB Emergency Operations Centre (EOC) will be established with the necessary incident management team members required to manage the response. External partners and relevant health providers, including Toi Te Ora Public Health will be invited to attend the EOC briefings, and/or act in liaison roles as required as well as Maori and Pacifica representatives, Local and regional CDEM representative, St John, Police, Fire Emergency NZ.

The EOC will be responsible for:
Assisting health providers wherever possible to continue to provide their services to meet the needs of their patients/clients/residents. This may include:

- Co-ordinating provision and access to personal protective equipment, clinical and non-clinical supplies to health services if they have exhausted normal supplies, or there is a national shortage. This can include non-health services as directed by the MoH.
- Provide access to infection control expertise and training
- Assists with access to additional / replacement health professional and care staff
- Co-ordinates circulation of information to wide provider / public / service network

Health service providers

A service provider can utilise their emergency and business continuity plan when they believe they are overwhelmed or have the potential to be overwhelmed. When a service provider activates their plan they shall communicate to the DHB that they have taken this action, unless it is a whole of area situation and all local service providers are simultaneously activating their emergency plans. At this point Lakes DHB will determine the level of activity required and will activate its HEP accordingly.

Providers contribute to the overall health services emergency response. Following an emergency, situation reports from all health providers affected will be required to ensure a complete picture of the impact on health services is known. The DHB incident management team will use this information to make informed decisions about how health systems can be supported and co-ordinated to restore health services to the affected population. All health service providers responding to the emergency maintain a record of resources used in that emergency response in preparation for a reconciliation of accounts.

Following an emergency, providers wherever possible will continue to provide their services, to meet the needs of their normal patients, clients or residents and others, who as a result of the emergency are unable to access their usual provider.
This may include:

- Activating emergency and business continuity plans to minimise disruption to services through the loss of staff or the loss or impairment of buildings or utility services
- Increasing their ability to accept and treat casualties (GPs and medical centres)
- Meeting the need for care and advice to uninjured casualties or those with minor injuries
- Meet the health care needs of people from welfare centres; this could include:
  - replacing missing medication
  - undertaking health screening
- Accommodating changes in workload arising from any early discharge arrangements in hospitals to free up beds
- Supporting the provision of information and advice to the public
- The provision of social and psychological support in conjunction with social services
- Ensure obligations can be met and there is regular monitoring of staff awareness, training and readiness of resources
- Participate in alternative communications networks that link principal health care facilities with Lakes DHB.

Secondary Hospitals – Rotorua & Taupō

Rotorua and Taupō Hospitals will provide the facilities for the majority of acute treatment for the patients affected by the incident. These hospitals will also accommodate the majority of recuperative patients during their immediate post operation period. (Precise functions of hospitals are detailed in their individual plans)

- Manage capacity to accept those requiring admission as a result of the incident. This will involve activating the rapid discharge process
- When the resources of Rotorua Hospital are fully committed, the private medical facility (Southern Cross QE) may be called upon to assist with surgical operations and other treatment within their capacity. These requests will be coordinated through the DHB Emergency Operations Centre.
  - This will involve negotiations around the ability to admit low acuity patients, to make facilities available for hospital patients, to ensure that the best use is made of medical equipment and supplies following an emergency.

Public Health Services (Toi Te Ora Public Health)

Public Health Services' responsibilities are outlined in Section 9(4) of the National Civil Defence Emergency Management Plan and the Public Health Emergency Planning and Response section of the Ministry of Health Public Health Services handbook.

- To enable a collaborative response to emergencies that impact on public health, Toi Te Ora Public Health will be incorporated into the IMT as an advisor to the Incident Controller, along with acting as a member of the technical advisory group. A liaison representative will be invited to join the EOC and attend briefings as required)
- Staffing support from the DHB will be provided as required.

Mental health providers

Emergencies can cause psychosocial stress and may impair the mental health of both those immediately involved and the wider community.

Psychosocial support to the wider community is supplied through a diverse range of health and welfare agencies. The DHB has the responsibility of coordinating the response of agencies providing that support and will be an active member of the Bay of Plenty and Waikato Regional Civil Defence, Welfare Coordination Groups.

Mental Health providers will make provision for the psychological and psychosocial needs of existing patients along with the needs of new patients.

Ambulance Service

Ambulance Services will activate their NZ Ambulance Major Incident and Emergency Plan (AMPLANZ) 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 Emergency Plan proposes extra resources being brought in from outside the region.

National mass casualty transport

The role of the ambulance sector in response to a major incident is to deliver and maintain appropriate pre-hospital clinical care, and in most cases to make inter-hospital transfers. The computer aided system of the three ambulance clinical control centres will maintain current information on the ambulance resources available for deployment. In a major incident the ambulance service manages and coordinates all land based, rotor and fixed wing assets for roadside to bedside transport, including inter-hospital transfers.

Lead agency roles and responsibilities

The lead agency is the agency with the mandate to manage the response to an incident through legislation under protocols by agreement or because it has the expertise and experience. The lead agency establishes control to coordinate the response of all agencies involved.

The lead agency's role is to:

- monitor and assess the situation
- plan for and coordinate the response
- report to Governance
- coordinate the dissemination of public information

DHB as lead agency

If Health is designated the lead agency of a multi-agency response (e.g., in a pandemic or declared health emergency) Lakes DHB will be required to assume responsibility for coordinating all aspects of the response, including those of non-health agencies.

A health service emergency is defined as any event which:

- Presents an unexpected serious threat to the health of the community
- Results in the presentation to a health care provider of more casualties or patients in number, type or degree that it is staffed or equipped to treat at that time
- Causes loss of services that prevent a health care facility from continuing to care for those patients it already has

A public health emergency is defined as 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. Many incidents that will have a significant impact on the health sector will not be declared civil defence emergencies. Medical Officers of Health have special powers relating to infectious and notifiable diseases in a declared CDEM emergency or when authorised by the Minister of Health to manage situations which pose a risk to public health.

Advisories and warnings

Emergency warnings and advisories provide information about imminent or sudden onset incidents that can potentially have significant impacts on people, property, areas, or social or economic activities. The objective is to issue warnings and advisories in a timely manner so that local authorities, agencies and people can take action to reduce loss of life, illness, injury and damage.

Warnings and advisories about predictable events i.e. severe weather, volcanic eruption, distance-source tsunami are to be given as quickly as practicable. For unpredictable events i.e. earthquakes, local-source tsunami where a prior warning may not be possible, the objective is to inform emergency response by indicating the likely magnitude of the event and extent of the affected areas.

Emergency Ambulance Communication Centre notification

St John have established 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 event. The single point of contacts is the Duty Manager and ED Coordinator.

Single Point of Contact

The MoH, each DHB and public health unit maintain a single point of contact (SPOC) system that is available on a 24-hour, 7-days-a-week basis. The purpose of the system is to enable effective and rapid communications between senior MoH officials, DHBs and public health units at any time, via a dedicated SPOC email, to notify each other of a potential or actual emergency. The nominated Lakes DHB Health SPOC for any national, regional or local health related emergency is the Duty Manager based in Rotorua Hospital.

Alert codes

The MoH has developed alert codes to provide an easily understood system of high-priority communication leading up to and during emergency response activations. These alert codes are issued

from the Ministry via the SPOC system. The alert codes outlined in Table 2 are intended for use in relation to nationally led communication.

It is not necessary for all DHBs to be at equally corresponding levels of alert. The appropriate level will be determined by the impact and the ability for DHB(s) to respond or provide support for the response. For example, a single or group of DHBs may be in code red, while the remaining DHBs are in code yellow.

Table 2: Health and disability sector alert codes

Phase	Measures	Code
Information	Notification of a potential emergency that may impact in and/or on New Zealand or specific information important to the health and disability sector. **Example:** emergence of a new infectious disease with pandemic potential, or early warning of volcanic activity.	White
Standby	Warning of imminent code red alert that will require immediate activation of health emergency plans. **Example:** imported case of a new and highly infectious disease in New Zealand without local transmission, or initial reports of a major mass casualty incident within one area of New Zealand which may require assistance from unaffected DHBs.	Yellow
Activation	Major emergency in New Zealand exists that requires immediate activation of health emergency plans. **Example:** large-scale epidemic or pandemic or major mass casualty incident requiring assistance from unaffected DHBs.	Red
Stand-down	Deactivation of emergency response. **Example:** end of outbreak or epidemic. Recovery activities will continue.	Green

All advisories, alerts and notifications are escalated to senior management as required
A full explanation of these codes, how they apply, and MoH and DHB roles is contained in Appendix 3 Ministry of Health Alert Codes

MANAGEMENT OF THE RESPONSE

Coordinated Incident Management System (CIMS)

New Zealand Government requires all emergency services to use Coordinated Incident Management System (CIMS) for the coordination and response to incidents and emergencies. The health and disability sector have adapted the NZ Government Coordinated Incident Management System (3rd edition) to fit with health's requirements.

CIMS is intended to provide a structure that allows multiple organisations, agencies and services involved in an emergency to work together as a team in a coordinated manner. CIMS does not affect the normal day to day operations, clinical and managerial processes. All business as usual relationships are maintained within the organisations, agencies and services involved in a response.

The CIMS structure is made up of CIMS roles which are delegated to Incident Management Team (IMT) members. The structure is flexible and scalable; the number of team members required can vary depending on the scale of the response required. Partner organisation representatives can be included in the Emergency Operations Centre (EOC), meetings and briefings - Local & Regional CDEM, Toi Te Ora Public Health, Bay of Plenty DHB, St John, Rotorua Area Primary Health Service (RAPHS) and Pinnacle Midlands Health Network.

In a regionally or nationally significant emergency a Lakes DHB representative will be appointed to the local or regional CDEM emergency operations centres. A satchel with role card, vest and stationery is held in the emergency manager's office.

The roles, selection and training of incident management team

Lakes DHB Incident Controllers are required to be CIMS 4 trained; to be in a senior management role and have the appropriate delegations and authority required to act in the role. IMT members must also have received CIMS training. An online Emergency Response – CIMS in Health course is available on the online training platform Ko Awatea Learning. In person CIMS in Health training sessions are offered by the Emergency Management Coordinator. All senior staff should ensure they remain up to date with current systems by participating in emergency management exercises and training.

Emergency Operation Centres (EOC)

The Role of the EOCs

The EOC provides the facility for coordinating emergencies of all types and sizes. Their primary role is a central point to enable the IMT to coordinate the response to an emergency. The EOC is the centre for the collection, analysis and dissemination of information, and the coordination of resources to support the incident.

Depending on the scale of the emergency and the level of response required, a decision will be made by the Incident Controller/Response Manager as to the size, type and location of the EOC required. An EOC can operate from a "virtual" (allows roles to work from their offices but meeting at regular intervals to monitor and manage the response via video conferencing) to a fully operational EOC, utilising the required number of offices and meetings rooms available in a central location. If required there is the capability to operate fully virtual, with the IMT working from home and attending briefings via video conferencing.

Health Provider EOCs may also be established if required, to manage provider sector facilities e.g. Rotorua Area Primary Health Service, Pinnacle Midlands, Aged Care Sector, Mental Health etc.

CIMS Structure - Incident Management Team

Figure 5: National CIMS in the health context

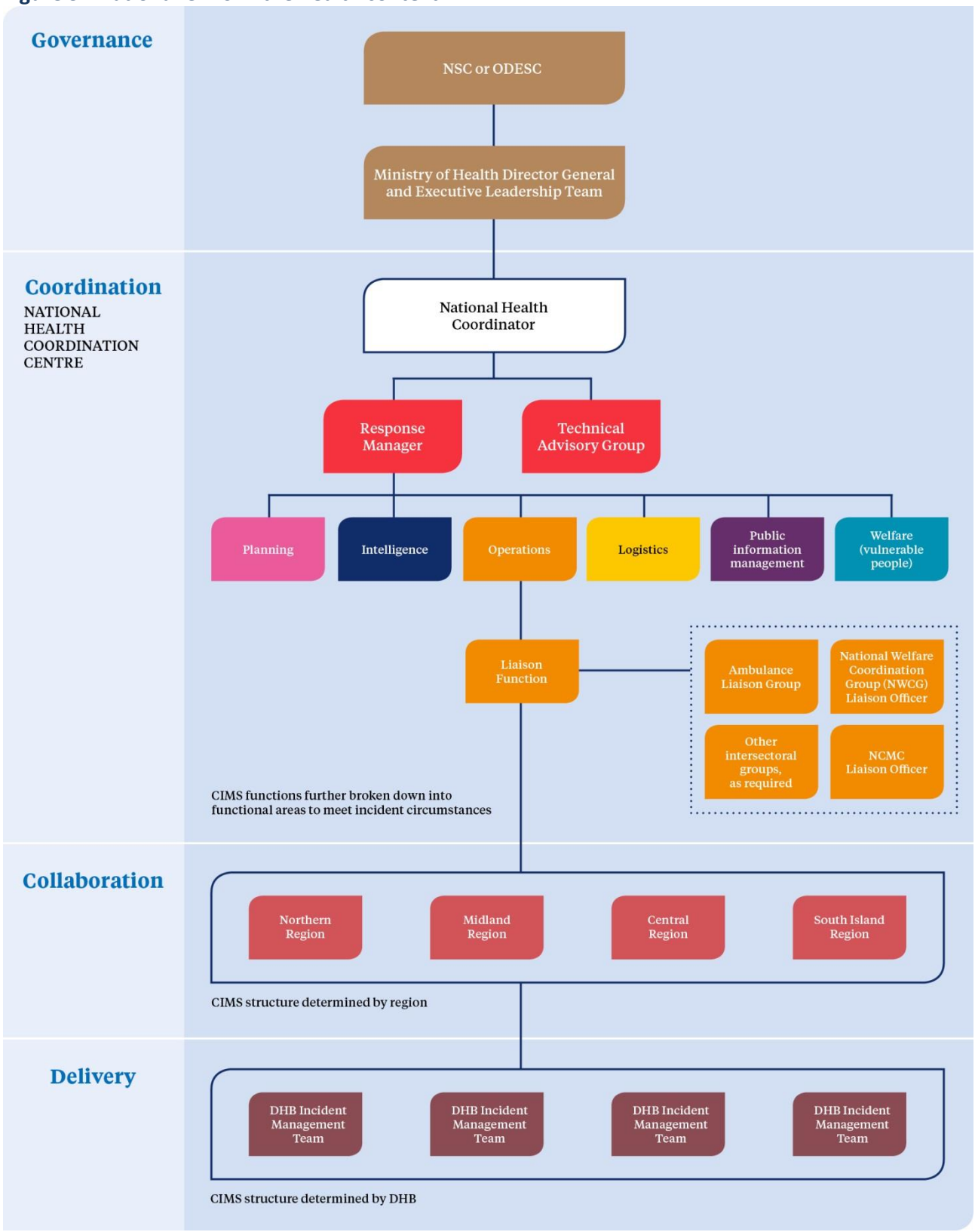


Figure 6: Lakes DHB CIMS structure (Sample for a large response)

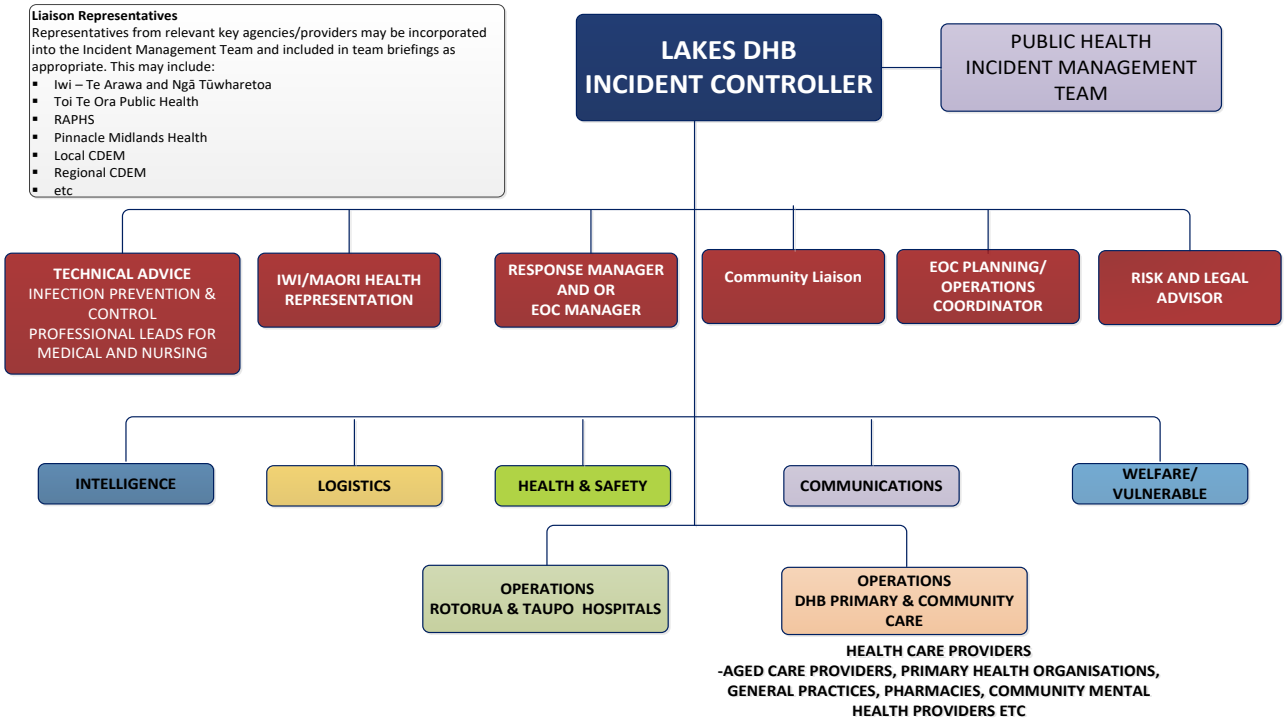


Table 3: Incident management team roles

IMT Role	Overview of role
Incident Controller	Coordinates the response
Response Manager	Supports and stands in for Incident Controller
EOC Manager	Manages the Emergency Operations Centre
Technical Advice	Advise IMT on aspects of the response relevant to their area of expertise
Iwi/Māori representation	Advise the IMT on all matters related to Māori and ensures iwi/Māori interests are represented
Liaison - Community	Manages interactions with support agencies, cultural minorities and community health providers Formal liaison should be established for local or regional responses. This includes the provision for a health liaison representative at the group and local CDEM EOCs. The liaison representative will communicate and disseminate applicable interagency information within the DHB.
Intelligence	Supports the IMT by gathering the latest intelligence, assessing and presenting it to IMT
EOC Planning	Oversees the development of actions plans and planning required
Hospitals Operations	Manages the operational aspects of the response for the Hospitals
Operations DHB Primary & Community Care	Manages the operational aspects of the response for the DHB Primary and community health providers
Logistics	Supplies equipment, PPE and supplies and Facilities activities
Communications	Preparing and disseminating information to staff, community providers, media and the public
Welfare	Looking after the welfare aspect for staff, patients and vulnerable population
Risk & Legal	Assesses and analysing the organisational risk to Lakes DHB and advise on legal issues
Health & Safety	Overseeing the Health & Safety aspects for staff, patients and visitors

Communications/public information management

Public Information Management during an emergency involves collecting, analysing, and disseminating information to staff and the public. It enables the people affected by the emergency to understand and take the appropriate steps to protect themselves. In the event of an outbreak or a pandemic Lakes DHB communications may work together with Bay of Plenty DHB and Toi Te Ora Public Health.

The goal of Public Information Management is to:

- create strong public confidence in the emergency management response
- support public safety with public information
- positively influence public behaviour
- manage public expectations
- share consistent messaging, supportive to one another's efforts

Information sharing via social media carries certain risks in that much of the information may not be from a reliable source, but have a strong influence over public behaviour and understanding. In order to minimise this risk it is essential that the public information management:

- anticipates information requirements
- provides accurate factual information with regularity
- establishes security and credibility when receiving information
- respects and preserves privacy and confidentiality of sensitive information

All internal and external communication must be authorised by the Incident Controller

Communication with health providers

Lakes DHB's uses the communication platform - Medinz for communicating critical, urgent and routine information with contracted health providers. This ensures they receive accurate information from supportive key organisations, including Lakes DHB, Pathlab, Toi Te Ora Public Health in a timely manner via text or email, they are highlighted as routine, urgent and critical. Recipient groups include Rotorua Area Primary Health Services, MHN Pinnacle, aged care sector, Kaupapa Maori providers, community pharmacies, LMCs, and "other" providers.

Healthline (0800 611 116)

Healthline can be utilised to provide information to the public and assess and triage caller in an incident.
In addition to this Toi Te Ora - Public Health have the ability to provide up to date information on their website for both health professionals and the public.

Human resourcing and staffing

Human Resources are an essential part of an effectively managed response to and recovery from a health emergency. Human Resources have a business continuity plan that outlines how they will manage staff capacity issues, and staff health and safety during emergency events.

Health and wellbeing of employees

Health and safety of the employees is pivotal to a successful response. This includes consideration of:

- physical
- mental health
- social wellbeing
- maintaining a safe environment.

The Health and Safety role of the Incident Management Team is responsible for ensuring that all practical steps are taken to ensure the safety of staff and volunteers during an emergency as outlined in the Health & Employment Act 2013.

This includes, but is not limited to, ensuring the employees and other people where appropriate have access to:

- information, policies and procedures relevant to implementing the HEP
- the required personal protective equipment (PPE) and decontamination equipment
- supplies for treatment of anyone who may be exposed to infectious diseases
- relief staff
- facilities and services to ensure their physical and mental wellbeing throughout the response phase
- any other protective measure that is practical to provide

In order to reduce the impact of the response on staff, shifts should be limited to 12 hours and staff should be rotated between high, medium and low-stress areas; and sufficient relief teams should be provided.

Health Emergency Management Information System (EMIS)

(Currently not available due to reconstruction)
Health EMIS, the health and disability sector's web-based 'emergency management information system', is the primary tool for managing significant incidents and emergencies at inter-DHB and national levels.

Health EMIS provides an electronic system to manage information produced during an incident or emergency. It does not replace verbal communications between agencies and service providers. It provides DHBs, public health units and other key health responders, such as ambulance services, with a logging and task-tracking system which they can use to manage their local response to an incident. The system complements other business-as-usual information systems.

Evacuation of health care facilities

The evacuation of a health care facility is highly complex and requires regional or national response to support to assist in managing the process. There is risk to the patients who may be bed-ridden and dependent on medical equipment. Furthermore, the evacuation must take into account the transfer of staff, medical records, medications, medical equipment and clinical products.
Core principles:

- **Evacuation** is the urgent movement of patients to a suitable safe location in response to a significant emergency. It has the ability to be scalable and may be a full or partial evacuation.
- **Relocation** is the planned movement of patients and staff from a facility to a designated suitable facility in response to a significant emergency
- **Shelter in place** is to seek safety within a facility rather than to evacuate to a different location.

The decision to evacuate, relocate or shelter in place will be made by the Incident Controller and will be made on the basis of a hazard assessment that includes the threat to patients, staff and visitors, and potential harm as a result of evacuation. There is no simple formula that can be applied and there are many factors that will influence this decision.

Rotorua and Taupō Hospitals emergency plan includes specific evacuation planning considerations and support material.

Management of the deceased

An emergency may result in multiple deaths causing mortuaries and funeral directors to be 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.

There are processes to manage multiple mortalities when the number of dead exceeds the ability for usual practices to manage and care for the dead and their families' cultural needs. This includes the ability to hold funeral services and 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.
- Worksafe NZ is responsible for health and safety in the workplace, including for funeral directors, pathologists, etc.
- The Ministry of Health is responsible for protecting public health and administering the Health and Burial and Cremation Acts. Local Medical Officers of Health and Health Protection Officers may implement many functions on behalf of the Director-General of Health and require action to ensure the deceased are managed in a way that protects the health of the community.
- 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.
- Maori trusts have oversight of urupa which are managed by the Maori land court. They have a role in managing the deceased as other burial ground/cemetery manages if there was a mass mortality event.
- 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 or environmental contaminant is likely to require consultation with to ensure any risk to those handling the deceased are managed and public health is protected.

Community health services

In a health-related emergency, DHBs, in consultation with primary and community providers and ambulance services, must plan the most effective way to respond to high service demand while maintaining usual services to the greatest degree possible.

A sudden increase in demand for primary care services may arise from the need to provide separate facilities for people with an infectious disease during an outbreak such as a pandemic, or when there has been a mass casualty incident, or evacuation from another DHB region.
It may be necessary to establish a community based assessment centre (CBAC). The purpose of a CBAC is to provide additional primary health care capacity. Its primary functions include:

- undertaking triage and clinical assessment
- giving advice
- making referrals to other primary health or secondary health care services
- gathering information to inform the Government, civil defence and emergency management groups and other agencies on the state of the public health.
- During a pandemic, providing a secure centre for dispensing antivirals and antibiotics or providing a location for mass vaccination of the community.

The DHB maintains plans to stand up either fixed or mobile testing centres, and CBAC. Which centres will be determined by event and response required. The purpose of these facilities is to provide additional primary care capacity. If required a suitable location will be identified dependant on the circumstances of the response required.

Issues to be considered in terms of this requirement include:

- the delivery of the service provides for the cultural needs of the community with a focus on equity
- infection prevention and control protocols
- personal protective equipment (PPE)for staff
- a system for separating ill from well patients in the waiting room
- a system to monitor the wellbeing of staff
- traffic and parking issues that may result from a large number of attendees

Post the COVID-19 response new plans and processes incorporating all the work undertaken during the response will be available.

Mass prophylaxis

Mass prophylaxis is having the capability to protect the health of the population by administering critical interventions in order to prevent the development of disease among those who are exposed or are potentially exposed. This capability includes following up and monitoring adverse events and providing communication messages to address the concerns of the public.

Should a prophylaxis programme be required the Ministry of Health will publish guidance for DHBs, who will be tasked with implementing the Ministry of Health prophylaxis strategy.

New Zealand stores bulk volumes of needles and syringes, sharps containers, and other vaccination equipment and supplies to mount a mass vaccination programme when required. These supplies will be mobilised by the Ministry of Health to support a mass vaccination programme.
Depending on availability, a vaccine may initially be restricted to priority groups, front line health workers and emergency services, followed by the general public.

When a situation arises where mass prophylaxis is being considered within the Lakes DHB area due to public health event, the DHB incident controller in consultation and partnership with Toi Te Ora Public Health plan manage the process.

Planning considerations include:

- coordination of potential point-of-dispensing sites or methods
- recruitment, accreditation and training of staff for clinics
- collaboration with other agencies, Iwi and community groups
- creation of appropriate medical screening tools and models
- appropriate communication with other stakeholder agencies and the public.

The rollout of a prophylaxis programme should be supported by the combined efforts of provider arm, general practice and pharmacies.
DHB communication staff will work with Strategy, Planning and Funding and Health and Safety and Toi Te Ora Public Health to provide information about and promote prophylaxis programmes

National reserve supplies

The MoH manages the national emergency reserves and stockpiles in preparation for when increased demand for the specialist emergency equipment and supplies are required in an emergency and in the recovery phases.

DHBs have access to these supplies during large and prolonged emergencies that generate unusual demands on normal health service stocks and supply chains.
DHBs manage their BAU supplies and supply chain capacity at a level that supports all reasonably predictable local events.

Reserve supplies include:

- PPE including masks, gowns, aprons and eye protection
- clinical supplies, equipment and vaccination supplies
- medicines and vaccines
- other supplies including body bags

The MoH:

- maintains the national reserve stockpiles
- establishes and communicates policies
- approves release of national reserve supplies when needed
- allocates national reserve supplies between DHBs
- coordinates transportation and distribution to DHBs
- monitor and forecasts national supplies use
- funds national reserve supplies use
- replenishes the national reserve bulk supplies

DHBs:

- maintain the rotation of national reserve supplies held in DHB stores
- applies to the National Coordinator for Ministry for release of national reserve supplies as needed
- allocates internal DHB supplies in an emergency
- support neighbouring or regional DHBs
- coordinates distribution of supplies within DHB districts
- reports and forecasts supply usage
- ensure clinical guidelines, usage policies and appropriate economical use in clinical settings are followed
- report to the Ministry of all national reserve supplies received and used

The National Health Emergency Plan: National Reserve Supplies Management and usages Policies, 3rd edition details the responsibilities of the MoH and DHBs in the management and usage of these critical resources.

Quarantine plan overview

Toi Te Ora is responsible for ensuring the risks that ill persons through the border may pose to the community are managed appropriately. Toi Te Ora that may pose a risk to the health of the community. Border health legislation enable the quarantine and isolation of persons and Toi Te Ora maintain a quarantine facility plan that operationalises the MOU agreements between Bay of Plenty DHB and accommodation providers. Prior to COVID-19, these MOU agreements were maintained by

the BOP DHB Emergency Management Team. Currently due to the OVID19 response these agreements are no longer valid active. This work stream will be reviewed post the response to COVID19.

Infant feeding

Arrangements to support the feeding of infants (up to one year of age) in emergencies sit with the DHBs. The planning is aligned with Ministry of Health policies and with international obligations and best practice for feeding babies in emergencies. Key aspects include:

- Arrangements to support families with infants who may be displaced by an emergency, and in particular ensuring they have access to expert feeding advice and supplies.
- Ensuring sufficient stocks of infant formula and ancillary supplies are available to ensure infants in hospital can continue to be cared for during any interruption to the normal supply chain and that any urgent needs for assistance in the community can be met.
- Managing any unsolicited donations of infant formula and other associated items.
- Supporting the agencies who normally work with mothers/caregivers and their infants – e.g. Lactation specialists, Lead Maternity Carers, Plunket, Tamariki Ora, and general practices.

Each DHB has a designated contact for infant feeding in line with:
https://www.health.govt.nz/system/files/documents/publications/roles-and-responsibilities-infant-feeding-in-an-emergency-dec15.pdf

Planning for Recovery

Recovery activities commence while response activities are in progress. As directed in the National Health Emergency Plan, the DHBs will refine developed recovery plans and implement these after the initial impact of the emergency has been stabilised. Appointment of a recovery manager is required to occur early in the response phase, they will coordinate recovery planning and delivery activities with stakeholders locally and regionally. The responsibility of the recovery manager is to ensure that planning is initiated to restore essential health and disability services as soon as possible and supporting the health (including wellbeing) needs of the community from the impacts of the emergency. I.e. cultural, social etc. Lakes DHB will work with Toi Te Ora and other stakeholders to identify the impacts to health and the needs to be addressed.

Standing down the HEP

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 MoH.
Deactivation of an emergency response is dependent on a wide range of variables that must be satisfied before the announcement occurs. Some basic principles that should be followed are that:

- The emergency response role has concluded
- The immediate physical health and safety needs of the affected people have been met
- Essential health disability services and facilities are re-established and operational
- Immediate health concerns arising from the public have been satisfied
- It is timely to enter the active recovery phase which is one of the 4 Rs' of emergency management and generally of longer duration than the response.

Once confirmed, the MoH will issue a Code Green alert to signify the end of the response period. The time and date of deactivation may be used to determine arrangements implemented by the MoH in the recovery period.

After each activation/exercise the HEP is reviewed based on debriefings and evaluation outcomes in order to clarify roles and responsibilities at all levels during local, regional and national activation.

RECOVERY

Objectives include:

- ***minimising the escalation of the consequences of the emergency***
- ***regenerating the emotional, social and physical wellbeing of individuals and communities***
- ***taking opportunities to adapt to meet the future needs of the community***
- ***reducing future exposure to hazards and their associated risks.***

Introduction

Recovery is defined as the coordinated efforts and processes to effect the immediate, medium and long-term holistic regeneration of services and communities following an emergency. Recovery activity begins after the initial impact has been stabilised in the response phase, and continues until the community's capacity for self-help has been restored. It may involve a local, regional, national health related response or it may involve a whole of government response involving economic, social and legislative issues.

The timeframe for recovery may vary from weeks to years as economic and emotional effects can cause constant stress for many years.

Planning for recovery is integral to preparing for emergencies and is not simply a post-emergency consideration. The recovery phase is not about returning to normality. It is more about regeneration; building back smarter, better, more sustainably and with more resilience. The post-emergency environment poses new challenges and opportunities to re-plan and perhaps even relocate. Health services need to transition from the immediate response to longer-term recovery with partner organisations and affected communities.

Considerations for immediate and long-term community recovery can include:

- providing immediate health services to affected individuals and families
- assessing community health and psychosocial needs and prioritising the actions required
- developing, implementing and monitoring the provision of community health activities
- enabling communication with Māori, Pacifica and vulnerable communities and participation in decision-making
- adapting existing organisations and procedures in order to minimise the time needed to get post-disaster institutions functioning
- contributing to future mitigation needs or improvements to planning.

Recovery extends beyond restoring physical assets and providing welfare services. Successful recovery recognises that both communities and individuals have a wide range of recovery needs, which must be addressed in a coordinated way. A holistic framework is needed to consider the multi-faceted aspects of recovery that support the foundations of community sustainability. The framework used by MCDEM encompasses the community and its four environments (social, economic, natural and built), as illustrated in the figure 7 below.

Figure 7: Integrated and holistic recovery

Health agencies and service providers contribute to all four environments of recovery. As well as ensuring that services are accessible and sustainable, the health and disability sector must adjust to emerging requirements and changes in demand by reshaping services and models of care delivery.

Recovery Manager

The DHB will identify and appoint a Recovery Manager early in the response phase. Depending on the scale of the event this may need to be a full time position for a significant period of time. To gain an understanding of the complexity of the emergency it is beneficial they work alongside the Incident Controller during the response phase.

They may be required to operate in a complex and demanding environment with the responsibility for advising the Chief Executive and Board regarding the allocation of scarce resources and restoration priorities. They should hold a senior position in the DHB with the appropriate designated authority. If the size/scope/duration of the recovery programme warrants it, a recovery group may be appointed, and the work split into specific section projects.

The key responsibility of the Recovery Manager is to facilitate and coordinate the short/medium term health recovery activities for the affected services and communities within Lakes DHB by:

- assessment of the health needs of the affected community
- coordination the health resources made available
- managing the rehabilitation and restoration of the affected community's health care services and health status.
- reassessing measures to reduce hazards and risks.

Recovery structure and organisation

While the MoH and other government agencies may be the lead for government involvement in a response phase (particularly in respect of a health emergency), it is usually NEMA who becomes the lead government agency for coordinating any necessary government support for recovery. Large scale emergencies require a whole-of-government response. NEMA coordinates the recovery activity of relevant CDEM groups, lifeline utilities (for example, electricity, telecommunications and water), government departments and international aid following the transition from response to recovery and during the short, medium and long-term. More in-depth information on recovery can be found in:

Recovery Management- Director's Guidelines for CDEM Groups (2005) and the Guide to the National Civil Defence & Emergency Management Plan (2006, s25).

The recovery structures implemented will be based on the type and scale of the emergency. Lakes DHB will be represented by the Recovery Manager in the relevant aspects of recovery management for the community, local areas or regions working alongside some or all of the following:

- Health and Disability sector, in particular To Te Ora Public Health
- Councils
- Local and regional CDEM Group
- Central Government
- Community groups

Resources

- Key actions are identified in the Lakes DHB Recovery Plan.
- A satchel with resources is held in the emergency management office.
- Full CDEM recovery resources are available on the CDEM website. www.civildefence.govt.nz/cdem-sector/cdem.../guidelines/

PSYCHOSOCIAL RECOVERY & SUPPORT

Psychosocial recovery

Recovery encompasses the psychological and social dimensions that are part of the regeneration of a community. The process of psychological recovery from emergencies involves easing the physical and psychological difficulties for individuals, families/whānau and communities as well as building and bolstering social and psychological wellbeing.

Psychosocial recovery spans the 4R's of planning, with most emphasis on the readiness, response and recovery phases. It is just one element of wider social recovery, and also links to the other three components or recovery, namely of the economic, natural and built environments.
Lakes DHB is committed to promoting health recovery measures, actions and operations not only during the recovery phase but across the 4R's in its principles and organisational planning for all aspects of its emergency management planning.

Psychosocial support

The responsibility for community psychosocial support sits with the Ministry of Health which includes DHBs, and the health and disability sector. A Document outlining responsibilities - Part II Section 10 Psychosocial Support, Welfare Services in an Emergency Director's Guideline [DGL 11/15 .

The Ministry has provided strategic advice and guidance to the Government, CDEM agencies and health and disability sector through the Office of the Director of Mental Health. The MoH has provided document outlining required actions: Framework for Psychosocial Support in Emergencies. The Ministry will represent the health and disability sector on the National Welfare Coordination Group. DHBs lead the local groups responsible for delivery of services that meet the psychosocial needs of a community after an emergency. Lakes DHB is represented on the Bay of Plenty and Waikato Welfare Coordination Groups to provide advice, guidance to lead agencies responsible for recovery.

The DHB is responsible for the coordination of the provision of psychosocial support, specialist public health, mental health and addiction services and will provide advice to government and non-governmental organisations and primary health organisations on the type and nature of services needed for the length of time psychosocial support is needed.

Lakes DHB Psychosocial Support Plan outlines the planning, coordination and delivery of psychosocial interventions and mental health treatments in the context of a potential or actual emergency.

REPORTING, MONITORING AND EVALUATION

Plan monitoring and exercises

Health emergency planning sits in the Clinical Governance and Quality & Risk Service of Lakes DHB. Monitoring and evaluation will take place as follows:

- The plan or aspects of the plan will be tested by table-top exercise annually (if there has been a response to an emergency or incident that has required the activation of an incident management team, this can replace an exercise). Following the completion of each exercise an evaluation will be undertaken, or in the case of activation, debriefs will be facilitated and areas identified requiring improvements will be followed up.
- Will hold bi annual Emergo exercises facilitated by St John.
- Will take part in multi-agency exercises when the opportunity arises.
- Emergency Management will provide the opportunities for health providers to practice their responses to an emergency by communicating through the MEDINZ platform.

Plan review

The plan will be reviewed within three years of its adoption. All emergency plans will also be reviewed and updated as required following any new developments or substantial changes to the operations or organisation of New Zealand health and disability services, and/or as a result of lessons from a significant emergency affecting the provision of health services within the region or by direction of the Chief Executive.

Emergency event debriefing

Debriefs provide a forum for to those involved or impacted by the response to the emergency to communicate their experience so that lesson can be identified and learnt from. They promote post-event learning and recovery for the people who are involved in the emergency event. The lessons identified will be incorporated into DHB policy and processes to better prepare the DHB and reduce the impacts of future event on the DHB community.

Debriefs will be conducted after each emergency response and exercises at all levels of Lakes DHB and partner organisations involved in the response. All debriefs must concentrate on organisational and management issues, not on personal issues. Time should be set aside to debrief the team on emotional/personnel issues so that the group can then focus on organisational issues.

Immediate post-event ('Hot') debrief

This debrief is to be held immediately after the incident or after the shift is completed to allow for rapid assessment of the response to date and issues arising. All staff involved in management of the incident and those who will assume responsibility for the ongoing management should attend. This 'hot' debrief should be conducted by the Incident Controller, their nominee or the manager of any particular function.

Notes must be recorded and distributed for learning purposes and raised at the 'Cold' debrief that follows.

Internal organisation ('Cold') debrief

A 'cold' debrief is typically held within four weeks of the stand down from the incident. All staff involved in management of the incident and/or functions should attend. Progressive debriefs can be held if the response extends over a length period of time. For the full cold debrief that follows it is preferable that debriefing is facilitated by a person(s) independent from the actual response.

Reports of the debrief findings and recommendations will be submitted to the executive team when completed.

The multi-agency debriefs

The multi-agency debrief should be held within six months of the event, whenever more than one agency is involved in the event. It should occur after all agencies have held their own debriefs. It should focus on the effectiveness of the coordination and address multi-agency issues.

APPENDICES

Appendix 1: Legislative requirements and reference documents

The Civil Defence Emergency Management Act 2002 (and amendments) and National CDEM Plan outlines the roles and responsibilities of key agencies in an emergency. A range of supporting and enabling legislation provides the legislative framework for health emergency management planning. This legislation and regulations includes but is not limited to:

- Health Act 1956
  - Health (Infectious and Notifiable Diseases) Regulations 1966
  - Health (Quarantine) Regulations 1983
  - Health (Burial) Regulations 1946
- Burial and Cremation Act
- New Zealand Public Health and Disability Act 2000
- Medicines Act 1981
- Civil Defence Emergency Management Act 2002
- Health Practitioners Competence Assurance Act 2003
- International Health Regulations 2005
- Epidemic Preparedness Act 2006

Other documents

- National Civil Defence Emergency Management Plan Order 2015 (in particular, but not limited to, clauses 47-51 and 71)
- National Health Emergency Plan (NHEP)
- National Health Emergency Plan: Guiding Principles for Emergency Management Planning in the Health and Disability Sector, 2005
- National Health Emergency Plan: Hazardous Substances Incident Hospital Guidelines 2005
- National Health Emergency Plan; H5N1 Pre-Pandemic Vaccine Usage Policy (latest published edition)
- National Health Emergency Plan: National Reserve Supplies Management and Usage Policies (latest published edition)
- New Zealand Influenza Pandemic Action Plan (latest published version)
- any other published National Health Emergency Planning documents
- Health and Disability Standards (2008) Part 4.7: 'Essential emergency and security systems'.
- The New Zealand Coordinated Incident Management System 3rd Edition (2020)

Appendix 2: Risk analysis–hazards and their consequence for the health and disability sector

Hazard	Impact on health facilities and services	Community impacts – response and recovery	PR= Priority Rating Likelihood= L
Earthquakes	Damage to facilities and/or critical infrastructure Transportation disruption to supply chain Impact on staff and families (physical, social, homes, transport, etc) Scale: Widespread, local to regional	Death and injury (crush, fractures, lacerations, burns, abrasions, particulate inhalation) Psychosocial impacts Low risk for infectious disease from endemic pathogens Economic impacts	PR =High L= Possible
Volcanic hazards	Damage to facilities and/or critical infrastructure (within eruption and associated quake zones) Ash impacts on water supplies, air quality, air-conditioning and facilities Loss of staff (self-evacuating) Transportation disruption to supply chain Scale: Local to regional	Illness (respiratory symptoms, exacerbations of pre-existing lung and heart disease) Potential chronic conditions due to environmental contamination Psychosocial impacts Economic impacts	PR=High L= Possible
Landslides	Damage to facilities and/or critical infrastructure (in slip zone) Transportation disruption to supply chain Scale: Site to area	Injury Psychosocial impacts Economic impacts	PR=Medium L= Possible
Tsunami For neighbouring coastal area	Major Impact for Lakes will be from an influx of displaced persons with relating health conditions Impact on staff and families (physical, social, homes, transport, etc) Transportation disruption to supply chain Scale: Local to regional	Death and injury (drowning, serious crush, fractures, lacerations, wound infection) Psychosocial impacts Economic impacts Contamination of environment, water supplies, infrastructure, etc	PR=High L= Possible

Hazard	Impact on health facilities and services	Community impacts – response and recovery	PR= Priority Rating Likelihood= L
Floods	Damage to facilities and/or critical infrastructure (in low-lying areas) Loss/contamination of essential drugs and supplies Isolation of services, staff, patients and/or communities Loss of staff/health workers Water supplies contaminated and/or reduced Transportation disruption to supply chain Scale: Area to regional	Death and injury (from drowning, electrocutions or physical trauma) Illness (due to drinking-water contamination, wound infection, respiratory and dermatological symptoms due to mould growth) Low risk of communicable disease outbreak usually associated with heavy population displacement Psychosocial impacts Economic impacts Evacuation-related health risks	PR=High L= Possible
Severe storm	Damage to facilities and/or critical infrastructure Transportation disruption to supply chain Scale: Generally local	Death and injury (debris, vehicle accidents, electrocutions)	PR=High L=Likely
Snow	Damage to facilities and/or critical infrastructure (due to snow-loading) Isolation of services, staff, patients and/or communities Scale: Local to regional	Injury (vehicle accidents, slips and falls) Hypothermia	PR=Low L=Unlikely
Drought	Water supplies reduced Scale: Regional	Illness (airborne and dust-related respiratory symptoms) Infectious disease (related to population displacement, vulnerable populations, drought-related behaviours such as reduction in hand hygiene practices) Psychosocial impacts (especially those whose livelihoods depend on rainfall)	PR=High L= Likely
Extreme weather incidents (heat or cold)	Critical infrastructure compromised Scale: Local to regional	Death and illness (respiratory symptoms, exacerbation of pre-existing lung and heart disease) Heat exhaustion Hypothermia	PR=Medium L= Likely

Hazard	Impact on health facilities and services	Community impacts – response and recovery	PR= Priority Rating Likelihood= L
Wildfire	Damage to facilities and/or critical infrastructure (in at-risk areas) Transportation disruption to supply chain Scale: Local	Death and injury (burns, smoke inhalation, eye injuries) Psychosocial impacts Economic impacts Evacuation-related health risks	PR=Medium L=Possible
Animal and plant pests and disease	Isolation of services, staff, patients and/or communities Scale: Local to regional	Illness Injuries (culling/disposal) Communities isolated Food supply impacts	PR=High L=Possible
Human disease outbreaks and pandemic (including water-borne illnesses)	Health impacts to staff Impact on staff and families (physical, social, homes, transport, etc) Critical services compromised Border health controls Scale: Regional, national or international	Illness and death Psychosocial impacts Economic Communities isolated	PR=High L= Possible
Lifeline failure	Critical services compromised Information security compromised Communication impacted Transportation disruption to supply chain Scale: Site to local	Economic impacts Loss of public confidence Loss of confidential information Illness/injury (due to disruption to access to sanitary services such as water and sewage systems, , heating, power)	PR=Medium L= Possible
Hazardous substance incident	Health impacts/injuries to responders and/or health workers Scale: Site to local	Injury and illness (respiratory, eye and skin symptoms; genotoxic effects; endocrine abnormalities; headache; nausea; dizziness; and tiredness or fatigue) Chronic respiratory disorders Psychosocial impacts Economic impacts Environmental contamination	PR=Medium L= Unlikely
Major transport accident	Damage to or contamination of facilities and/or critical infrastructure Access to site compromised Patient transport compromised Impact of managing mass casualties on clinical staff and services Scale: Site to area	Death and injury (impact, trauma, burns, hazardous substances)	PR=Medium L= Likely

Hazard	Impact on health facilities and services	Community impacts – response and recovery	PR= Priority Rating Likelihood= L
Terrorism	Damage to or contamination of facilities and/or critical infrastructure Critical services compromised Health impacts/injuries to health responders Impact of managing mass casualties on clinical staff and services Scale: Site to area	Death and injury (blast, lacerations, crushing, contamination – chemical, biological, radiological and nuclear) Illness (respiratory symptoms, including loss of pulmonary function) Psychosocial impacts	PR=Medium L=Rare
Food safety (eg, accidental or deliberate contamination)	Health service catering contamination Loss of staff/health workers Scale: Multi-site with regional/national implications	Illness (due to contamination)	PR= L=
Information System outage	Data breach, cyber attack, unplanned IT and telecom outages	Interruption to the delivery of health services due to an outage	PR=High L=Possible

Appendix 3: Ministry of Health Alert Codes

All alert phases	
National (Ministry)	**Local (DHB)**
Coordinates the health and disability sector operational response at the national level Provides information and advice to the Minister Provides strategic direction on the health and disability sector's response Liaises with other agencies at the national level Liaises with international agencies Identifies and activates national technical advisory group(s) as required Provides clinical and public health advice on control and management, where possible Approves/directs distribution of national reserve supplies Ensures technical advisory groups analyse critical data Provides information to assist with response Plans for recovery	Coordinates and manages the health and disability sector's response in its particular area Liaises with other agencies at the local level and within the region Provides the region and the Ministry with required information Activates inter-DHB response support and coordination as required Coordinates input and use of Health EMIS within health services
Information (Code White) (includes advisories)	
National (Ministry)	**Local (DHB)**
Issues code white alert through SPOC system Monitors situation and continues surveillance May activate a national incident on Health EMIS Advises DHB chief executives, DHB single points of contact and all public health unit managers of the emerging situation and potential developments Provides media with public information and advice, as necessary Liaises with other government agencies at the national level as necessary Liaises with international agencies as necessary	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 the Ministry regarding media statements Reviews local and regional health emergency plans Prepares to activate emergency plans Liaises with other emergency management agencies within the region
Standby (Code Yellow)	
National (Ministry)	**Local (DHB)**
Identifies and appoints national incident management team May activate a national incident on Health EMIS Assesses whether activation of the National Health Coordination Centre is required, and activates if necessary Determines and communicates strategic actions for response to the incident Identifies and activates national technical advisory group(s) as required Advises the health and disability sector of the situation via the SPOC system	Prepares to activate DHB emergency operations centre Identifies need for and appoints DHB incident management team 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 CBACs and tele-triage as necessary

Manages liaison and communications with other government agencies Manages liaison with international agencies	Note: In certain types of emergencies (such as a pandemic), public health units may fully deploy while clinical services remain on standby to provide assistance to public health units if required and to mount a clinical response.
Activation (Code Red)	
National (Ministry)	**Local (DHB)**
Issues code red alert; thereafter communicates via Health EMIS and the four regional emergency management advisors Activates a national incident on Health EMIS Coordinates the health response at the national level, as required Activates the National Health Coordination Centre, as required Monitors the situation, revises and communicates strategic actions for response, as required Approves/directs distribution of national reserve supplies when required Considers strategic recovery issues Provides clinical and public health advice on control and management, where possible Carries out national public information management activities Manages liaison with other government agencies Manages liaison with international agencies Implements recovery planning	Activates DHB emergency operations centre Activates DHB incident management team Manages DHB primary, secondary and public health service response Liaises with other agencies at a district level Activates CBACs and tele-triage as necessary Provides inter-DHB coordination with DHB/community health intelligence Activates inter-DHB response support and coordination as required Notifies health providers of change of alert level Appoints a recovery manager
Stand-down (Code Green)	
National (Ministry)	**Local (DHB)**
Issues code green alert Advises other government and international agencies of stand-down Advises media and public Stands down Ministry incident management team Stands down the National Health Coordination Centre Focuses activities on national recovery issues for the health and disability sector Implements recovery plan in conjunction with other agencies Supplies national public information on recovery Manages national debrief and evaluation of events Reviews plans	Stands down DHB emergency operations centre Stands down DHB incident management team Focuses activities on health recovery issues in the DHB region Stands down inter-DHB coordination if appropriate Facilitates debriefs Provides Ministry with information following debriefs Updates plans

Appendix 4: Ministry of Health (MoH) specialist plans

Links to MOH Plans

National Health Emergency Plan	https://www.health.govt.nz/publication/national-health-emergency-plan-framework-health-and-disability-sector
Burns Plan	https://www.health.govt.nz/system/files/documents/publications/nhep-multiple-complex-burns.pdf
Mass Casualty Plan	https://www.health.govt.nz/system/files/documents/publications/nhep-mass-casulty-action-plan.pdf
Hazardous Substances Plan	https://www.health.govt.nz/system/files/documents/publications/nhephazardoussubs.pdf
Influenza Action Plan	https://www.health.govt.nz/system/files/documents/publications/influenza-pandemic-plan-framework-action-2nd-edn-aug17.docx
Guidance – Community Based assessment centres and other support	https://www.health.govt.nz/publication/national-health-emergency-plan-guidance-community-based-assessment-centres-and-other-support
Framework – Psychosocial Support in Emergencies	https://www.health.govt.nz/publication/framework-psychosocial-support-emergencies
Guidance-Heat Health Plans	https://www.health.govt.nz/publication/heat-health-plans

Links to CDEM Plans

National CDEM Plan Order	https://www.legislation.govt.nz/regulation/public/2015/0140/latest/DLM6486453.html?src=qs%20
Guide to National CDEM Plan	https://www.civildefence.govt.nz/assets/guide-to-the-national-cdem-plan/Guide-to-the-National-CDEM-Plan-2015.pdf
MCDEM Director' Guideline for CDEM Groups and Agencies with Responsibility for Welfare	https://www.civildefence.govt.nz/assets/Welfare-Services-in-an-Emergency/Welfare-Services-in-an-Emergency-Directors-Guideline.pdf
NEMA Strategic Planning for Recovery	https://www.civildefence.govt.nz/cdem-sector/guidelines/strategic-planning-for-recovery/
Bay of Plenty Region Civil Defence Group Plan	https://www.bopcivildefence.govt.nz/media/1292/bopcdem-group-plan-2018-2023.pdf
Waikato Region Civil Defence Group Plan	https://www.waikatoregioncdemg.govt.nz/policy-and-plans/group-plan/
Rotorua Lakes Council Civil Defence Emergency Plan	https://www.rotorualakescouncil.nz/our-services/cdemergency/cdinrotorua/Documents/Civil-Defence-Emegency-Management-Plan-2015.pdf
Taupō District Council Emergency Management Plan	https://www.Taupōdc.govt.nz/repository/libraries/id:25026fn3317q9slqygym/hierarchy/our-council/policies-plans-and-bylaws/plans/documents/civil-defence-emergency-management-plan-2012/Civil-Defence-Emergency-Management-Plan-2012.pdf

Other Plans

NZ Ambulance Major Incident and Emergency Plan (AMPLANZ)	https://www.health.govt.nz/publication/national-health-emergency-plan-framework-health-and-disability-sector

Appendix 5: Supporting plans and processes (summarised)

Full procedures are available in Rotorua & Taupō Hospital Emergency Response Plan

Inter DHB coordination and support

Regional and national staffing requests from an area affected by a major incident are coordinated nationally utilising the Emergency Management Information System (EMIS). Depending on the level of response required, either the Emergency Management Coordinator or Incident Controller coordinates the response with support from Human Resources.

Receipt of support staff from other DHBs

The CEO or designate must approve any requests for staff from other DHB to assist Lakes DHB during an emergency response. Requests for support staff should be made in consultation with the National Health Coordination Centre, utilising EMIS to register all relevant information.

Managing emergency volunteers

Volunteers that work regularly for Lakes DHB undergo occupational health checks prior to working onsite as required, and adhere to our policies at all times.

Spontaneous volunteers

The management of spontaneous volunteers is a complex situation. Spontaneous volunteers can be a significant resource, but are often ineffectively used and can hinder emergency activities by creating health, safety, and security issues, distracting responders from their duties, and interfering with ongoing operations. Advance planning is required to provide for trained, credentialed health volunteer to support local surge capacity in Rotorua and Taupō Hospitals. The Human Resources Recruitment Team Leader is responsible for coordinating volunteers.

Mass Casualty Plan (surge capacity)

Mass casualty incidents (MCI) require a coordinated response from emergency services and the health and disability sector. An incident of this nature will increase the demand for health services, however wherever possible, the process for responding will be consistent with business as usual process to minimise disruption and promote consistency.
Lakes Mass Casualty Incident Plan outlines the planned response to a surge of patients.
DHB actions and responses during a MCI:

- Utilise CIMS to establish an incident management team to coordinate the response
- Initiate a staff cascade process
- Implement systems and process for triage, diagnosis and treatment
- Cease elective surgical and outpatient activity
- Liaise with QE Southern Cross and Lakes Primecare re capacity to assist
- Identification of patients for rapid discharge or transfer
- Management and support of visitors and dependants (family and whānau)
- Information management and communication within the DHB and public

Glossary of Terms

BOPCEG	Bay of Plenty Region Coordinating Executive Group
CALD	Culturally and Linguistically Different communities
CBAC	Community Based Assessment Centre
CDEM Groups	This group is made up of executives of each Territorial Local Authority (TLA) in the greater Wellington Region as well representatives of emergency services.
CE	Chief Executive
CFA	Crown Funding Agency
CIMS	Coordinated Incident Management System. A structure to systematically manage emergency incidents which allows multiple agencies or units involved in an emergency to work together.
Community Services	Community based Services provided by DHBs and other organisations
DGL	Director General
DHB	District Health Board. Provides hospital and community-based health services (including public health units). DHBs have legislated obligations as funders and providers of publicly-funded services for the populations of specific geographical areas in New Zealand.
EMBOP	Emergency Management Bay of Plenty (Civil Defence)
Emergency	A health emergency is defined as a natural or man-made event that suddenly or significantly disrupts the environment of care; the ability to provide care and treatment to the community; or changes or increases demand for a health organisation's services.
Emergency Managers (EMs)	Also called emergency coordinators, or emergency service leaders
EOC	Emergency Operations Centre. An established facility where the operational response to an incident is controlled and provided.
Epidemic	A disease affecting or tending to affect an atypically large number of individuals within a population, community or region at the same time.
ESCC	Emergency Services Coordination Committee
FENZ	Fire and Emergency New Zealand
Hazardscape	The natural process, events and human actions that may cause harm or disruption to people's lives and livelihoods.
Health EMIS	Health Emergency Management Information System. A web-based incident management and information sharing system provided by MoH.
Health facilities	A building or location where health services are provided. This may also include mobile services.
HEP	Health Emergency Plan
HERP	Hospital Emergency Response Plan
Hospital and Health Service	As defined by the Health and Disability Services Act 1993.
HR	Human Resources
IMT	Incident Management Team

Incident Controller (IC)	The senior person, CIMS 4 trained, tasked with the overall responsibility controlling and coordinating the response to the emergency. Leads the Incident Management Team.
LDHB	Lakes District Health Board
Lifeline utilities	Any organisation named or described in Part 1, Schedule 1 or carries on a business described in Part B of Schedule 1 of the CDEM Act. This includes airports, ports, railways, and providers of gas, electricity, water, wastewater or sewerage, storm water, telecommunications, roading networks and petroleum products
NEMA	(Civil Defence) National Emergency Management Agency
MHEMG	Midland Region Health Emergency Managers Group
MHEP	Midland Regional Health Emergency Plan
MoH	Ministry of Health
MOoH	Medical Officer of Health
MOU	Memorandum of Understanding
NCMC	National Crisis Management Centre
NGO	Non-government Organisation
NHEP	National Health Emergency Plan. This plan provides guidance on the enablers of effective health emergency management and describes the roles and responsibilities at all levels across the areas of reduction, readiness, response and recovery. The mechanisms, systems and tools used in the health and disability sector to respond to an emergency event are also described in detail.
NSC	The National Security Committee. The committee is chaired by the Prime Minister, and includes those ministers responsible for departments that may pay essential roles in emergencies. The NSC is the key decision-making body of executive government for coordination and directing national responses to major crises or circumstances affecting national security (either domestic or international).
ODESC	Officials' Committee for Domestic and external Security Coordination. A committee of government chief executives charged with providing strategic policy advice to ministers. It provides support to DESC and oversees emergency readiness, intelligence and security, terrorism and maritime security. Activation of ODESC is at ministerial request; for example, where a growing risk of a particular threat has been identified.
OPF	Operational Policy Framework. One of a group of documents collectively known as the *Policy Component of the District Health Board Planning Package* that sets out the operational level accountabilities for DHBs for each fiscal year. The OPF is executed through Crown Funding Agreements between the Minister of Health and each DHB.
Pandemic	An epidemic that spreads to the point that it affects a whole region, a continent of the world, and is declared by WHO to be a pandemic.
Partner Agencies	All non-DHB health providers in the Lakes Region

PHOs	Primary Health Organisations. Two PHOS work with the DHBs to coordinate the primary health response to major emergencies: Rotorua Area Primary Health (RAPHS) and Pinnacle Midland Health
PHUs	Public Health Units
Primary Care	Care/services provided by general practitioners, practice nurses, community pharmacists, dentists, midwives, community nurses, and others in the community.
SPOC	Single point of contact
TLA	Territorial Local Authority. These are the second tier of local government under regional councils. Regional councils are responsible for the administration of many environmental and public transport matters, while the territorial authorities administer local roads and reserves, sewerage, building consents, the land use and subdivision aspects of resource management, and other local matters. (Wikipedia, 2017.)
WCG	Regional Welfare Coordination Group
WHO	World Health Organization