HSE Emergency Management

Area 3 Crisis Management Team

Major Emergency Plan

(Covering Geographical Areas of Counties Clare, Limerick and North Tipperary)

June 2024

Version	**Version 10 – June 2024**
Approval Date	**June 2024**
Review Date	**June 2025**
Area Crisis Management Team (CMT) Action Card	**Please note: Area 3 CMT Action Card Version 8 corresponds with this plan**

Version Control:

Revision Number	Version 8 – May 2022	**Summary of edits**	Feedback and updates from Departments of Public Health, Psychology, Environmental Health and Emergency Management
	Version 9 – July 2023		Feedback and updates from Departments of Public Health, National Ambulance Service and Emergency Management
	Version 10 –June 2024	**Summary of edits**	Feedback and updates from Emergency Management and AEPG members.

Explanatory Notes:

- The HSE is currently in the process of transitioning to RHA model as per Sláinte Care however, at the time of review, the HSE is organised into Acute Operations (Hospital Groups) and Community Operations (Community Healthcare Organisations). The Area 3 Crisis Management Team (CMT) is a strategic group that consists of senior managers representing *all HSE functions and services.* The Area 3 CMT is aligned with the geographical area of Mid West Community Healthcare (that is, Counties Clare, Limerick and North Tipperary). For the purposes of this Area 3 CMT Major Emergency Plan, the 'Area' refers to these counties.
- At the time of review of Version 10 of this plan (June 2024), the tactical and strategic recommendations of the PWC Independent Post Cyber Incident Review are actively being implemented nationally. It is acknowledged that a cyber-attack is a national risk that would have a significant impact on HSE functions and services in the area. It is anticipated that a section detailing the interface with the Office of Chief Information Officer and a risk assessment for cyber-attacks will be added to the next version, in accordance with national HSE adjustments and guidance.

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COMMON PAGE

(In accordance with the Framework 2006 Guidance Document[1] a version of these pages appear in the Major Emergency Plan of each Principal Response Agency (PRA)). As a result, each PRA will make and receive two calls to and from the other PRAs in relation to any Major Emergency notification)

TO ACTIVATE THIS PLAN

Contact National Emergency Operations Centre (NEOC) at

999/112

Using the following Confidential, Dedicated Numbers:

This is …… (Name, rank and service) ……

A …… (Type of incident) …… has occurred/is imminent

at ……(Location) ……

As an authorised officer I declare that a major emergency exists.

Please activate the mobilisation arrangements in the HSE AREA 3 CMT Major Emergency Plan.

NEOC **National Emergency Operations Centre**	**Emergency**	**Non-Emergency**
Ballyshannon / Tallaght	999/112	01 4633 410

[1] *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

Notify NEOC of the Declaration of the Major Emergency using the following message format:

After the Declaration is made, the notifying officer should then use the mnemonic METHANE to structure and deliver an information message (as follows)

M	**Major Emergency Declared**
E	**Exact Location of the emergency**
T	**Type of Emergency (Transport, Chemical, etc.)**
H	**Hazards, present and potential**
A	**Access/egress routes**
N	**Number and types of Casualties**
E	**Emergency services present and required**

Where the initial declaration of the Major Emergency is made by the HSE, the NEOC Controller on duty, as part of pre-set actions, will notify the other two PRAs of the declaration and provide information as available. Contact may be made via the following numbers:

If these numbers are not answered use 999/112 as alternative

Fire Service/Local Authorities	Telephone Number	Back up Number
Munster Regional Communications Centre	061 319654	061 411398

Garda Div. HQ at:	Telephone Number	Back up Number
Limerick	061 212400	061 212411
Tipperary	0504 25100	0504 25111
Clare	065 6848100	065 6848111

SECTION 1 INRODUCTION TO THE PLAN

1.1 Foreword

Major Emergency Management (MEM) is a priority issue for all HSE services/functions in counties Counties Clare, Limerick and North Tipperary. MEM is fundamentally about ensuring that the necessary planning, prepardness, capacity, training and coordination are in place at all levels of the health service to enable the services to meet the challenges posed by such events. Given that it is not possible to foresee all possible adverse events, an all hazards approach is taken, which is capable of adaptation in the light of prevailing circumstances.

The Area 3 CMT Major Emergency Plan (covering counties Counties Clare, Limerick and North Tipperary) has developed in accordance with the requirements set out in Section 4.4.1 of the National Framework for Major Emergency Management (2006)[2], and sets out mechanisms for coordination at all levels of Major Emergency Management – on site, at local level and at regional level.

This plan is supported by a series of sub-plans covering, sites, services and departments. It is designed to integrate with corresponding plans from the other Principal Response Agencies (PRAs) of Local Authority and An Garda Síochana as well as with the emergency plans for specific sites classified as upper tier sites under the Seveso (Control of Major Accidents Hazards) Regulations[3].

Major Emergency Management arrangements build on current strengths, and make full use of the core competencies and organistional strengths of the health services as the basis for the response. The aim is to fit in with existing organisational and government structures, subject to appropriate co-ordination mechanisms being added.

This plan aims to provide the service at all levels with an appropriate framework, skill base and the tools necessary to respond to any emergency situation that may arise.

It is the responsibility of all employees to familiarise themselves with their roles and funtions as described in the Area 3 CMT Major Emergency Plan and the more specific sub-plans that relate to their services.

Using a systems approach to Major Emergency Management that involves a continuous cycle of activity, we will ensure that the HSE and our PRA partners are in a position to provide protection and care of the public at times of vulnerability, through clear leadership, an early and coordinated response, accountability and safe working, while maintaining the provision of essential services.

Signed:

Maria Bridgeman.

Maria Bridgeman
Chief Officer Mid-West Community Healthcare &
Chair of HSE Area 3 Crisis Management Team

Niamh Wallace
Head of Service, Health & Wellbeing &
Chair of the Area 3 Emergency Planning Group

[2] Section 4.4.1, *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

[3] *Chemical Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015* (S.I. No. 209 2015) https://www.hsa.ie/eng/Your_Industry/Chemicals/Legislation_Enforcement/COMAH/SI_209_of_2015.pdf

1.2 The Framework for Major Emergency Management 2006

The Framework for Major Emergency Management 2006[4] outlines the structures and processes followed by the Principal Response Agencies in managing a response to a Major Emergency. The MEM Framework arises from a decision of Government. It is available on the HSE Intranet

http://hsenet.hse.ie/Emergency_Management/Generic_Plans_for_Major_Emergencies/

or **http://www.mem.ie** together with other supporting guidelines, protocols and templates.

1.3 Objectives of Area 3 CMT Plan

The objectives of this plan are:

- To provide a system outlining the strategic delivery of a coordinated response when a Major Emergency has been declared as set out in Section 2.1.1 in the geographical area Mid-West Community Healthcare for **all HSE services/functions**.
- To ensure that the HSE has clear leadership in times of crisis and when responding to a Major Emergency.
- To ensure an early and appropriate response with efficient operations co-coordinated with the other PRAs when responding to a Major Emergency.
- To provide for the protection and care of the public at times of vulnerability when a Major Emergency has been declared.
- To ensure the maintenance of HSE essential services during a Major Emergency Response.
- To deliver a realistic and rational approach with transparent accountability when responding to a Major Emergency.
- To put in place a process by which the recovery phase is addressed by the Area 3 CMT as early as possible in a major emergency as possible.

[4] *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

1.4 Scope of this Area 3 CMT Major Emergency Plan

This plan provides for a co-coordinated response to major emergencies beyond the normal capabilities of the principal emergency services in the geographical area of Mid-West Community Healthcare. These may arise from major transport accidents, fires, acts of terrorism, severe weather and outbreaks of disease, spillage or release of hazardous substances.

The types of emergency that arise from fuel shortages, disruption of services or industrial disputes are of another nature and are not catered for in this plan.

This plan consists of two distinct parts:

- The Plan proper, which uses the common standard procedures as per framework for Major Emergency Management 2006[5] throughout the geographical area of Mid-West Community Healthcare Organisation.
- The Appendices, which are elements of the plan proper but are easier to treat as separate items e.g. Directory of Contacts, Garda Casualty Bureau, Media Plan, Risk Assessments, Maps and/or illustrations etc.

The variations possible in the event of a Major Emergency are so numerous that no plan can provide detailed responses for all possible events, which may arise. This plan therefore is to be regarded as an all hazard approach, capable of adaptation in the light of prevailing circumstances. It is not intended, nor should it be interpreted, as a restriction on common sense or initiative when dealing with situations as they arise. It has been developed to identify the process to be taken by the HSE, led by the Area 3 CMT in responding to a Major Emergency.

1.5 Relationship to other plans

This plan has been prepared in accordance with Section 4.1[5] of the Framework so that it is consistent with the plans of other HSE Regions, other Principal Response Agencies, appropriate National Emergency Plans and other Site and Event Specific Plans, which may be activated at the same time.

1.6 Language, Terminology and Definition of a Major Emergency

This plan complies with Appendix F3[6] of the Framework which provides a Glossary of Terms and Acronyms for use by the Principal Response Agencies and are outlined in Appendix 1 of this document

Definition of a Major Emergency:

"A Major Emergency is any event which, usually with little or no warning, causes or threatens to cause death or injury, serious disruption of essential services, or damage to property or the environment or infrastructure beyond the normal capabilities of the principal emergency services in the area in which the event occurs and requires the activation of specific additional procedures and the mobilisation of additional resources to ensure an effective, coordinated response."

(A Framework For Major Emergency Management 2006)

[5] Section 4.1, *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

[6] Appendix F3, *A Framework for Major Emergency Management Appendices,* 2006 *http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management-Appendices.pdf*

A Major Emergency can only be declared by an authorised officer of one of the Principal Response Agencies (PRA's).

The designated authorised officers of the PRAs are outlined in Section 7.1.

1.7 Distribution

This HSE Area 3 CMT Major Emergency Plan is available for HSE Staff and PRAs on the HSE website:

https://www.hse.ie/eng/services/list/3/emergencymanangement/area-mep/

1.8 Public Access to the Plan

A copy of this HSE Area 3 CMT Major Emergency Plan with the confidential contact telephone numbers and other personal information removed is available on the HSE Website for members of the public whom may wish to access same:

https://www.hse.ie/eng/services/list/3/emergencymanangement/area-mep/

SECTION 2 THE PRINCIPAL RESPONSE AGENCY AND ITS FUNCTIONAL AREA

2.1 The Agency – The Health Service Executive (HSE)

The HSE is the agency responsible for providing health and personal social services for everyone living in this country. It has undergone significant organisational change and provides its services under the following:

- The Community Healthcare Organisation (Mid-West Community Healthcare -*Limerick, Clare & North Tipperary)*
- Acute Hospital Divisions
  UL Hospitals Group *incorporating*
  - University Hospital Limerick
  - University Maternity Hospital Limerick
  - Nenagh Hospital
  - Ennis Hospital
  - Croom Orthopaedic Hospital
  - St. John's Hospital (Voluntary)
- National Ambulance Services
- Public Health Departments
- Environmental Health Services

Child welfare comes under the remit of Tusla which has close links with the HSE services.

2.1.1 Functions of the HSE

In accordance with Appendix F5[7] of the Framework, the HSE will undertake the following functions in the response to a Major Emergency: -

- Declaration of a Major Emergency where appropriate and notification of the other two relevant Principal Response Agencies (PRAs)
- Activation of predetermined procedures/arrangements in accordance with Major Emergency Mobilisation Procedure
- Acting as lead agency for biological incidents in accordance with Appendix F7[8]
- Provision of medical advice and assistance
- Provision of medical aid to casualties at the site
- Triage of casualties, and assigning them to hospitals for evacuation
- Casualty evacuation and ambulance transport
- Provision of hospital treatment
- Provision of psychosocial support to persons affected by the emergency
- Certification of the dead
- Support for An Garda Síochána's forensic work
- Support for the Coroner's role
- Clinical decontamination and decontamination of contaminated persons on arrival at hospital
- Provision of chemoprophylaxis to anyone exposed to biological agents and follow up surveillance and monitoring of people exposed to hazardous substances
- Advising and assisting An Garda Síochána and Local Authorities on public health issues arising
- Exercising control of any voluntary or other service which it mobilises to the site
- Monitoring and/or reporting on the impact in its functional area of any emergency/crisis which falls within the ambit of a "National Emergency", and coordinating/undertaking any countermeasures in its functional area which are required/recommended by an appropriate national body
- Any other function, related to its normal functions, which is necessary for the management of the emergency/crisis
- Any function which the On-Site Co-ordinating Group requests it to perform
- Maintaining essential health services during the Major Emergency

These functions will be discharged by a variety of services including (non exhaustive): The National Ambulance Service (NAS), Acute Hospitals Division, Mid-West Community Healthcare, Department of Public Health (PH), Communications (Comms) and the CMT.

[7] Appendix F5, *A Framework for Major Emergency Management Appendices,* 2006 *http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management-Appendices.pdf*

[8] Appendix F7, *A Framework for Major Emergency Management Appendices,* 2006 *http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management-Appendices.pdf*

The Roles and the HSE Service responsible are summarised in the following table:

HSE Roles	Responsible HSE Services
Declaration of a Major Emergency and notifying the other two relevant principal response agencies	Authorised Officers in the National Ambulance Service (NAS) Acute Hospitals Division Mid-West Community Healthcare Public Health (PH) Notification – Both internal and external notification to be carried out by NAS National Emergency Operations Centre (NEOC).
Activation of predetermined procedures/arrangements in accordance with its Major Emergency Mobilisation Procedure	National Ambulance Service (NAS)
Acting as "lead agency", where this is determined in accordance with Appendix F9[9], and undertaking the specified coordination function	CMT & relevant Department of Public Health
Provision of medical advice and assistance	NAS Acute Hospitals Division Mid-West Community Healthcare Department of Public Health
Provision of medical aid to casualties at the site	NAS
Triage of casualties, and assigning them to hospitals	NAS
Casualty evacuation and ambulance transport	NAS
Provision of hospital treatment	Acute Hospitals Division
Provision of psychosocial support for persons affected by the emergency	Mid-West Community Healthcare
Certification of the dead	Acute Hospitals Division/ Mid-West Community Healthcare
Support for An Garda Síochána's forensic work	All services as appropriate
Support for the Coroner's role	All Services as appropriate
Clinical decontamination and decontamination of contaminated persons on arrival at hospital	Hospitals and NAS
Maintaining essential health services during the major emergency	CMT and All Services
Advice and assistance to An Garda Síochána and Local Authorities on public health issues arising	CMT & Department of Public Health
Exercise control of any voluntary or other service which it mobilises	NAS
Monitoring and/ or reporting on the impact in its functional area of any emergency/ crisis which falls within the ambit of a "National Emergency", and co-ordinating / undertaking	All services via the CMT

[9] Appendix F9, *A Framework for Major Emergency Management Appendices,* 2006 *http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management-Appendices.pdf*

any countermeasures in its functional area which are required/ recommended by an appropriate national body	
Any other function, related to its normal functions, which is necessary for the management of the emergency/ crisis	Relevant Responding Service
Any function which the On-Site Co-ordinator requests it to perform	Relevant Responding Service

2.2 Boundaries and Characteristics of the Area

The geographical remit of this plan comprises of the counties of Counties Clare, Limerick and North Tipperary. The three counties comprise a total area of just over than 10,511 km². The area has an extensive coastline. Special arrangements for Marine, Island and offshore emergencies are included in Appendix 2 of this document. This also covers the role of Medico Cork in offshore emergencies. Medico Cork is a national resource that provide a radio based support to the Marine and offshore sector.

A more detailed description of the area is set out in Appendix 3 Risk Assessment

SECTION 3 RISK ASSESSMENT FOR THE AREA

The Risk Assessment of the Area 3 CMT Plan is set out in Appendix 3 of this document. The Inter Agency Risk Assessments for the North West MEM region are available from the Emergency Management Office if required.

Transport risks have been identified within the busy seaport of Foynes and within the Airport at Shannon. Our busy road and rail infrastructure also carries significant risk of multi-casualty incidents.

Our long and varied coastline and extensive rivers have been identified as a source of potential tidal and inland waterways flooding. There are four designated classified Upper-tier Seveso sites in the area.

SECTION 4 HSE RESOURCES FOR MAJOR EMERGENCY RESPONSE

4.1 Internal Resources

In the event of a Major Emergency, the appropriate services from those listed here will be activated.

4.1.1 Area 3 Crisis Management Team

Each ACMT is associated with the geographical area of a Community Healthcare Organisation; The ACMT **'is a strategic level management group, within each principal response agency, which is assembled during a major emergency'.** The ACMT consists of ***senior managers*** representing the various functions/services within the HSE. The ACMT is assembled to ***manage a crisis*** and deal with issues arising for the HSE both ***during*** the emergency and subsequent ***recovery*** phase. The Chief Officer or his/her designate chairs the ACMT.

The Area 3 CMT consists of the senior managers representing all functions and services in the HSE Geographical area of Mid-West Community Healthcare. Each service/function is responsible for advising the West Emergency Management Office of the nominees to the ACMT for their service/function. (Refer to Section 6.2 for complete membership and functions.) The West Emergency Management Office manages the contact details for the Area 3 CMT and issues each member with an Action Card associated with this plan. The A3CMT meets initially by Teleconference and if required at an Area 3 CMT designated facility. The A3CMT is alerted by a text alert system and is called into conference session about 15-20 minutes after the declaration of a major emergency.

The Chief Emergency Management Officer (CEMO) and the Regional Emergency Management Officers (REMO) are members of the Area 3 CMT.

4.1.2 The National Ambulance Service (NAS)

The National Ambulance Service will normally provide the first HSE response to a Major Emergency. The NAS is responsible for the provision of pre-hospital emergency care to persons injured as a result of the Major Emergency. Their activities during a major emergency will include the provision of immediate treatment and the provision of transport to those injured to definitive centres of care.

There are 10 Ambulance stations, spread across the three counties as follows:

Limerick

- 3 Ambulance Stations/Bases

Clare

- 4 Ambulance Stations/Bases

North Tipperary

- 3 Ambulance Stations/Bases

(See Appendix 4 of this plan for Map of National Ambulance Service Stations)

4.1.3 National Emergency Operations Centre (NEOC)

The NAS National Emergency Operations Centre (NEOC) as the designated emergency 24/7 365 - call centre also plays a key role in the activation of this plan. This is "one" call centre based on two sites Tallaght and Ballyshannon. The manager in NEOC, when notified of a declaration of a major emergency, will activate the Area 3 Crisis Management Team.

4.1.4 Acute Hospitals Division

There is one hospital group operational in the Area 3 CMT operational area, with an associated receiving Hospital (24-hour Emergency Department Facilities).

University of Limerick Hospitals Group consists of six hospital sites which function as a single hospital system:

- University Hospital Limerick (receiving hospital – see information below)
- University Maternity Hospital Limerick
- Nenagh Hospital
- Ennis Hospital
- Croom Orthopaedic Hospital
- St. John's Hospital (Voluntary)

University Hospital Limerick (receiving hospital)

University Hospital Limerick (UHL) is the only hospital in the group that has a full 24/7/365 emergency care and critical care service. UHL has 455 inpatient beds. It is one of the 8 designated cancer centres in the country. The hospital has a dedicated 24/7 primary Percutaneous Coronary Intervention centre. This is for non-surgical procedures for STEMI's (serious heart attacks). The Acute Medical Assessment Unit treats patients referred by GPs and Injury Units. It is open from 8am to 6pm from Monday to Friday including Bank Holidays. The Acute Surgical Assessment Unit (ASAU) is a rapid access facility for acute surgical patients who are over 16. Patients must have been assessed by a GP or hospital doctor. The unit is open from 8am to 8pm, Monday to Friday. It is closed on Bank Holidays. The UHL Thrombolysis Centre is for the management of acute stroke. All stroke patients presenting to UHL are considered for thrombolysis. The service is 24/7. There is a dedicated stroke team and an Acute Stroke Unit in UHL.

(See Appendix 4 of this plan for location of receiving hospitals)

4.1.5 Community Healthcare Organisation (CHO)

During a Major Emergency, and particularly in the aftermath, Mid-West Community Healthcare will play a vital role in caring for, and supporting, a wide range of individuals, including the families and friends of casualties, uninjured survivors, and those who have been evacuated from their homes.

These functions are provided within Mid-West Community Healthcare through the following services:

- Primary Care
- Mental Health
- Health & Wellbeing
- Older Persons
- Disabilities

Depending on the nature of the Major Emergency the services of Mid-West Community Healthcare may be involved in providing extra services to the communities affected by the Major Emergency.

Mid-West Community Healthcare has its own Major Emergency Plan and Site Specific plans for each of its residential community nursing units.

4.1.6 Public Health

The Department of Public Health will play a significant role during the response to any Major Emergency which results in a real or perceived threat to public health, including emergencies involving an infectious condition, such as serious outbreaks, emerging threats and pandemics, the release of a chemical, radioactive, biological or nuclear agent or the contamination of water or food supplies. The Public Health service is provided by the Department of Public Health Area E / Mid-West, which covers Counties Clare, Limerick and North Tipperary.

The Area Director of Public Health or their nominated representative - a Consultant / Specialist in Public Health Medicine (S/CPHM) is assigned the 'Medical Officer of Health' role. The Medical Officer of Health (MOH) has responsibility and authority to investigate and control notifiable infectious diseases and outbreaks, under the Health Acts 1947 and 1953, Infectious Disease Regulations 1981 and subsequent amendments to these regulations. This legislation requires the MOH to take the necessary steps to investigate the nature and source of such infection, to prevent the spread of such infection and to removing conditions favourable to such infection. Under the General Data Protection Regulation (GDPR) 2018, Article 9 2(i), Public Health can access identifiable data relevant to all hazards for reasons of public interest in the area of public health, such as protecting against serious cross-border threats to health.

Other relevant legislation which describes the public health role during emergencies includes the International Health Regulations (2005), Decision no. 1082/2013/EU on cross border threats to health, infectious disease regulations (Aircraft and Shipping); the Health (Duties of Officers) Order, 1949, drinking water, air quality and other environmental legislation to include environmental control.

4.1.7 Psychosocial Support

The HSE will provide psychosocial support in accordance with the guidance document on Psychosocial and Mental Health needs following Major Emergencies A Guidance Document 2014 .

Available at: https://www.hse.ie/eng/services/publications/mentalhealth/emer.pdf

The nominated Principal Psychology Manager for the Mid-West Community Healthcare geographic area will take the lead for the psychosocial coordination in both planning and response for major emergency situations and is therefore a member of the Area 3 Emergency Planning Group (for planning purposes) and the Area 3 Crisis Management Team (for coordination of the response).

The aims of providing psychosocial and mental health care in the aftermath of Major Emergencies of all kinds are to:

- Mitigate the psychosocial and mental health effects on people by responding proportionately, flexibly and in a timely way to the phased needs of people who are affected; and
- Ensure a continuum of care, provided in an integrated way that recognises that people's needs may be immediate, as well as short, medium or long term.

4.1.8 Environmental Health

The HSE Environmental Health Service will play a significant role in the response to any Major Emergency, which threatens or results in the contamination of water or food supplies and has significant statutory powers with respect to food safety. The Regional Chief Environmental Health Officer and the Principal Environmental Health Officers in Area 3 are members of the Area 3 Crisis Management team.

It is anticipated that Environmental Health Services would be involved in the following areas / incidents:

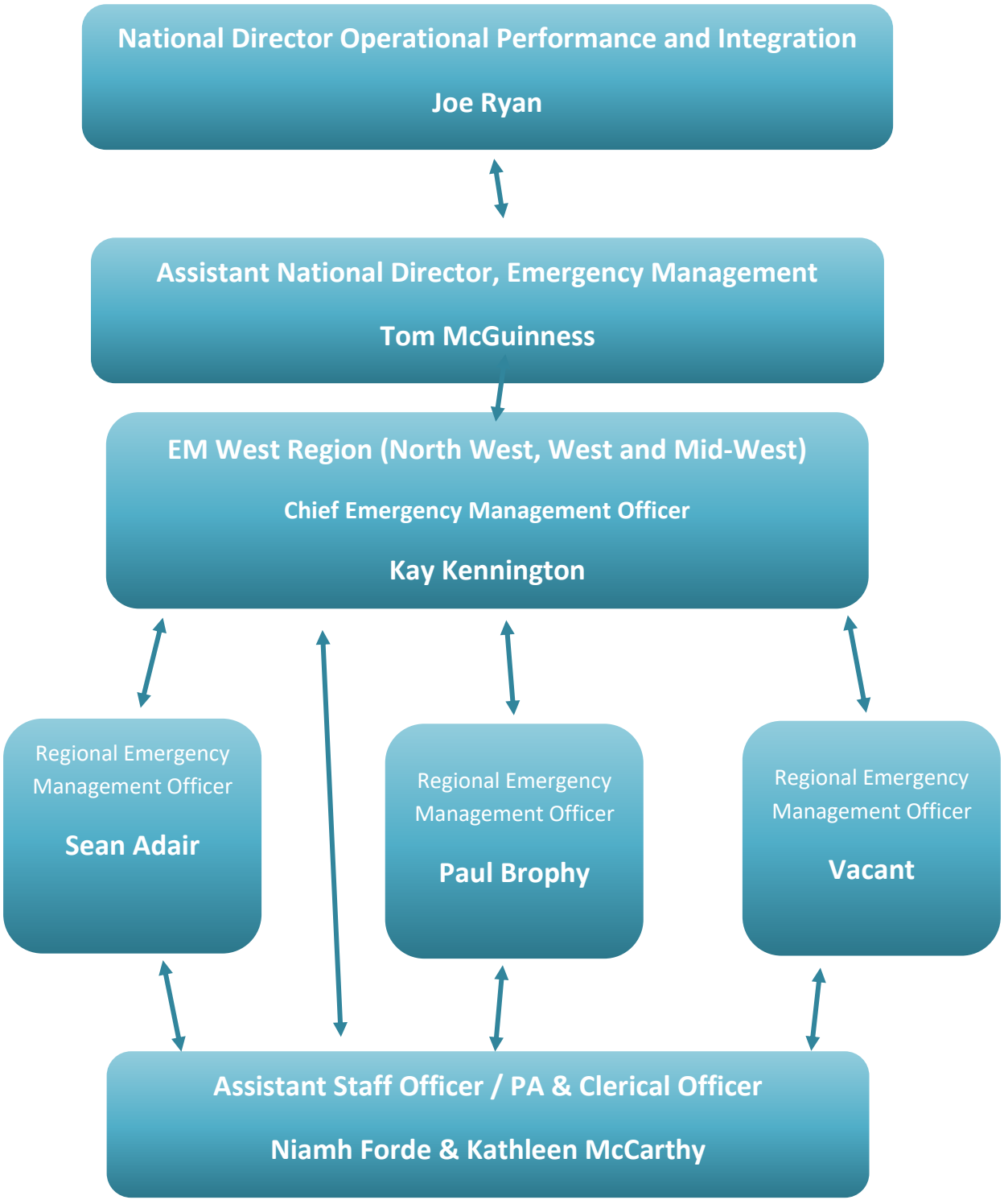
- Major Contamination of Drinking Water Supply
- Major Contamination of food
- Major flooding
- Contamination of land and air

4.1.9 The Emergency Management Office

The principal roles of the Regional Emergency Management Offices are to assist all HSE services/functions in planning for a Major Emergency and to facilitate and support the Area 3 CMT during a Major Emergency.

The Emergency Management Function is organised as follows:

Figure 4.1 Emergency Management Structure



4.1.10 Communications Division

The HSE National Communications Division works with health service teams all over the country. HSE Divisions are each assigned a Client Director from the Communications Division, who works as a programme manager for the communications elements of the division's work. They are your expert Communications Consultant; there to help you get the most from your communications programmes and the support services. The Client Director for Emergency Management contact details are listed within the Directory of Contacts in Appendix 5 of this plan.

Each Hospital Group and Mid-West Community Healthcare has designated Communications staff within their function. These staff will support Area 3 CMT in association with the National Communications Division as appropriate. They may also fulfill the role of Media Liaison Officer as required.

4.1.11 Support Functions

Support to the HSE response will be provided by a number of other departments within the Organisation. These are:

- Human Resources
- Finance
- Logistics / Procurement
- Estate Management
- Information Communications Technology (ICT)
- In the event of a Major Emergency, Area 3 CMT will activate the appropriate services.

4.2 External Resources

In the event of a Major Emergency, the HSE may request activation of appropriate external resources, as required, from the following agencies:

- Neighbouring HSE Services
- The Irish Red Cross
- The Order of Malta Ambulance Corps
- The St. John Ambulance Brigade
- Coast Guard
- Civil Defence (via and by agreement with the Local Authority)
- The Defence Forces, including Irish Air Corps & Naval Service (by agreement)
- Royal National Lifeboat Institution (RNLI)
- Voluntary and Private Hospitals and other health facilities with which pre-existing arrangements have been made for specific support.
- Organisations that may provide community resilience.

4.3 Regional Interagency Level Response

A Regional Interagency Response may be required when the nature of a Major Emergency is such that:

- The resources available locally do not appear to be sufficient.
- The consequences are likely to impact outside the area.
- The incident is spread across more than one Local Authority area or is close to a boundary of two or more of the Principal Response Agencies.
- The Plan for Regional Level Co-ordination may be activated, in accordance with Section 9 of this plan.

SECTION 5 PREPAREDNESS FOR MAJOR EMERGENCY RESPONSE

5.1 This Plan

The Emergency Management function has prepared this plan, which sets out its arrangements to respond to events occurring in or impacting on its functional region, which require the declaration of a Major Emergency. The HSE functions are set out in Section 2.1.1

5.2 Structures

The HSE has established Planning and Preparedness Major Emergency Management groups at national, regional, area and local/service levels, which take a lead in the development, exercise, review and maintenance of an appropriate level of preparedness for Major Emergency Response.

5.2.1 National

At National level, the National Emergency Planning Group (NEPG) has responsibility for Emergency Planning. The purpose of the NEPG is to support and encourage best practice in Emergency Management throughout all HSE areas. The group's Membership includes senior management representatives from all HSE Directorates including the Mid-West

and the Acute Hospitals Division. It is chaired by the Assistant National Director of Emergency Management. This team meets twice yearly and more frequently if required. When necessary the NEPG may create specialised sub groups to plan for specific emerging threats, this is most likely when there is (or a threat of) a public health emergency with the Department of Health leading the National response. In this instance this group may also take the lead in coordinating the overall HSE response to such an emergency. This delegation will only happen at the direction of the CEO of the HSE.

5.2.2 Area 3 Emergency Planning Group

An Area Emergency Planning Group (AEPG) is coterminous with the geographical area of its Community Healthcare Organisation (CHO). The purpose of the AEPG is to support and encourage best practice in Emergency Management throughout Area 3 and across all HSE services and facilities. The membership of the AEPG consists of representatives of all key HSE functions, Acute Hospitals Division and other key HSE frontline and ancillary services in that geographic area. A Head of Service designated by the Chief Officer chairs this Group. The Chair will oversee the coordination and harmonisation of all EM plans in the area. The Group will plan and prepare response and recovery measures for all emergencies within Area 3.

5.2.3 Local, Site and Service

Each Acute Hospital Division has a designated Lead for Emergency Management. Each Receiving Hospital has a designated Lead for Emergency Management and an Emergency Management Planning Group. Likewise, each Mid-West Community Healthcare service has a Lead for Emergency Management and an Emergency Management Group.

5.3 Service and Business Plans

Major Emergency Management is advanced and monitored across all areas and services of the HSE by means of the annual service and business planning processes. Emergency Management is included in the overall Service Plan of the HSE as well as in the Service and Business Plans of the Hospitals, Community Healthcare Organisation (CHO), NAS, and Area Department of Public Health, at national, regional, area and local/service levels.

5.4 Planning & Preparedness

The A3CMT designates responsibility to the Area Emergency Planning Group for the continued development of planning and preparedness for Major Emergency response through:

- The nomination of individuals and alternates to key roles
- The provision of training for all those involved
- The organisation of a comprehensive programme of exercises including internal and inter-agency exercises.

5.5 Responsibility for Major Emergency Development Process

The responsibility for planning the response to major emergencies lies with the Area Emergency Planning Group. The response to all emergencies will be coordinated by the A3CMT.

5.6 Key Roles

The Geographical Area of Mid-West Community Healthcare has nominated competent individuals and alternates to the key roles to enable the agency to function in accordance with the common arrangements set out in this Plan. These roles include:

HSE Key Roles	**Possible Appointee**
Chair of Area 3 CMT	• CO of Mid-West Community Healthcare or his/her alternate
(Site) Controller of Operations	• General Manager or designated alternative • Area Director of Public Health or designated alternative • *In the case of an **Acute Public Health Emergency,** the NAS may act as the Controller of Operations, and will be provided with clinical support by a Public Health Doctor.*
Media Liaison Officer	• Communications Officer or designated alternative
Information Management Officer (IMOs)	• IMOs for the CMT will be provided by the Office of the CO • IMO's for the Incident Site will be provided by NAS or CO – From trained group

Action Manager (AM)	• AM's for the CMT will be provided by the office of the CO • AM's for the Site will be provided by the CO
Support Staff	• Appropriate service(s)

Interagency Key Roles	**Possible Appointee**
Chair Regional Co-Ordination Group	• CO or his/her alternate (if HSE lead agency)
Chair of Local Co-Ordination Group	• CO or his/her alternate (if HSE lead agency)
On Site Co-Coordinator	• General Manager or designated alternative • Area Director Of Public Health or designated alternative
Information Management Officers (IMOs)	• IMOs for the RCC will be provided by the Office of the CO • IMO's for the LCC will be provided by CO - From trained Group
Action Managers (AMs)	• AM's for the RCC will be provided by the office of the CO • AM's for the LCC will be provided by the CO

5.7 Supports for Key Roles

Support teams may be formed to support and assist individuals in key roles. These teams will be drawn from existing staff in the HSE.

5.8 Linking the Area 3 CMT Major Emergency Plan with Other Emergency Plans

As well as the normal activation procedure, set out in Section 7, this plan may be activated during an emergency which involves the activation of:

- A National Emergency Plan (see Section 10),
- A Severe Weather Plan (see Section 11), or
- A Site or Event Specific Plan (see Section 12)

5.9 Staff Development, Training and Exercise Programs

As part of the preparedness process, The HSE West Emergency Management Office has an on-going programme of staff development and training, as well as organising an annual programme of exercises.

5.9.1 Training

All HSE staff, who have a role to play in a Major Emergency response, are provided with training. A database of all trained personnel is held at the Emergency Management office. This training includes both internal and Inter-Agency seminars and training courses such as On-Site Coordination, Local Coordination and Information Management. Training will be facilitated virtually as much as possible.

5.9.2 Exercises

The HSE West Emergency Management Office has an on-going programme of exercises, both internal and Inter-Agency, which include:

- Exercises within individual services, such as Hospitals and Mid-West Community Healthcare
- Inter-Agency exercises, organised by the relevant Interagency Regional Working Groups
- Exercises at Airports
- Exercises at Upper-tier Seveso Sites

5.10 Major Emergency Preparedness Appraisal

In accordance with the requirements in Section 4.7[10] of the Framework, the Emergency Management Office will carry out and document an annual appraisal of its preparedness for Major Emergencies each year.

[10] Section 4.7, *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

SECTION 6 THE COMMAND, CONTROL AND CO-ORDINATION SYSTEM

6.1 HSE CMT(s) Structures

During a Major Emergency Response, the HSE will exercise command and control over its own resources, primarily by means of a CMT and existing management structures.

6.1.1 Area 3 CMT

The Area 3 CMT is a strategic level management group drawn from the senior HSE managers from all HSE services/functions in this area, who will meet at the pre-determined location. The functions of the Area 3 CMT are to:

- Manage, control and co-ordinate the overall HSE response to the situation.
- Provide support to the HSE's Controller of Operations on site and mobilise resources from within the Area 3 functions/services or externally as required.
- Liaise with HSE national CMT (if activated), and relevant Government Departments on strategic issues.
- Ensure appropriate participation of the HSE Area 3 functions/services in the Inter-Agency co-ordination structures.
- Maintain the HSE Area 3 functions/services normal day-to-day services
- Oversee the recovery strategies of HSE Area 3 resources.
- Co-ordinate all requests for assistance both internally and externally.
- Collect and collate all available information on the Major Emergency.
- Oversee the management of staff resources during a protracted incident.
- Co-ordinate all media briefings in relation to HSE Area 3 function's/service's activities.
- Co-ordinate and endorse regular public information.
- Arrange and conduct debriefs on the Major Emergency.
- Liaise with the Local and or Regional Coordination Centre.
- Co-ordinate the phased stand down of HSE Area 3 resources as required.

6.2 CMT Members and their Respective Function

6.2.1 Area 3 Crisis Management Team Membership

1. Chief Officer of Mid-West Community Healthcare (Chair)
2. Representative of the EM West region Office
3. Hospital Group representatives
4. National Ambulance Service representatives
5. Mid-West Community Healthcare (Heads of Services)
6. Area Director of Public Health or designate
7. Principal Environmental Health Officer
8. Psychosocial Lead
9. Communications Representative

Representatives from the following services will be requested by the Chief Officer as appropriate:

1. Human Resources
2. Finance
3. Estates
4. Procurement
5. IT

6.2.2 Chairperson – Chief Officer or his/her designate

- Chair all Area 3 CMT meetings.
- Ensure coordination of HSE services involved.
- Establish and maintain linkages and reporting functions with National HSE involved in the response.
- In conjunction with Emergency Management staff, ensure all appropriate documentation is maintained in relation to the activation.
- Establish and maintain contact with HSE Representative on the Regional Co-Ordination Group (if activated).
- Provide Support to the HSE representative at Local Co-ordination Centre (LCC).
- Establish and maintain links with the responding services involved in the Activation.
- Manage requests and resource requirements which will affect the HSE's response to the activation.
- Liaise with other ACMTs in relation to issues which will impact on the HSE response to the activation.
- Advise the regional coordination group in relation to HSE service issues on an Inter-Agency basis.
- Deliver status reports on the activity of HSE services during and post incident to the Area 3 CMT.
- Manage the stand down of HSE services in the area following the incident.
- Ensure that service continuity is maintained during and post incident.
- Establish and maintain links with the responding services involved in the Activation.

6.2.3 NAS Area Operations Manager or designate

The General Manager NAS and the Assistant Chief Ambulance Officer *are members of the Area 3 CMT*

- Represent the National Ambulance Service at the Area 3 CMT meetings.
- Establish and maintain links with the responding Ambulance service Officers involved in the management of the Activation.
- Manage requests and requirements, which will affect the area's ambulance services response to the activation.
- Liaise with other HSE services in relation to issues, which will impact on the area ambulance services response to the activation.
- Through the chair of the Area 3 CMT advise the Local Coordination group in relation to ambulance service issues on an interagency basis.
- Deliver status reports on the activity of the ambulance service during and post incident to the Area 3 CMT.
- Manage the stand down of the ambulance service in the area following the incident, having cognisance of the other HSE responding services.
- Ensure that service continuity is managed during and post incident.

6.2.4 Acute Hospital Divisions – UL Hospital Group

The CEO & COO of UL Hospitals, the Hospitals Major Emergency Plan Lead and the Communications Manager are members of the Area 3 CMT

- Represent the UL Hospital Group at the Area 3 CMT meetings.
- Establish and maintain links with the responding services (NEOC & NAS as required).
- Manage all acute hospital requirements in response to the Emergency.
- Provide updates to Area 3 CMT regarding capacity and hospital status.
- Liaise with other HSE services regarding issues which impact the acute hospitals.
- Through the chair of the Area 3 CMT liaise with the Local Coordination group in relation to acute hospital services on an Inter- Agency basis.
- Deliver status reports on the activity of the acute hospital services during and post incident to the Area 3 CMT.
- Manage the stand down of the acute hospital services in the area following the incident. Having cognisance of the other HSE responding services.
- Ensure that service continuity for UL Hospitals is maintained during and post incident.

6.2.5 Mid-West Community Healthcare

The Heads of Service are members of the Area 3 CMT.

- Represent Mid-West Community Healthcare at the Area 3 CMT meetings.
- Establish and maintain links with the responding services as required.
- Manage all Mid-West Community Healthcare requirements in response to the Emergency.
- Provide updates to Area 3 CMT regarding Mid-West Community Healthcare's status.
- Liaise with other HSE services regarding issues, which affect Mid-West Community Healthcare services.
- Through the chair of the Area 3 CMT liaise with the Local Coordination group in relation to Mid-West Community Healthcare services on an Inter-Agency basis.
- Deliver status reports on the activity of Mid-West Community Healthcare services during and post incident to the Area 3 CMT.
- Manage the stand down of the Mid-West Community Healthcare services in the area following the incident. Having cognisance of the other HSE responding Services.
- Ensure that service continuity for Mid-West Community Healthcare services are maintained during and post incident.

6.2.6 Area E Department of Public Health

The Area E Director of Public Health or a Consultant / Specialist in Public Health Medicine is a member of the Area 3 CMT.

- Represent the Area E's Department of Public Health service at the Area 3 CMT meetings.
- Take a lead role where the incident involves a biological agent.
- Establish and maintain links with the responding services of the Area 3 Department of Public Health services involved in the activation.
- Manage requests and requirements which will affect the Area 3 Department of Public Health services response to the activation.
- Provide Public Health advice as required at Area 3 CMT meetings.

- Liaise with other HSE services in relation to issues which will impact on the Department of Public Health services response to the activation.
- Through the chair of the Area 3 CMT liaise with the Local Coordination group in relation to Department of Public Health services issues on an Inter- Agency basis.
- Deliver status reports on the activity of the Department of Public Health services during and post incident to the Area 3 CMT.
- Manage the stand down of the Department of Public Health services in the area following the incident. Having cognisance of the other HSE responding Services.
- Ensure that service continuity is managed during and post incident.
- In any emergency which involves possible exposure of members of the public to a hazard, public health will perform a public health risk assessment (PHRA) based on the information provided to them. This includes determining the exposure – receptor pathway. The PHRA is an iterative process, and the public health medical advice is updated as new information is provided.
- Based on the PHRA, public health will provide public health medical advice, including advice on decontamination measures.
- Public health is trained in communicating the risk and advice to members of the public, media as well as to the Area 3 CMT.
- Where there is a credible threat of a CBRNE incident, this advice is used to feed into a Joint Threats Analysis. The joint threat analysis is carried out by An Garda Siochana, supported by the Defence Force Explosive Ordnance Disposal team (EOD), Fire Service and public health.
- Where a biological agent is suspected public health is responsible for the provision of post-exposure chemoprophylaxis to all those exposed in conjunction with the other services represented on the ACMT.

6.2.7 Psychosocial Support

The Principal Psychologist (Psychosocial Lead *is a member of the Area 3 CMT*).

- Represent the psychosocial function at the Area 3 CMT meetings.
- Manage requests and requirements, which will affect the Area 3 psychosocial function's response to the activation.
- Provide psychosocial advice as required at Area 3 CMT meetings
- Liaise with other HSE services in relation to issues, which will impact on the psychosocial function's response to the activation.
- Through the chair of the Area 3 CMT liaise with the Local Coordination group in relation to psychosocial issues on an Inter- Agency basis.
- Deliver status reports on the activity of the psychosocial function during and post incident to the Area 3 CMT.
- Manage the stand down of the psychosocial function in the area following the incident. Having cognisance of the other HSE responding Services.
- Ensure that service continuity is managed during and post incident.

6.2.8 Environmental Health

The Regional Chief Environmental Health Manager and the Principal Environmental Health Officers in Area 3 are members of the HSE Area 3 Crisis Management Team.

- Represent the Area 3's Environmental Health service at the Area 3 CMT meetings.
- Establish and maintain links with the responding services of the area's Environmental Health services involved in the activation.
- Manage requests and requirements which will affect the Area 3's Environmental Health services response to the activation.
- Liaise with other HSE services in relation to issues which will impact on the Environmental Health service's response to the activation
- Through the chair of the Area 3 CMT liaise with the Local Coordination group in relation to Environmental Health services issues on an Inter- Agency basis.
- Deliver status reports on the activity of the Environmental Health services during and post incident to the Area 3 CMT.

As Appropriate to the incident, carry out the following:

- Immediately Liaise with Uisce Eireann and the Local Authority.
- Liaise with the Department of Public Health to develop a knowledgeable position on the incident and to develop information and advice for other agencies and general public.
- Inform Uisce Eireann/ Local Authority of advice to be given to consumers.
- Contact relevant laboratories in order to prepare for the taking of necessary samples.
- Lead out on food contamination issues.
- Liaise immediately and maintain regular contact with the Food Safety Authority of Ireland (FSAI) and with the Food Industry.
- Maintain contact and liaise with the relevant colleagues in local and adjoining Health Safety Executive Services, Local Authorities and other stakeholders (e.g. Social Protection).
- Enforce as appropriate Food Safety statutory measures where required in situations which threatens or results in the contamination of water or food supplies.
- Co-operate with FSAI and Area 3's Communications Departments in advising the general public.
- Manage the stand down of the Environmental Health services in the area following the incident. Having cognisance of the other HSE responding Services.
- Ensure that service continuity is managed during and post incident.

6.2.9 Regional Emergency Management Office

The Chief Emergency Management Officer and the Regional Emergency Management Officers are members of the Area 3 CMT.

- To provide advice on the HSE MEM Management of the incident to the members of the Area 3 CMT.
- To liaise with the National Office of Emergency Management in relation to the Incident.
- To liaise with the Emergency Management staff from other HSE areas in relation to the response.
- To assist in the collation all documents generated in relation to the activation.
- In association with the Chair of Area 3 CMT, manage the stand down of the emergency management staff and command centre following the incident
- To assist the completion of reports in relation to the activation post incident.

6.2.10 HSE Communications Division Representative

Depending on the nature of the Emergency and availability of appropriate staff, the Communications Officer will be nominated from either the Hospital or Mid-West Community Healthcare service by the Area 3 CMT. Their duties will include the following:

- Provide Communications Expertise at the Area 3 CMT meetings as required.
- Establish and maintain links with the HSE National Communications Division and the relevant HSE functions/services involved in the Activation.
- Manage requests and requirements in relation to communications issues from the members of the Area 3 CMT.
- Through the chair of the Area 3 CMT, liaise with the communications sections of the other responding statutory agencies in relation to all media and public information issues.
- Deliver status reports on the activity of the Communications Division during and post incident to the Area 3 CMT.
- Manage the stand down of the Communications Division in the area following the incident. Having cognisance of the other HSE responding Services.
- Ensure that service continuity is managed during and post incident.

6.2.11 Logistics/Procurement Manager

- Represent the Logistic/Procurement management service at the Area 3 CMT meetings.
- Manage requests and requirements in relation to Logistic/Procurement management service issues from the members of the Area 3 CMT.
- Through the chair of the Area 3 CMT liaise with the other responding statutory agencies in relation to all Logistic/Procurement issues.
- Deliver status reports on the activity of the Logistic/Procurement management service services during and post incident to the Area 3 CMT.
- Manage the stand down of the Logistic/Procurement management service in the area following the incident. Having cognisance of the other HSE responding Services.
- Ensure that service continuity in all supply chains are managed during and post incident.

6.2.12 Human Resources

- As required, HR will advise the Area 3 CMT on all Human Resource issues in relation to the incident.

6.2.13 Specialist Advisers to the Area 3 Crisis Management Team

The Area 3 CMT have at its disposal specialist advisers who can be contacted by the Area 3 CMT during activation. They are not members of the Area 3 CMT but can be contacted to assist the Area 3 CMT in their response to an incident. Their functions are to:

- To attend Area 3 CMT meetings on request either by phone link or in person.
- To give advice on specific issues in relation to their specialist area expertise.
- To research issues in relation to their specialist area and report to the Area 3 CMT on their findings.

6.3 Control at the Site

At the site of a Major Emergency, the HSE will exercise control, not only over its own services, but also over any additional services (other than those of the other Principal Response Agencies) which it mobilises to the site. Control of the HSE services at the site of the Emergency shall be exercised by the Controller of Operations. The Controller of Operations is empowered to make all decisions relating to his/her agency's functions, but must take account of decisions of the On-Site Co-ordination Group in so doing.

6.3.1 The Role of the Controller of Operations is set out below:

- To make such decisions as are appropriate to the role of controlling the activities of HSE services at the site (Controlling in this context may mean setting priority objectives for individual services; command of each service should remain with the officers of that service.)
- To meet with the other two Controllers, determine the lead agency and inform Area 3 CMT of this decision
- To undertake the role of On-Site Co-ordinator, where the service s/he represents is identified as the lead agency
- To participate fully in the site co-ordination activity, including the establishment of a Site Management Plan
- Where another service is the Lead Agency, to ensure that HSE operations are co-ordinated with the other Principal Response Agencies, including ensuring secure communications with all agencies responding to the major emergency at the site
- To decide and request the attendance of such services as s/he determines are needed
- To exercise control over such services as s/he has requested to attend
- To operate a Holding Area to which HSE personnel from his/her agency will report on arrival at the site of the major emergency and from which they will be deployed
- To requisition any equipment s/he deems necessary to deal with the incident
- To seek such advice as s/he requires
- To maintain a log of HSE activity at the incident site and decisions made;
- To contribute to and ensure information management systems operate effectively;
- To liaise with and brief the Area 3 CMT on the handling of the major emergency.

6.3.2 Other functions of the HSE Controller of Operations

- For most incidents, the HSE Controller of Operations will be a designated Ambulance Officer or his or her designated. The Regional Ambulance Plan may contain additional tasks and responsibilities for the HSE Controller of Operations

SECTION 7 THE COMMON ELEMENTS OF RESPONSE

The common elements of response are as follows:

7.1 Declaring a Major Emergency

7.1.1 General

A Major Emergency can be declared by an "Authorised Officer" and the relevant Major Emergency Plans activated by whichever of the Principal Response Agencies (An Garda Síochána, the Health Service Executive or the Local Authority) first becomes aware that a Major Emergency has occurred or is imminent.

A Major Emergency will be declared by an Authorised Officer of the Principal Response Agency which first considers that the criteria set out in the Framework[11] definition of a Major Emergency have been satisfied.

Note: Only an Authorised Officer of a Principal Response Agency (PRA) can declare that a Major Emergency exists.

Please refer to the Common Pages inside the front cover of this Plan, which gives the method of Activation and a typical message to declare a Major Emergency

[11] *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

7.1.2 HSE Activation & Authorised Officers

The following HSE staff or their designate acting on their behalf are authorised to declare a Major Emergency and to activate this plan.

- National Ambulance Service General Manager/Assistant Chief Ambulance Officer
- National Ambulance Service National Emergency Operations Centre Manager
- Regional Executive Officers (REOs)
- Acute Hospitals Division CEO/COO
- Chief Officer of Mid-West Community Healthcare
- Area Director of Public Health
- Chief Emergency Management Officer

Where an Authorised Officer considers that the criteria set out in the Framework[12] definition of a Major Emergency has been satisfied, that Officer should immediately contact NAS National Emergency Operations Centre, declare that a Major Emergency exists and request the activation of the HSE Area 3 CMT Emergency Plan (covering the geographical areas of counties Clare, Limerick and North Tipperary).

This request should be supported by as much information as is available, structured using the METHANE mnemonic.

National Emergency Operations Centre will then initiate the HSE Major Emergency Mobilisation Procedures, which include notifying the other Principal Response Agencies of the declaration of a Major Emergency, using the telephone numbers in the Common Pages.

Once An Garda Síochána and the Local Authority have been notified, they will contact NEOC Centre using the numbers in the Common Pages, to confirm that they have activated their Major Emergency Plans.

The National Emergency Management Office has adopted the process of compulsory notification to its Crisis Management Teams (CMTs) should a Major Emergency Plan be activated in one of the HSE Services. This means that all members of the CMT for that area are notified of the emergency and required to come together on a teleconference to discuss the response and agree further actions for the CMT. This Plan is identical to all other plans in relation to its process of activation: all Major Emergency Plans have two phases of activation.

These two phases of "Alert" are

Declaration of Standby:

When a Major Emergency appears likely to occur (adverse weather forecasts terrorist threat or possibility of disease outbreak)

The declaration of a Standby is intended to alert the individual members of the Crisis Management Team that a Major Emergency may occur giving the Team time to assess the situation and time to prepare an appropriate response.

Declaration of Major Emergency:

When a Major Emergency has been declared

[12] *A Framework for Major Emergency Management Appendices,* 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management-Appendices.pdf

The declaration of a Major Emergency is intended to confirm to the individual members of the Crisis Management Team that a Major Emergency has been declared.

7.1.3 Garda or Local Authority Activation

Where a Major Emergency is declared by An Garda Síochána or a Local Authority, they will notify National Emergency Operations Centre of the declaration, using the telephone numbers in the Common Pages. National Emergency Operations Centre will then initiate the HSE Major Emergency Mobilisation Procedures.

As part of that process, National Emergency Operations Centre will call An Garda Síochána and the relevant Local Authority, using the numbers on the Common Pages, to confirm that the HSE Area 3 CMT Major Emergency Plan has been activated.

7.1.4 Other Activations

In addition to the declaration of a Major Emergency by one of the Principal Response Agencies, this Plan may be activated in response to a request from a member of the HSE National CMT.

7.1.5 Major Emergency Arising at a Hospital, Mid-West Community Healthcare facility, Area Department of Public Health or other HSE Facility

In the event that a Major Emergency arises in a HSE facility, the relevant authorised officer at that facility, having declared a Major Emergency at the facility, will contact NAS National Emergency Operations Centre and inform the Controller on Duty of the nature of the incident and that a Major Emergency has been declared at the facility.

NEOC will initiate the HSE's Area 3 CMT Major Emergency Plan, alert the Area 3 CMT and other PRA's.

7.1.6 Response of the HSE to a Major Emergency

The detailed response of the HSE to the declaration of a Major Emergency will depend on the information supplied (in the METHANE Message) and an assessment of the range and scale of HSE resources which are likely to be required in the response.

Activation of the Emergency Management Area 3 Major Emergency Mobilisation Procedures will include the following:

- The Ambulance Controller on Duty will follow pre-determined National Emergency Operations Centre Procedures which will normally include: - the dispatch of the nearest available ambulance(s) to the scene, notification of appropriate hospitals, notification of the relevant NAS personnel, as appropriate as per the control centre protocols.

- The Area 3 CMT will be activated using the text alert system and will meet initially by teleconference, to manage, control and co-ordinate the HSE's overall response to the situation.

- Not all hospitals may be required to act as Receiving Hospitals for casualties from the Major Emergency. Some may be required to support the Receiving Hospital(s) by, for example, taking more non Major Emergency ED traffic. Such Support Hospitals will be notified accordingly.

- If necessary, other resources may be put on stand-by, such as other Hospitals, Mid-West Community Healthcare services, voluntary organisations, that need extra time to mobilise, as well as services in adjoining Regions. Public health may request additional resources from neighbouring areas, or at a national level through the Director National Health Protection.

Note: A HSE response will always follow the declaration of a Major Emergency which is made in accordance with the MEM Framework[13]. The extent and detail of that response will depend on the information supplied. As an incident progresses, the HSE response will be managed by the Area 3 CMT. Even if the incident proves to be less serious than first assessed, the HSE response will not normally be stood down until the Area 3 CMT has issued the appropriate stand down instructions. These instructions will vary depending on the service, department or hospital involved.

7.2 Initial Mobilisation

The Major Emergency Mobilisation Procedure (See Appendix 6 of this plan, HSE Mobilisation Procedure) will be implemented immediately on notification of the declaration of a major emergency. When this Plan has been activated, each service requested shall respond, in accordance with pre-determined arrangements.

In some situations, there may be an early warning of an impending emergency. Mobilisation within the geographical area of Mid-West Community Healthcare may include moving to a standby/alert stage for some services or specific individuals, until the situation becomes clearer.

There may also be circumstances where the resources or expertise of agencies other than the Principal Response Agencies will be required. In these situations, the relevant arrangements outlined in Section 7.10 of this Plan will be invoked. No third party should respond to the site of a major emergency, unless mobilised by one of the Principal Response Agencies through an agreed procedure.

Depending on the nature of the emergency, mobilisation may involve the dispatch to the site of a Site Medical Officer and, possibly, a Site Medical Team. Decisions on the personnel involved (whether from a hospital or a community based service) will depend on a number of local and event specific factors.

In the event of a Major Emergency being declared initial mobilisation will be carried out by the National Emergency Operations Centre (NEOC). Once the NEOC is satisfied that initial mobilisation is underway a compulsory notification of the Area 3 CMT will be initiated using the text alert system. When the Area 3 CMT is assembled on a conference call either the NAS Duty Controller or NAS Area Operations Manager will brief the Area 3 CMT on the emergency.

[13] *A Framework for Major Emergency Management Appendices,* 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management-Appendices.pdf

7.2.1 Process used to alert the Area 3 CMT

Following receipt of a METHANE message the Emergency Medical Controller (NEOC) will initiate the nationally agreed protocol for alerting the Area 3 CMT.

The initial alert is disseminated to each member of the Area 3 CMT via SMS text messaging system.

Each member will be contacted by SMS text, the content of the message will be as follows:

"**Major *Emergency Area 3 CMT***
Consult your Action Card
Teleconference in 15 minutes
Check message sent time on your phone"

The Area 3 CMT members should consult their **Action Card** and ring the prescribed number contained in their Action Card to participate in the teleconference (*15 minutes from message sent time*).

A full briefing will be given on the teleconference by the lead HSE directorate/division (NAS/Public Health) which is involved in the operational response.

The purpose of this text is to inform the members of the Area 3 CMT that a Major Emergency has occurred or is imminent and to allow them to prepare to respond.

7.2.2 Activation Protocol Backup

In the event of failure of the text system the following protocol will be initiated by the National Emergency Operations Centre (NEOC).

NEOC will phone the Emergency Management Lead for each service/function or their alternate of the Area 3 CMT from a list provided, and relay details pertaining to the Major Emergency.

When the Area 3 CMT is convened, members will cascade the activation through their own directorates as deemed appropriate and deploy resources required.

7.2.3 Notification of others

The alerting process has a built in resilience element, when the initial SMS Text message is sent to the Area 3 CMT members an identical message is simultaneously received by:

- **The Assistant National Director for Emergency Management**

The NEOC (National Emergency Operations Centre) which receives the declaration from an internal HSE source will then contact the relevant Principal Response Agencies within the area where the incident has occurred and alert them of the HSE activation.

7.3 Command, Control and Communication Centres

The NEOC will be the primary means by which the HSE will mobilise its resources at the scene and maintain communications between the site(s), the receiving hospital(s) and Area 3 CMT.

7.4 Co-ordination Centres

Co-ordination of the response to a Major Emergency will take place primarily at the site, at the Area 3 CMT's facility and at the Local Co-ordination Centre (Interagency). Each "Receiving" Hospital and each Community Healthcare Organisation (CHO) have designated facilities from which to manage its response to a Major Emergency.

7.4.1 Interagency On-Site Co-ordination Centre

This may be a dedicated vehicle, tent or an adjacent building near the location of the incident site. The three Controllers of Operation will decide on the most suitable location for the On-Site Coordination Centre.

7.4.2 Area 3 Crisis Management Team

The Area 3 CMT will meet at:

Great Hall Meeting Room, St. Joseph's Health Campus, Mulgrave Street, Limerick City, V94 C8DV

7.4.3 Local Interagency Co-ordination Centre

The Local Co-Ordination Group will meet in whichever of the following Local Co-ordination Centre is most appropriate:

- Limerick City & County Council, Aras an Chontae, Merchants Quay, Limerick, V94 EH90
- Clare County Council, Áras Contae an Chláir, New Road, Ennis, County Clare V95 DXP2
- Tipperary County Council, Áras Contae, Civic Offices, Limerick Road, Nenagh, Co. Tipperary E45A099
- Tipperary County Council, Áras Contae, Civic Offices, Emmet Street, Clonmel, Co. Tipperary E91N512

7.4.4 Regional Interagency Co-ordination Centres

In the event that a regional level response is required, the Plan for Regional Level Co-operation may be activated and a Regional Co-ordination Group will meet in whichever of the Local Co-ordination Centres is considered most appropriate. (See Section 9).

7.5 Communications Facilities

During a Major Emergency the HSE will use a variety of technical communications facilities for internal and external communications.

7.5.1 HSE Communications Systems

All normal communications systems, including telephone, email, mobile telephone and fax, will be used to communicate between the various HSE Centres involved in the response to a Major Emergency, as well as with relevant external agencies, such as the Local Authority, An Garda Síochána, the Department of Health and Children, etc.

The NAS use TETRA Radio System as their means of communication.

7.5.2 Inter-Agency Communications On-Site

Inter-Agency Communications On-Site will be facilitated by means of a set of hand portable radios which will be operated on a single channel shared between the three Principal Emergency Services (PES)

7.5.3 Communications between the Site and Co-ordination Centres

Communication between the On-Site Co-ordination Group and the Local Co-ordination Group will be facilitated by way of the radio and/or telephone systems available to relevant personnel at the time.

7.6 Exercising the Lead Agency's Co-ordination Roles

7.6.1 The Lead Agency

For every Major Emergency, one of the three Principal Response Agencies will be designated as the lead agency, in accordance with Section 5.4.2[14] of the Framework, and will assume responsibility for Inter-Agency co-ordination at both the site(s)and at the Local Co-ordination Centre (in accordance with Section 5.4.3[15] of the Framework).

7.6.2 Review and Transfer of the Lead Agency

The lead agency role may change over time, to reflect the change in circumstances of the Major Emergency. Ownership of the lead agency should be reviewed at appropriate stages. All changes in lead agency designation, and the timing thereof, shall be by agreement of the three Controllers of Operation and shall be notified as soon as possible to the Local Co-ordination Group.

7.6.3 The HSE as Lead Agency

Where the HSE is assigned the role of lead agency in a Major Emergency in Area 3, it will have responsibility for the co-ordination function, at both the On-Site and the Local Co-ordination Centres. Public health have a significant role in the event of a biological incident. In accordance with Section 5.4.3[16] of the Framework, the co-ordination function includes:

- Ensuring involvement of the three Principal Response Agencies and the principal emergency services in sharing information
- Ensuring involvement of the other organisations, who may be requested to respond, in co-ordination activities and arrangements
- Ensuring that mandated co-ordination decisions are made promptly and communicated to all involved
- Ensuring that site management issues are addressed and decided
- Ensuring that Public Information messages and Media briefings are co-ordinated and implemented
- Ensuring that pre-arranged communication links are put in place and operating

[14] Section 5.4.2, *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf
[15] Section 5.4.3, *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf
[16] Section 5.4.3, *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

- Operating the generic Information Management System
- Ensuring that the ownership of the lead agency is reviewed, and modified as appropriate
- Ensuring that all aspects of the management of the incident are dealt with before the response is stood down
- Ensuring that a report on the co-ordination function is prepared in respect of the emergency after it is stood down, and circulated (first as a draft) to the other services which attended.

With responsibility for co-ordination comes a mandate for decision making, as set out in Section 5.4.4[17] of the Framework. The purpose of this mandate is to make explicit the decisions that need to be made at the appropriate level and to define how decisions are to be arrived at quickly. Associated with this empowerment is the need for individuals holding key roles to hear the views of colleagues in Principal Response Agencies and to use the Information Management System as part of the decision making process. The decision making mandate does not empower unilateral decision making until the views of the other agencies have been heard and considered.

Where the HSE is assigned the lead agency role, the responsibilities involved will be discharged:

- At the site, by the National Ambulance Service, on behalf of the HSE, supported by public health if required
- At the Local Co-ordination Centre, by the Chief Officer or designate on behalf of the HSE

7.7 Public Information

During a Major Emergency situation it will be crucial for the Principal Response Agencies to provide timely and accurate information to the public. This will be especially important for members of the public who may perceive themselves and their families to be at risk and who are seeking information on the actions which may be taken to protect themselves and their families.

Initial public information messages will be issued by the On-Site Co-ordination Group but, once the Local Co-ordination Group has met, it will take over the task of co-ordinating the provision of public information. Public information may be disseminated by means of local and national media outlets - help lines, web pages, Social Media and automatic text messaging. This activity should be co-ordinated on behalf of the Local Co-ordination Group by the lead agency and will be in accordance with the Mid-West Interagency Public Communications plan.

7.7.1 Role of HSE – Public Information

In emergency situations where there is a real or perceived threat to the health of individuals or the general public, the HSE, and in particular the Department of Public Health service, can play a crucial role in the development of appropriate advice, information and reassurance for both individuals and communities. To this end, it is important that the appropriate Consultants / Specialists in Public Health Medicine within the HSE are notified and consulted at the earliest opportunity, so that their input to public information messages can be optimised. The quality of the public health medical advice is dependent on the accuracy of the information provided to them to feed into the risk assessment.

[17] Section 5.4.4, *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

7.8 The Media

The Mid-West Interagency Region has an Interagency Public Communications Plan – Media Liaison. Each of these plans follows a standard template outlining the Regions arrangements for communications during a Major Emergency. These are detailed under the following headings:

- Section 1: Introduction to the plan
- Section 2: Response
- Section 3: Roles and Responsibilities
- Section 4: Information Processing
- Section 5: Stand Down and Protocols
- APPENDICES including Directory of Contacts

All Communications processes during a major emergency will follow the Interagency Public Communications Plan. Please see Appendix 7 of this plan for Mid-West Interagency Public Communications Plan

7.9 Site Management Arrangements

These will be as per the MEM Framework and as set out in section 7.9.2.[18]

7.9.1 Actions of First Officer Attending

The first National Ambulance Service Crew/Manager to arrive at the site will, de facto, have the role of HSE Controller of Operations at the scene until relieved. The immediate concerns and actions of this officer, in addition to specific National Ambulance Service issues, should include:

- Continuing to gather information on the extent of the incident;
- Providing information on the emergency to NAS National Emergency Operations Centre, for distribution to the Area 3 CMT and other relevant health service managers and facilities;
- Meeting with the other Controllers of Operations to agree on the lead agency and, therefore, the On-Site Co-ordinator; and
- Establishing Inter-Agency communication links.

The first ambulance vehicle that arrives at the scene will become the HSE Control Point, until the Controller of Operations declares otherwise; a dedicated incident command vehicle may take over the control function when it arrives. The Controller of Operations should ensure that, where possible, the HSE Control Point is co-located with the Control Points of the other emergency services to form the initial Site Control Point.

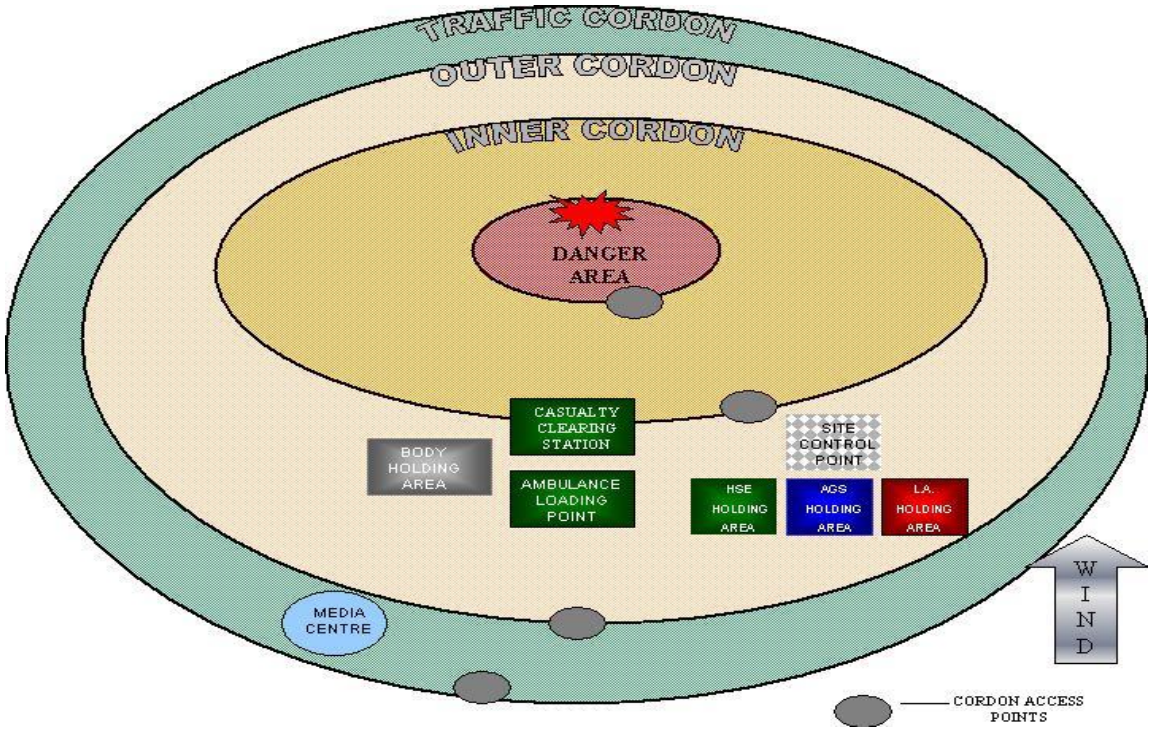
The Ambulance that acts as the HSE Control Point will be the only ambulance that has a blue warning beacon illuminated. All other ambulance vehicles will turn off their blue lights to facilitate easy identification of the control vehicle.

7.9.2 General Site Management Arrangements

An initial important task of the HSE Controller of Operations, in association with the other two Controllers, is to match the components of the typical Site Plan, set out in Figure 7.1, with the terrain of the Major Emergency. Once agreed, the resulting Site Management Plan should be disseminated for implementation, to all responding organisations.

[18] Section 7.9.2, *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

Figure 7.1 Typical Site Management Arrangements



The Body Holding Area and the Holding Areas of the responding services can be located on Figure 7.1 above. A Traffic Cordon is used to prevent congestion at and around the site and thereby ensure the free passage of emergency response vehicles into and out of the site.

HSE staff should only attend the scene when deployed by their service.

7.9.3 Control of Access

In order to control access to a Major Emergency site, cordons should be established as quickly as possible, to facilitate the operations of the emergency services, to protect the public and to protect evidence.

Depending on the terrain involved, An Garda Síochána, in consultation with the On-Site Co-ordination Group, will establish up to three cordons, including an Inner Cordon, an Outer Cordon and a Traffic Cordon.

In general, an Inner Cordon is used to define the area where the emergency services work to rescue casualties and survivors and deal with the substance of the emergency. An Outer Cordon is used to define an area, between the Inner and Outer Cordons, where the Site Control Point, the On-Site Co-ordination Centre, the Casualty Clearing Station, the Ambulance Loading Area, the Body Holding Area and the Holding Areas of the responding services can be located. A Traffic Cordon is used to prevent congestion at and around the site and thereby ensure the free passage of emergency response vehicles into and out of the site.

7.9.4 Danger Area

A Danger Area may be declared where there is a definite risk to rescue personnel, over and above that which would normally pertain at emergency operations. This risk could arise because of danger posed by the release of hazardous materials, buildings in danger of further collapse, the threat of explosion, or the presence of an armed individual. In such a situation, the On-Site Co-ordination Group may decide to declare a Danger Area and may designate an officer, appropriate for the circumstances (e. Senior Fire Officer at the Site), to define the boundaries of, and control access to, the Danger Area.

7.9.5 Identification

All uniformed personnel, responding to the site of a Major Emergency, should wear the prescribed uniform, including high visibility and safety clothing, issued by their agency. Officers who are acting in key roles, such as the Controller of Operations, should wear the appropriate tabards, which in the case of the HSE has a green and white chequered pattern and the words "HSE Controller". The corresponding tabards for the other Principal Response Agencies are as follows: Local Authority, red and white with "Local Authority Controller" and An Garda Síochána, blue and white with "Garda Controller".

When the lead agency has been determined, the On-Site Co-ordinator should don distinctive tabards with the words "On-Site Co-ordinator", clearly visible, front and back. Where non uniformed HSE personnel are required to respond to the site of a Major Emergency, they should wear a high visibility jacket, appropriately colour coded for the HSE, with their job/function clearly displayed both front and back.

7.9.6 Helicopters

Helicopters may be used at the site of a Major Emergency to provide aerial reconnaissance, to ferry people or equipment to the site, to remove casualties or to transport them to distant facilities. However, the use of helicopters has to be integrated into the overall site management arrangements to avoid having a negative impact on operations on the ground. The On-Site Co-ordinator will, in consultation with the other Controller of Operations, determine if, and for what purpose, helicopter support should be mobilised to the site and the preferred Landing Zone(s) for them. No helicopters should travel to the site of a major emergency unless mobilised through this arrangement.

7.9.7 Air Exclusion Zone

Where the Principal Response Agencies consider it appropriate and beneficial, the On-Site Co-ordinator may request, through An Garda Síochána, that an Air Exclusion Zone be declared around the emergency site by the Irish Aviation Authority. When a restricted zone above and around the site is declared, it is promulgated by means of a "Notice to Airmen – NOTAM" – from the Irish Aviation Authority.

7.10 Mobilising Additional Resources

7.10.1 General

During the response to a Major Emergency, the HSE may need to mobilise additional resources and this can be achieved either by:

- Activating resources from parts of HSE, which are not primarily involved in the Major Emergency
- Mobilising assistance from other organisations;
- Seeking national/international assistance as appropriate.
- In certain circumstances, the HSE may request assistance from private healthcare facilities in the locality.

7.10.2 HSE Resources

In the event of a Major Emergency, the various services involved, including the National Ambulance Service and the Acute Hospitals Division may be in a position to activate resources from other areas to provide appropriate support, which are not primarily involved in the emergency. This process can be facilitated and augmented by the Area 3 CMT.

7.10.3 The Defence Forces

The Defence Forces can provide a significant support role in a major emergency response. The Defence Forces capabilities can be employed across a wide spectrum of activity in a major emergency. However, these capabilities are primarily deployed in a military role at home and in peace support operations overseas and their deployment in a major emergency situation may require a lead in time to facilitate redeployment. All requests for Defence Force assistance by the HSE should be normally be channelled through An Garda Síochána. The Area 3 CMT can make a request directly for Defence Force assistance using the standard "aid to the civil authority" request format. (Appendix 8 and 9)

7.10.4 Links with Voluntary Emergency Services

The following table shows the links between the PRAs and the Voluntary Emergency Services.

Table 7.1. Principal Response Agencies with Linked VES

Principal Response Agency	Linked Voluntary Emergency Service
An Garda Síochána	Irish Mountain Rescue Association Irish Cave Rescue Association Search and Rescue Dogs Sub-Aqua Teams Coast Guard RNLI
Health Service Executive	Irish Red Cross Order of Malta Ireland St. John Ambulance Brigade
Local Authority	Civil Defence

Each Principal Response Agency with a linked Voluntary Emergency Services is responsible for the mobilisation of that service and their integration into the overall response. The mobilisation of the VES by the HSE will be coordinated through National Emergency Operations Centre (NEOC). The internal command of each volunteer organisation resides with that organisation.

7.10.5 Utilities

Utilities are frequently involved in the response to emergencies, usually to assist the Principal Response Agencies in making situations safe. They may also be directly involved in restoring their own services, for example, electricity supply in the aftermath of a storm. Utilities operate under their own legislative and regulatory frameworks but, during the response to an emergency, they need to liaise with the On-Site Co-coordinator. Utilities may be requested to provide representatives and/or experts to the On-Site Co-ordination Group, the Local Coordination Group and/or the Regional Co-ordination Group, as appropriate.

Private sector organisations may be involved in a major emergency through ownership of the site where the emergency has occurred or through ownership of some element involved in the emergency e.g. an aircraft, bus, factory, etc. They may also be called on to assist in the response to a major emergency, by providing specialist services and/or equipment. Private sector representatives and/or experts may be requested to support the work of the On-Site Co-ordination Group, the Local Co-ordination Group and/or the Regional Co-ordination Group, as appropriate.

7.10.6 National, International Assistance

Where resources that are controlled at a national level are required, as part of the management of the incident, requests for those resources should be directed by the lead agency to the Lead Government Department.

Any decision to seek assistance from outside the state should be made by the lead agency, in association with the other Principal Response Agencies, at the Local Coordination Centre. The Local Co-ordination Group should identify and dimension the level/type of assistance likely to be required and its duration.

In the event of a major public health incident, public health will notify the Director National Health Protection for any additional resources required. In addition, the public health service in Ireland has a contract with Public Health England – Centre for Radiation, Chemicals and Environmental Hazards (PHE-CRCE) to provide 24/7 advice and support. The European Community has established a Community Mechanism to facilitate the provision of assistance between the member states in the event of major emergencies. The chair of the Local/Regional Coordination Group should make requests for such assistance to the National Liaison Officer in the Department of Housing, Planning, Community and Local Government.

7.11 Casualty and Survivor Arrangements

7.11.1 General

The primary objective of any response to a Major Emergency is to provide effective arrangements for the rescue, care, treatment and rehabilitation of all of the individuals who are affected by the emergency. While the HSE is not a primary rescue service, it has responsibility for the transport and treatment of injured persons, once they have been rescued.

7.11.2 Casualties

Once casualties have been rescued or found, they will be assessed or triaged as quickly as possible. Triage is a dynamic process of assessing casualties and deciding the priority of their treatment, including a two stage process of triage sieve and triage sort. Following initial triage, casualties will normally be labelled, using Triage Cards, and moved to a Casualty Clearing Station. The purpose of this labelling is to indicate the triage category of the casualty, to facilitate the changing of that category, if required, and to record any treatment, procedure or medication administered. A standard card with Red (Immediate), Yellow, (Urgent), Green (Minor) and White (Dead) sections is normally used for this purpose.

The National Ambulance Service, in consultation with the HSE Controller of Operations and the Site Medical Officer will establish a Casualty Clearing Station at the site, where casualties will be collected, further triaged, treated, as necessary, and prepared for transport to hospital. The HSE Controller will, in consultation with the Site Medical Officer and the relevant hospitals, decide on the hospital(s), to which casualties are to be brought, the Receiving Hospital(s), and, on the basis of their condition, the distance and the capacity of available hospitals. In the event of a protracted incident, with significant numbers of casualties, the Area 3 CMT may become involved in this process.

7.11.3 Fatalities

The bodies of Casualties, which have been triaged as dead, should not be moved from the incident site unless this is necessary to affect the rescue of other casualties or to prevent them being lost or damaged. The recovery of the dead and human remains is part of an evidence recovery process and, as such, is the responsibility of An Garda Síochána, acting as agents of the Coroner. [See Appendix 10 of this document the role of the Coroner.]

The On-Site Co-ordinator, in association with the other Controllers, will decide if it is necessary to establish a Body Holding Area at the site. This Body Holding Area, if established, will be situated close to the Casualty Clearing Station.

An On - Site Body Holding Area is not an appropriate place for the prolonged storage of dead bodies. These will be moved as soon as possible to an appropriate mortuary. However, in any Major Emergency involving a large number of fatalities, it is likely that a Temporary Mortuary will be required. The decision to establish a Temporary Mortuary will be made by the Local Co-ordination Group in consultation with the Coroner. The provision of such a Temporary Mortuary is the responsibility of the Local Authority. The Mid-West Interagency region has specific arrangements outlined in their "Mass Fatality Protocols" A copy of these protocols are available from the Emergency Management Office by request.

7.11.4 Survivors

In certain circumstances, the On-Site Co-ordinator, in conjunction with the other Controllers, may decide that a Survivor Reception Centre is required. All those who have survived the incident uninjured will be directed to this location, where their details will be documented and collated by An Garda Síochána. The Local Authority is responsible for the establishment and running of such centres.

7.11.5 Casualty Bureau

In the event of a major emergency involving significant numbers of casualties, An Garda Síochána will establish a Casualty Bureau to collect and collate the details (including condition and location) of all casualties and survivors. As part of this process, a Casualty Liaison Officer or team will normally be sent by An Garda Síochána to each Receiving Hospital where casualties are being treated. All potential Receiving Hospitals have arrangements in place to facilitate An Garda Síochána in this process. (Appendix 10 of this document Garda Casualty Bureau)

7.11.6 Friends' and Relatives' Reception Centres

Some emergencies may warrant the establishment of Friends' and Relatives' Reception Centre's at appropriate locations associated with the emergency, these centres will be established through the coordination groups, with local authorities responsible for identifying locations, the HSE meeting any health needs including the provision of psychosocial advice & support and the Gardai coordinating information and security related matters. All potential Receiving Hospitals have arrangements in place to establish and staff a Friends' and Relatives' Reception Centre outlined in their Major Emergency Plans.

7.11.7 Non-Irish National Casualties

It is possible that some Major Emergencies may involve significant numbers of casualties from other jurisdictions and it is important that provision is made for any resulting issues of language and culture differences. All potential Receiving Hospitals have arrangements in place to secure translators and to deal, as far as practical, with cultural sensitivities.

7.11.8 Pastoral Care

The On-Site Co-ordinator has responsibility for ensuring that, where appropriate, pastoral services are mobilised to the site and facilitated by the Principal Response Agencies in their work with casualties and survivors. Similarly, individual hospitals have arrangements for the provision of pastoral services.

7.11.9 Psychosocial Care

It is generally recognised that being involved in abnormal, traumatic events, such as occur at major emergencies, can cause serious but normal stress reactions for the individuals involved. Those affected can include those who are injured, those who are involved with the event but not physically injured, persons who witness aspects of the emergency, individuals involved in rescue and recovery, including volunteers, as well as many other individuals involved in the response, such as those working with bodies, with severely injured casualties and with bereaved families. It is accepted that the provision of practical help and information as well as social, emotional and psychological support, frequently referred to as psychosocial support, to such individuals is an important objective of any emergency response. The HSE will provide psychosocial support to all staff involved in an emergency response via the Employee Assistance Programme

The HSE also has responsibility for the provision of psychosocial support to members of the public who may be affected by an emergency. The HSE Controller of Operations at the site and the relevant Area 3 CMT, in consultation with colleagues from the other Principal Response Agencies, will establish the likely nature, dimensions, priorities and optimum locations for the delivery of any psychosocial support that may be required in the aftermath of a major emergency. Leadership in this area will be provided by the Principal Psychology Manager.

7.12 Emergencies Involving Hazardous Materials

Hazardous material incidents pose specific issues for the principal emergency services and for that reason, special arrangements are required. These incidents can occur either because of deliberate or accidental events. The Local Authority is the lead agency for response to normal hazardous material incidents, with the exception of those involving biological agents, where the HSE is the lead agency.

7.12.1 Lead Agency

The On-Site Co-ordinator, in association with the other Controllers of Operations, will establish the need for decontamination. Public health can advise on the appropriate decontamination method. The preferred decontamination method is:

- Disrobe
- Dry decontamination is the default decontamination method
- Wet decontamination for caustic substances / or where biological or radiological exposure is identified

The HSE has responsibility for providing clinical decontamination and medical treatment to casualties affected by hazardous materials. The fire services have responsibility for providing other forms of physical decontamination of persons at the site. The HSE will be responsible for decontamination where required to protect health service facilities, such as hospitals, from secondary contamination. Where emergency decontamination of the public is required, the fire service may use its fire-fighter decontamination facilities, or improvised equipment may be used prior to the arrival of dedicated equipment. Where persons have to undergo this practice it should be carried out under the guidance of medical personnel. It should be noted that emergency decontamination carries risks for vulnerable groups, such as the elderly and the injured.

The On-Site Co-ordinator will take the decision on how best to protect a threatened population, after consultation with the other Controllers of Operations. This protection is usually achieved by moving people temporarily to a safe area, by evacuation where appropriate or feasible, or by advising affected individuals to take shelter in an appropriate place. Details of procedures for warning and informing the public are contained in the Mid-West Interagency Public Communications Plan (Appendix 7 of this document).

7.12.2 Suspect Chemical Biological Radiological Nuclear & Explosives (CBRNE) Incidents

Where terrorist involvement is suspected, An Garda Síochána will act as the lead agency. The Defence Forces, when requested, will assist An Garda Síochána in an Aid to the Civil Power role with Explosive Ordnance Disposal teams. Public health inputs into the Joint Threats Analysis where a credible CBRNE threat cannot be discounted.

Details of specific actions to be taken in the event of a suspect CBRNE incident are contained in the *Protocol for Multi-Agency Response to Suspect Chemical and Biological Agents arising from terrorist activity.*

7.12.3 Biological Incidents

Contaminated casualties pose a particular problem for the HSE, since, although decontamination facilities may be mobilised to the site, there is a strong possibility that contaminated individuals may present independently at local hospitals, with a consequential threat to the health and safety of staff and the capacity of the facility to continue to receive further casualties and to treat existing patients. In this situation, it is critically important that casualties are directed and health service decontamination resources are deployed in a manner which is not only the optimum for the treatment of casualties but also protects health service facilities and staff from contamination. Consultation and co-ordination between the HSE Controller of Operations, the Area 3 CMT and the management of Receiving Hospitals is vital to the achievement of this aim.

Where it is thought that casualties may have been contaminated with a biological substance, public health is responsible for arranging chemoprophylaxis of those exposed. The details from the Casualty Information Forms should be provided to public health to facilitate this process.

7.12.4 Infectious Diseases Outbreaks

Details of specific actions to be taken in the event of an outbreak will be mandated by the Area Department of Public Health. The Health Protection Surveillance Centre (HPSC) will provide advice and guidance. Under Medical Officer of Health (MOH) legislation public health can take whatever steps are required to control outbreaks.

7.12.5 Nuclear Incidents

Details of specific actions to be taken in the event of an activation of the National Emergency Plan for Nuclear Accidents are detailed in the *Protocol for Multi-Agency Response to Radiological/ Nuclear Emergencies.*

7.13 Protecting Threatened Populations

The scale and nature of a Major Emergency will determine whether evacuation of the public from a particular area is necessary, or whether they should be advised to remain indoors for shelter.

It is the responsibility of the local authorities to provide Rest Centres for evacuated populations.

It is the responsibility for local authorities to provide mortuary facilities for the dead.

When decided upon, the process of evacuation will be undertaken by An Garda Síochána, with the assistance of the other services.

The Garda Controller of Operations at the scene in consultation with the HSE and Local Authority will be responsible for ordering and effecting the evacuation. The extent and duration of the evacuation will be based on the advice received. The principle that the estimated duration of the evacuation should be considered before evacuation is implemented should be adhered to as far as possible.

Emergency Accommodation is identified in the relevant local authority's major emergency plan.

Additional guidance on evacuation is provided in *A Guide to Managing an Evacuation*[19].

The role of the Area Department of Public Health Service in protecting threatened populations in regard to infection control or adverse effects of environmental issues both acute and long-term is significant. Contact details of those potentially exposed to hazardous material should be provided to public health to allow them to complete follow up surveillance and monitoring if indicated.

The Area Director of Public Health/ Specialist in Public Health Medicine as MOH will exercise control in these circumstances through existing structures and via the Area 3 CMT.

[19] *A Framework for Emergency Management – Guidance Document 6 - A Guide to Managing Evacuation and Rest Centres,* Version 2 October 2015 http://mem.ie/wp-content/uploads/2016/01/A_Guide_to_Evacuation_20151.pdf

7.14 Early and Public Warning Systems

An early warning system for severe weather is currently in place for Severe Weather forecasts. This is a 24-hour service provided by Met Éireann. During a Major Emergency there may be a need for the site or Local Co-ordination Group to inform the public of a current or threatened situation or of a possible evacuation. *Please refer to Section 11.1 of this document.*

Other such warning systems are in place for Flooding, detailed in the Flood Response Plans, Water contamination etc.

Major Emergency Warnings -During a Major Emergency, it may be necessary to inform and warn the public of a current or threatened situation which may result in the need for some action, for example, evacuation.

Methods of Dissemination

Warnings may be disseminated to the public by use of some or all of the following methods:

- Door to Door
- Radio and T.V. broadcasting
- Local helpline / information line
- Web services and internet services
- Social Media
- Automated Text services
- Establish site specific warning systems

The detail of how this is implemented is detailed the Mid-West Interagency Public Communications Plan (Appendix 7 of this document).

7.15 Emergencies arising on Inland Waterways

The HSE National Ambulance Service may be asked by an Garda Síochána or the Coast Guard to assist in emergencies arising on inland waterways. They will normally do this by providing Ambulances and personnel to a pre-arranged location. It is important to note that HSE National Ambulance Service personnel are not equipped or trained to deal with emergencies involving search and rescue of casualties involved in emergencies on inland waterways.

7.16 Safety, Health and Welfare Considerations

The scene of a major emergency normally results from a dangerous occurrence and may, depending on the circumstances be an area of serious, imminent and unavoidable danger. HSE employees and voluntary agencies acting under their control, in this instance are engaged in activity relating to a civil emergency.

Every member of the HSE and voluntary agencies acting under their control shall ensure, so far as is reasonably practicable, the safety, health and welfare at work of his or her follow workers.

In particular the HSE controller at the scene shall as far as is reasonably practicable ensure that in the course of the work being carried by individuals under their control are not unnecessarily exposed to risks to their safety, health or welfare.

The controller at the scene will make an initial assessment of the risks presented by the hazards observed at the scene. It is important that the controller maintains a dynamic risk assessment process and may if he or she determines it is necessary designate a specific person to act in this role and advise on health and safety considerations.

If it is advised that there is serious and imminent deterioration in the hazards at the scene the controller of operations shall take action and give instructions to enable personnel to immediately leave the danger area and to proceed to a safe place.

In as far as is reasonably practicable the HSE controller of operations at the scene will ensure that the HSE staff and voluntary agencies acting under their control have training, including, in particular, information and instructions relating to the specific task to be performed.

Each member of the HSE and voluntary agencies acting under their control must as far is reasonably possible comply with relevant safety and health instructions, wear appropriate personal protective clothing where necessary cooperate with the controller of operations, look out for one another, and not do anything which would place themselves or others at risk.

They must not be under the influence of an intoxicant at the scene to the extent that the condition he or she is in is likely to endanger his or her own safety, health or welfare or that of any other person.

In a protracted incident consideration must be given to the organisation of time spent working at the scene and adequate rest periods must be taken into consideration both by the controllers at the scene and those engaged in the response to the incident.

- Command support arrangements at the scene should assign responsibility for the oversight and management of the safety of rescue personnel
- Danger Area: On arrival at the site, the HSE Controller of Operations should establish from the On-Site Co-ordinator (or the other two Controllers, where the On-Site Co-ordinator has not yet been designated) if a Danger Area has been defined and, if so, what particular safety provisions may apply. This issue should be kept under constant review by the On-site Co-ordinator and supporting Controller of Operations.
- Where there is a definite risk to personnel, over and above that which would normally pertain at emergency operations, a Danger Area may be declared. This risk could arise because of dangers posed by the release of hazardous materials, buildings in danger of further collapse, the threat of explosion or the presence of an armed individual. Any HSE Officer/ Responder who was aware of such additional risks should bring them to the attention of the On-Site Co-ordinator via the HSE Controller of Operations.
- Where it is necessary that HSE personnel continue to operate in a Danger Area, they should apply normal incident and safety management arrangements, and relevant officers should continue to exercise command /control over HSE personnel working in the Danger Area.
- Where a situation deteriorates to a point where the officer in charge of the Danger Area decides that it is necessary to withdraw response personnel from a Danger Area, a signal, comprising repeated sounding of a siren for ten seconds on, ten seconds off, will be given. All personnel should withdraw from the Danger Area on hearing this signal.

7.17 Logistical Issues/ Protracted Incidents

Arrangements for Rotation of Staff etc. at the Site(s)

During protracted emergencies it is important that front line field staff are relieved and rotated at regular intervals, particularly in situations which increase the stress on responders, for example, extreme heat or cold. The provision of relief staff, to replace those who have been on duty for some time, is a matter for discussion and agreement between the support staff of the HSE Controller at the Site, Ambulance Control and the Area 3 CMT.

- Hospital arrangements are contained in the relevant hospital plan.

- The Local Authority is responsible for the provisions of appropriate rest and refreshment facilities for all response personnel at the site(s) of a major emergency, as well as for survivors. These facilities may include the provision of food and drink, rest facilities and sanitary facilities.

7.18 Investigations

- An Garda Síochána is responsible for carrying out investigations when a crime has been identified in a Major Emergency.

- The scene of a suspected crime will be preserved by An Garda Síochána until a complete and thorough examination has been made. An Garda Síochána will need to obtain evidence of the highest possible standard and will require that all evidence is left in situ, unless a threat to life or health prevents this. Statements may be required from the staff of other Principal Response Agencies regarding their involvement.

- Subsequent investigations by An Garda Síochána will be carried out in accordance with best policies and the Garda Code.

- Other parties with statutory investigation roles.

- Depending on the nature of the Major Emergency, agencies other than An Garda Síochána may require access to the site for the purposes of carrying out an investigation. These agencies include the Health and Safety Authority (HSA), the Air Accident Investigation Unit (AAIU) and the Environmental Protection Agency (EPA).

- All HSE employees are requested to co-operate fully with all statutory investigations and to ensure that, unless a threat to life or health prevents this, all evidence is left undisturbed.

7.19 Community/ VIPs / Observers

7.19.1 Community Links

Where communities are affected by a Major Emergency, the Principal Response Agencies, operating within the Local Co-ordination Group, will make every effort to establish contact/links with the relevant communities, utilising established links or developing new ones as appropriate.

7.19.2 Visiting VIPs

All requests for visits to the site, or facilities associated with it should be referred to the Local Co-ordination Group. Requests for visits to HSE locations, such as the hospitals where casualties are being treated, should be referred to the Area 3 CMT.

Visits by dignitaries usually require extra security arrangements and liaison with the media. It is important that the organisation of such visits does not distract from the response effort. As a general rule, VIPs should be advised not to visit sites where danger still exists or where on-going rescues are in progress.

7.19.3 National/International Observers

Requests may be received from national and/or international observers who may wish to observe the response operations. The presence of experts from other regions or jurisdictions, who wish to act as observers at an incident, can greatly enhance the operation of debriefings and facilitate the process of learning lessons from an emergency. The Local Co-ordination Group will normally make arrangements for any such observers. However, specific health related observers may be facilitated by the Area 3 CMT.

7.20 Standing-Down the Major Emergency

7.20.1 Stand-Down at the Site

The decision to stand-down the Major Emergency status of an incident at the site will be taken by the On-Site Co-ordinator, in consultation with the other Controllers of Operations at the site and the Local Co-ordination Group. It is important to note that a great deal of activity may continue (for example, at hospitals, the temporary mortuary, etc.) after the Major Emergency is stood down at the site.

Each HSE service, department and hospital has a stand down procedure included in the relevant mobilisation action card. The Area 3 CMT has the responsibility of issuing the appropriate stand down instructions. These instructions will vary with the service, department or hospital depending on the requirement and may not apply to all elements of the HSE simultaneously and therefore all HSE personnel are instructed to only act on a stand-down instruction issued via the same communications route through which mobilisation or activation was received.

7.20.2 Stand-Down of the HSE

As the situation is brought under control and casualties leave the site, the HSE Controller of Operations should review the resources on the site and reduce/ stand-down these resources, in light of the changing situation. The Controller should ensure that, where other organisations have been mobilised to the site by the HSE, these should be informed of the decision to stand them down; likewise, services

operating at other locations. The On-Site Co-ordinator should be consulted before any service is stood down by the HSE. Each HSE service involved in the response must be stood down by the Senior Manager of the Service, Services may Stand Down at different times depending on the demand of their element to the response.

7.20.3 Operational debriefing and reporting activity

Each HSE Service which is involved in a response to a Major Emergency should carry out an operational debriefing of its involvement and document this debriefing in a report to the Regional Emergency Management Steering Group. The Regional Emergency Management Steering Group should review these reports and prepare a composite report to reflect the overall involvement of the HSE.

The HSE should also engage with the other Principal Response Agencies in a review of the Inter-Agency co-ordination aspects of the response. This review should be hosted by the lead agency and should involve all services which were part of the response. A composite report should be compiled by the Principal Response Agency which was the initial lead agency for submission, within a reasonable time scale, to the relevant Regional Interagency Steering Group and the National Interagency Steering Group.

The purpose of the above reviews should be to formulate lessons learned from the incident and the resulting reports should highlight these.

SECTION 8 AGENCY SPECIFIC ELEMENTS AND SUB-PLANS

This Plan has a series of supporting plans from;

- The National Ambulance Service
- The Acute Hospitals Division
- Mid-West Community Healthcare

These plans are listed in Appendix 11 of this plan and are available on request from the Emergency Management Office.

SECTION 9 PLAN FOR REGIONAL LEVEL CO-ORDINATION

9.1 Introduction

In some situations where a major emergency has been declared and the Major Emergency Plans of the Principal Response Agencies have been activated, it may be appropriate to consider scaling up from a local response to a regional level response.

This may occur when the resources available in the local area where the incident has happened do not appear to be sufficient to bring the situation under control in an expeditious and efficient manner; or the consequences of the emergency are likely to impact significantly outside of the local area; or the incident(s) is spread across more than one Local Authority or Division of An Garda Síochána; or the incident occurs at or close to a boundary of several of the Principal Response Agencies.

9.2 Regional Response

9.2.1 Decision to Scale up to a Regional Level Response

The decision to scale up from a local to a regional level response will be taken by the chair of the Local Co-ordination Group, in consultation with the chair of the On-Site Co-coordinating Group and the other members of the Local Co-ordination Group. This consultation may occur at a meeting of the Local Co-ordination Group, where such a group is in session or, alternatively, by means of a telephone conference call.

This decision will, by definition, involve specifying those extra Principal Response Agencies which are to be involved in the regional response.

Note: In many Major Emergency situations, neighbouring Garda Divisions, HSE Areas and Local Authorities will provide support and resources to the Garda Division, HSE Area and Local Authority, which are primarily involved in the response. Such support is not equivalent to the activation of the plan for Regional Level Co-ordination and, in fact, will often precede the activation of the regional plan.

9.2.2 Response Region

The areas covered by the Principal Response Agencies which are activated under the Plan for Regional Level Co-ordination will constitute the response region for the emergency.

Note: The response region for a regional level major emergency need not coincide (and in many cases will not coincide) with one of the predetermined Major Emergency Management Regions set out in Appendix F4[20] of the Framework.

In situations where more than one principal response agency from a particular service is represented at the site, Appendix F7[21] makes it clear that there will be only one Controller of Operations from that service and the unit from which the Controller of Operations will come should be determined in accordance with the guidance provided in Appendix F7[22]

9.2.3 Activation

Once the decision has been taken, the chair of the Local Co-ordination Group will declare that a regional level emergency exists and will activate the Plan for Regional Level Co-ordination by:

- Notifying each of the Principal Response Agencies involved that the Plan for Regional Level Co-ordination has been activated;
- Requesting that each of the Principal Response Agencies, which has not already activated its MEM Plan, should do so;
- Delivering an information message to each Principal Response Agency using the mnemonic METHANE; and
- Providing each of the Principal Response Agencies involved with a list of the agencies which are being activated to form the regional response

9.3 Command Control and Co-ordination of Response

- Command and Control Arrangements on Site.

The command and control arrangements at the site(s) of a regional major emergency will be the same as those for a standard major emergency including:

- Three Controllers of Operation;
- A lead agency determined in accordance with the Framework[23]; and
- An On-Site Coordinating Group
- An On-Site Co-ordinator
- The Regional Co-ordination Group

The mobilisation and operation of the Regional Co-ordination Group will be as per the arrangement for Local Co-ordination Groups set out in 5.4.5.2[24] in the Framework Document.
Regional Co-ordination Group arrangements should be made for:

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[20] Appendix F4, *A Framework for Major Emergency Management Appendices*, 2006 *http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management-Appendices.pdf*

[21] Appendix F7, *A Framework for Major Emergency Management Appendices*, 2006 *http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management-Appendices.pdf*

[22] Appendix F7, *A Framework for Major Emergency Management Appendices*, 2006 *http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management-Appendices.pdf*

[23] *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

[24] Section 5.4.5.2, *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

- The mobilisation of other organisations /agencies
- Requesting mutual aid from neighbours
- Requesting national/international assistance where required
- Dealing with multi-site or trans-boundary emergencies
- Linkage to national emergency plans
- Links with Government
- Support for chairs by Information Managers, etc. and communication arrangements with the site and with other groups will be as for a Local Co-ordination Group.

9.4 Trans-boundary Major Emergencies

Some Major Emergency events (e.g. severe storms, extensive flooding and/or blizzards) may affect a significant geographical area crossing CHO and county boundaries, in such a situation, a number of Local Co-ordination Groups may be activated. Where the chair of a Local Co-ordination Group, which has been activated in response to a major emergency, becomes aware that one or more other Local Co-ordination Groups have also been activated, contact should be made with the other chair(s) with a view to considering the establishment of a Regional Co-ordination Centre.

Such a Regional Co-ordination Centre will normally be located at the Local Co-ordination Centre which, in the view of the chairs, is best positioned (in terms of resources, communications and geography) to co-ordinate the activity of the different Local Co-ordination Groups which are active. In such a situation, these Local Co-ordination Groups will continue to act as per standard arrangements and will communicate with the Regional Co-ordination Centre through their chairs.

Note: During a trans-boundary Major Emergency, each Local Co-ordination Group will be in contact with the lead Government Department (in accordance with Section 5.4.5.5[25] of the Framework) and, in such a situation, the decision on whether the activities of a number of Local Co-ordination Groups should be co-ordinated via a Regional Co-ordination Centre or via the lead Government Department will be taken in light of the prevailing circumstances. The HSE at a national level, or another national body, may request the activation of this Plan and call upon HSE Areas to assist in responding to, or to perform its normal function/role arising from, a national level emergency.

The envisaged role could include:

- Monitoring and/or reporting on the impact of the emergency in the HSE Area
- Undertaking pre-assigned roles in a National Emergency Plan
- Undertaking relevant tasks following an emergency/crisis or
- Acting as a communications and co-ordination conduit.

All communications from relevant national bodies should be directed to the Chair of the CMT or his/her designated alternate. When a request is received from a national body in the context of a national emergency, the CMT will be activated and will co-ordinate the appropriate activities of the HSE. This Plan may also be activated in response to a request from a Minister of Government in light of an emergency/crisis situation.

This Plan may also be activated in response to a request from the Irish Coast Guard, following a threatened or actual emergency in the Irish Maritime Search and Rescue Region.

[25] Section 5.4.5.5, *A Framework for Major Emergency Management*, 2006 http://mem.ie/wp-content/uploads/2015/05/A-Framework-For-Major-Emergency-Management.pdf

SECTION 10 LINKS WITH NATIONAL EMERGENCY PLANS

This Plan will normally be activated in response to a local or regional Major Emergency. However, where a National Emergency Plan has been activated, the Department of Health and Children will/may request the activation of this plan.

SECTION 11 SEVERE WEATHER PLANS

Severe weather emergencies may involve significant threats to infrastructure and business continuity for all HSE services in Area 3. Support may be required for vulnerable sections of the community and HSE services/functions.

In Area 3, HSE managers have a responsibility to increase/develop the resilience of their services/functions to mitigate against the impact Severe Weather may have on the day to day running of their services.

To assist managers in their contingency planning for Severe Weather, a Severe Weather checklist and associated guidance document has been developed for HSE managers. Each manager has a responsibility to address this *Severe Weather Checklist and Guidance document Version 5* (dated October 2022), which is available at the below link:
https://www.hse.ie/eng/services/list/3/emergencymanangement/severe-weather/read-the-hse-severe-weather-checklist-and-guidance-document.pdf

Each Local Authority has, as a sub-plan of its Major Emergency Plan, a plan for responding to severe weather emergencies, whether a Major Emergency is declared or not, and Local Co-ordination Centres may be activated to manage response to a severe weather event, whether a Major Emergency is declared or not.

If a Local Authority activates the Local Coordination Group, the HSE will engage and the Area 3 CMT will be activated, where appropriate and assistance will be provided in whatever areas and by whichever services are appropriate to the situation.

Note: although these arrangements are initially directed towards storms, flooding and severe cold, problems can also be created for vulnerable population by periods of extreme heat and the HSE, in particular, needs to be vigilant at such times, monitoring the effect on the elderly and other vulnerable groups.

SECTION 12 SITE AND EVENT SPECIFIC ARRANGEMENTS AND PLANS

There are both legislative and procedural arrangements which require that Emergency Plans be prepared for specific sites or events. These include internal and external Emergency Plans for Upper-tier Seveso Establishments, Emergency Plans for airports and ports and Emergency Plans and arrangements for major sporting and cultural events.

The geographical area of A3CMT currently contains four Upper-tier Seveso Establishments.

SECTION 13 THE RECOVERY PHASE

Once the response to a Major Emergency is underway and operating effectively, the HSE, in consultation with the other Principal Response Agencies, will begin to plan for recovery. The Framework envisages recovery as occurring in two phases – immediate recovery and long term recovery.

The HSE will engage in this process through the Area 3 CMT and via its representatives on the Local Co-ordination Group.

As soon as it is practical, the Area 3 CMT will nominate an individual (or group) to begin the process of planning for the recovery phase. The principal issues for the HSE in recovery are likely to be

- Long term care and support for casualties and survivors
- Long term support for relatives of casualties and survivors
- Managing the conflicting demands of the emergency and the maintenance of normal services
- Supporting staff who have been under great pressure
- Continuing to engage with the media
- Preparing for legal and quasi legal issues, such as enquiries, criminal investigation, inquests, etc.

The Area 3 CMT will continue to function through the recovery phase until the issues arising are more appropriately dealt with by normal management processes.

SECTION 14 REVIEW OF THIS PLAN

This Plan will be reviewed and updated annually by the Area 3 Emergency Planning Group (AEPG). It will also be reviewed and amended as appropriate after any activation of this plan or major emergency exercise to reflect key learnings or recommendations. The Emergency Management Office will coordinate this process.

APPENDIX 1 - GLOSSARY OF TERMS AND ACRONYMS

Ambulance Loading Point

An area, close to the Casuality Clearing Station, where casualties are transferred to ambulance for transport to hospital.

Body Holding Area

An area, under the control of An Garda Síochána, where the dead can be held temporarily until transferred to a Mortuary or Temporary Mortuary.

Business Continuity

The processes and procedures an organisation puts in place to ensure that essential functions can continue during and after an adverse event.

Casualty

Any person killed or injured during the event. (For the purpose of the Casualty Bureau it also includes survivors, missing persons and evacuees).

Casualty Bureau/Casualty Information Centre

Central contact and information point, operated by An Garda Síochána, for all those seeking or providing information about individuals who may have been involved.

Casualty Clearing Station

The area established at the site by the ambulance service, where casualties are collected, triaged, treated and prepared for evacuation.

Casualty Form

A standard form completed in respect of each casualty and collated in the Casualty Bureau.

Civil Protection

The term used in the European Union to describe the collective approach to protecting populations from a wide range of hazards.

Collaboration

Working jointly on an activity.

Command

The process of directing the operations of all or part of the particular service (or group of services) by giving direct orders.

Control

The process of influencing the activity of a service or group of services, by setting tasks, objectives or targets, without necessarily having the authority to give direct orders.

Controller of Operations

The person given authority by a Principal Response Agency to control all elements of its activities at and about the site.

Co-operation

Working together towards the same end.

Co-ordination

Bringing the different elements of a complex activity or organisation into an efficient relationship through a negotiated process.

Cordons

The designated perimeters of an emergency site, with an Outer Cordon, an Inner Cordon, a Traffic Cordon and a Danger Area Cordon, as appropriate.

Crisis Management Team (CMT)

A strategic level management group, which consists of senior managers from within the Principal Response Agency, which is assembled to manage a crisis and deal with issues arising for the agency both during the emergency and the subsequent recovery phase.

Danger Area

An area where there is a definite risk to rescue personnel, over and above that which would normally pertain at emergency operations.

Decision Making Mandate

Establishes the envelopes of empowered activity and decision making to be expected, without references to higher authorities.

Decontamination

A procedure employed to remove hazardous materials from people and equipment.

Emergency Response

The short term measures taken to respond to situations which have occurred.

Evacuation Assembly Point

A building or area to which evacuees are directed for onward transportation.

Friends and Relatives Reception Area

A secure area, operated by An Garda Síochana, for the use of friends and relatives arriving at or near the site of the emergency.

Garda Code Instructions

A document containing instructions, legislation, processed and procedures in respect of the day-to-day management of An Garda Síochana.

Hazard

Any phenomenon with the potential to cause direct harm to members of the community, the environment or physical infrastructure, or being potentially damaging to the economic and social infrastructure.

Hazard Identification

A stage in the Risk Assessment process where potential hazards are identified and recorded.

Hazard Analysis

A process by which the hazards facing a particular community, region or country are analysed and assessed in terms of the threat/risk which they pose.

Holding Area

An area at the site, to which resources and personnel, which are not immediately required, are directed to await deployment.

Hospital Casualty Officer

The member of An Garda Síochána responsible for collecting all information on casualties arriving at a receiving hospital.

Impact

The consequences of a hazardous event being realised, expressed in terms of a negative impact on human welfare, damage to the environment or the physical infrastructure or other negative consequences.

Information Management Officer (IMO)

A designated member of the support team of a Principal Response Agency who has competency/training in the area of information management

Information Management System

A system for the gathering, handling, use and dissemination of the information.

Investigating Agencies

Those organisations with a legal duty to investigate the causes of an event.

Lead Agency

The Principal Response Agency that is assigned the responsibility and mandate for the co-ordination function.

Likelihood

The probability or chance of an event occurring.

Local Co-ordination Centre

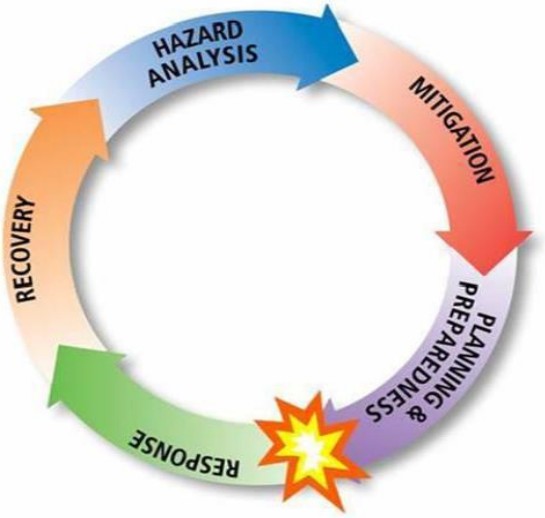
A pre-nominated building, typically at county or sub-county level, with support arrangements in place, and used for meetings of the Local Co-ordination Group.

Local Co-ordination Group

A group of senior representatives from the three Principal Response Agencies (An Garda Síochána, HSE and Local Authority) whose function is to facilitate strategic level co-ordination, make policy decisions, liaise with regional/national level co-ordination centres, if appropriate, and facilitate the distribution of information the media and the public.

Major Emergency Management

The range of measures taken under the five stages of emergency management paradigm.



Major Emergency Plan

A plan prepared by one of the Principal Response Agencies.

Major Emergency

Any event which usually with little or no warning, causes or threatens death or injury, serious disruption of essential services, or damage to property, the environment or infrastructure beyond the normal capabilities of the principal emergency services in the area in which the event occurs, and requiring the activation of specific additional procedures to ensure effective, co-ordinated response.

Media Centre

A building/area specifically designated for use by the media, and for liaison between the media and the Principal Response Agencies.

Media Holding Statements

Statements that contain generic information that have been assembled in advance, along with preliminary incident information that can be released in the early stages of the emergency.

Mitigation

A part of risk management and includes all actions taken to eliminate or reduce the risk of people, property and the environment from hazards which threaten them

Mutual Aid

The provision of services and assistance by one organisation to another.

National Emergency Co-ordination Centre

A centre designated for inter-departmental co-ordination purposes.

On – Site Co-ordinator

The person from the lead agency with the role of co-ordinating the activities of all agencies responding to an emergency.

On-Site Co-ordination Centre

Specific area/facility at the Site Control Point where the On-site Co-ordinator is located and the On-site Co-ordination group meet.

On-Site Co-ordination Group

Group that includes the On-Site Co-ordinator and the Controllers of Operations of the other two agencies, an Information Management Officer, a Media Liaison Officer and others as appropriate.

Operational Level

The level at which the management of hands-on work is undertaken at the incident site(s) or associated areas.

Principal Emergency Services (PES)

The services which respond to normal emergencies in Ireland, namely An Garda Síochána, the Ambulance Service and the Fire Service.

Principal Response Agencies (PRAs)

The agencies designated by the Government to respond to Major Emergencies i.e. An Garda Síochána, The HSE and the Local Authorities.

Protocol

A set of standard procedures for carrying out a task or managing a specific situation.

Receiving Hospital

A hospital designated by the HSE to be a principal location to which major emergency casualties are directed. (24-hour Emergency Department)

Recovery

The process of restoring and rebuilding communities, infrastructure, buildings and services.

Regional Co-Ordination Centre

A pre-nominated building, typically at regional level, with support arrangements in place and used by the Regional Co-ordination Group.

Regional Co-Ordination Group

A group of senior representatives of all relevant Principal Response Agencies, whose function is to facilitate strategic level co-ordination at regional level.

Rendezvous Point (RVP)

The Rendezvous Point is the location to which all resources responding to the emergency site are directed in the first instance. An Garda Síochána will organise the Rendezvous Point. Other services may have one of their officers present to direct responding vehicles into action or to that service's Holding Area.

Response

The actions taken immediately before, during and/or directly after an emergency.

Resilience

The term used to describe the inherent capacity of communities, services and infrastructure to withstand the consequences of an incident, and to recover/restore normality.

Rest Centre

Premises where persons evacuated during an emergency are provided with appropriate welfare and shelter.

Risk

The combination of the likelihood of a hazardous event and its potential impact.

Risk Assessment

A systematic process of identifying and evaluating either qualitatively or quantitatively, the risk resulting from specific hazards.

Risk Holders

Organisations and companies, which own and/or operate facilities and/or services where relevant hazards are found, such as Airlines, Chemical Manufacturers etc..

Risk Management

Actions taken to reduce the probability of an event occurring or to mitigate its consequences.

Risk Matrix

A matrix of likelihood and impact on which the results of a risk assessment are plotted.

Risk Regulators

Bodies with statutory responsibility for the regulation of activities where there are associated risks, such as the Health and Safety Authority, the Irish Aviation Authority, etc.

Scenario

A hypothetical sequence of events usually based on real experiences or on a projection of the consequences of hazards identified during the risk assessment process.

SEVESO Sites

Industrial sites that, because of the presence of dangerous substances in sufficient quantities, are regulated under Council Directive 96/82/EC and 2003/105/EC, commonly referred to as the Seveso II Directive.

Site Casualty Officer

The Member of An Garda Síochána with responsibility for collecting all information on casualties at the site.

Site Control Point

The place at a major emergency site from which the Controllers of Operations control, direct and co-ordinate their organisation's response to the emergency.

Site Medical Officer

The medical officer with overall medical responsibility at the site, who will liaise with the health service Controller of Operations on all issues related to the treatment of casualties.

Site Medical Team

A team drawn from a pre-arranged complement of doctors and nurses, with relevant experience and training, which will be sent to the site, if required.

Site Medical Plan

The arrangement of the elements of a typical major emergency site, matched to the terrain of the emergency, as determined by the On-Site Co-ordination Group.

Standard Operating Procedures (SOPs)

Sets of instructions, covering those features of an operation that lend themselves to a definite or standardised procedure, without loss of effectiveness.

Support Team

A pre-designated group formed to support and assist individuals operating in key roles, such as On-Site Co-ordinate, Chair of Local Co-ordination Group, etc.

Strategic Level

The level of management that is concerned with the broader and long-term implications of the emergency and which established the polices and framework within which decisions at the tactical level are taken.

Survivor Reception Centre

Secure location to which survivors, not requiring hospital treatment, can be taken for shelter, first aid, interview and documentation.

Tactical Level

The level at which the emergency is managed, including issues such as, allocation of resources, if required, and the planning and co-ordination of ongoing operations.

Temporary Mortuary

A building or vehicle adapted for temporary use as a mortuary in which post mortem examinations can take place.

Triage

A process of assessing casualties and deciding the priority of their treatment/or evacuation.

Acronyms

AAIU	Air Accident Investigation Unit
CCBRNE	Conventional, Chemical, Biological, Radiological, Nuclear or Explosive
CMT	Crisis Management Team
EOD	Explosive Ordnance Disposal
ICG	Irish Coast Guard
METHANE	**M**ajor Emergency Declared **E**xact Location of the emergency **T**ype of Emergency (Transport, Chemical, etc...) **H**azards present and potential **A**ccess/egress routes **N**umber and Types of Casualties **E**mergency Services present and required
MOU	Memorandum of Understanding
NEPNA	National Emergency Plan for Nuclear Accidents
NOTAM	Notice to Airmen
PDF	Permanent Defence Forces
PES	Principal Emergency Services
PRA	Principal Response Agency
RVP	Rendezvous Point
SAR	Search and Rescue
SLA	Service Level Agreement
SOP	Standard Operating Procedure
VIP	Very Important Person

APPENDIX 2 - MARINE AND OFF-SHORE INCIDENTS AND MEDICO CORK

In the event of a medical emergency at sea the Principal Emergency Service responsible for the initiation, control and co-ordination of maritime emergencies in Irish territorial waters, harbours and coastline is the Irish Coast Guard.

The major emergency plans of the principal response agencies may be activated by one of those agencies in response to a request to the Irish Coast Guard following a threatened or actual emergency in the Irish Maritime Search and Rescue Region.

Emergency Medical Advice in Marine and Off-shore Islands

Medical Emergencies that arise at sea and on islands have unique issues caused by the distance from shore. These incidents may not of themselves constitute a Major Emergency as provided for in the Framework however they do present some challenges different from a land based small-scale emergency.

To provide a response to this geographic isolation EU regulations [EC Council Directive 92/29/EEC] stipulate that every country must have one receiving hospital to take calls from the Coast Guard from seagoing vessels which require medical advice.

In accordance with Section 9 (1) of S.I. No. 506 of 1997, the Department of Communications, Marine and Natural Resources* has designated Cork University Hospital as the Radio Medical Consultation Centre for Ireland. It was designated as the Radio Medical Consultation Centre for Ireland by Marine Notice 28 of 2001. (Also, called a **N**otice **t**o **M**ariners **NTM**) *Note: The relevant marine emergency functions of the Department of Communications, Marine and Natural Resources were transferred to the Department of Transport on and from 1 January 2006.

The Maritime Medical Consultation Unit of CUH is MEDICO** Cork. The unit is available to provide vessels at sea with free medical advice by radio on a 24-hour basis.

**"MEDICO" is a radio nickname for medical service. There is MEDICO Madrid, MEDICO Rome and so on. So for example if a Spanish Trawler wanted medical advice in Uisce Éireann it would most likely be put in contact with MEDICO Madrid.

The unit can be contacted through the Irish Coast Guard Radio Stations at Dublin, Valentia and Malin Head. The Coast Guard plays a pivotal role in the service facilitating three-way communication between the sea-going vessel and the emergency department CUH where there is a designated Medico Cork phone. All calls are then dealt with by a consultant or registrar.

Extension of Medico Cork advice to Off-shore Islands

Air Ambulance Operations Notice 2/08 Dated: 24th January, 2008 extends the On-line advice from Medico, Cork to assist the national ambulance service in providing similar advice.

This will apply in situations where a call for an emergency helicopter transfer is received from an off-shore Island.

In order to ensure that helicopter resources are properly used and that the appropriate patients receive this service, the EMC dealing with such calls will use the following procedure:

The EMC will patch the caller through to Medico Cork where a senior emergency care practitioner will discuss the details of the patient's condition with the caller, give appropriate medical advice and provide a direction on the category of the medical emergency.

The EMC will respond to this advice to meet the needs of the patient concerned in accordance with National Ambulance Service protocols.

Method of Contact with Medico Cork

All calls for assistance from Medico Cork which fall within the guidelines should be directed to the Irish Coast Guard at:

DUBLIN (Marine Rescue Co-ordination Centre, MRCC)

01- 6620922 / 6620923

VALENTIA (Kerry)

066 – 9476109

MALIN HEAD (Donegal)

Paulgill@transport.gov.ie / 074 – 9370195 / 085-8718093

mrcsmalin@irishcoastguard.ie / 074 – 9370103 / 085-8085961

Or alternatively Dial **112/999** as ask for the Coast Guard and the Coast Guard will initiate the contact with Medico Cork.

HSE Emergency Management

Area 3

(Covering Geographical Areas of Counties Clare, Limerick and North Tipperary)

RISK ASSESSMENT

June 2024

Version Control:

Revision Number	Version 8 – May 2022	Summary of edits	Feedback and updates from Department of Public Health and Emergency Management
	Version 9 – July 2023	Summary of edits	Feedback and updates from Departments of Public Health and Emergency Management
	Version 10– June 2024	Summary of edits	Feedback and updates from Emergency Management and AEPG members.

Explanatory Notes:

- The HSE is currently in the process of transitioning to RHA model as per Slainte Care however, at the time of review, the HSE is organised into Acute Operations (Hospital Groups) and Community Operations (Community Healthcare Organisations). The Area 3 Crisis Management Team (CMT) is a strategic group that consists of senior managers representing *all HSE functions and services.* The Area 3 CMT is aligned with the geographical area of Mid West Community Healthcare (that is, Counties Clare, Limerick and North Tipperary). For the purposes of this Area 3 CMT Major Emergency Plan, the 'Area' refers to these counties.

- At the time of review of Version 10 of this plan (June 2024), the tactical and strategic recommendations of the PWC Independent Post Cyber Incident Review are actively being implemented nationally. It is acknowledged that a cyber-attack is a national risk that would have a significant impact on HSE functions and services in the area. It is anticipated that a section detailing the interface with the Office of Chief Information Officer and a risk assessment for cyber-attacks will be added to the next version, in accordance with national HSE adjustments and guidance.

Regional Risk Assessment

The Framework for Major Emergency Management 2006 outlines a 5 stage systems continuous cycle approach to Major Emergency Management. The principal elements of this system are

- Hazard Analysis / Risk Assessment
- Mitigation / Risk Management
- Planning and Preparedness
- Coordinated Response and
- Recovery

Each principal response agency should carry out a risk assessment in accordance with procedures outlined in the framework. The risk assessment approach is complimentary to the principle of an "All Hazards" approach.

The risk assessment process is comprised of a number of stages.

They are as follows:

1. Establishing the Context. Describing the characteristics of the former HSE West Region including the geography, populations and infrastructure of the Area.
2. Hazard Identification In this Risk Assessment document the potential hazards in the HSE West are categorised under four headings:
    - Natural – Storms, floods etc.
    - Transport – Air, Road, rail, water accidents
    - Technological – Fire, CBRNE, building collapse etc.
    - Civil – Crowd safety, communicable diseases etc.
3. Risk Assessment – consideration is given to the overall risks presented by the identified hazards.
4. Recording identified potential hazards on a Risk Matrix – The Risk is plotted on a specially designed graph that gives a visual context to lesser and greater risks at a glance.

Stage 1: Establishing the Context

The first stage of this Risk Assessment is to contextualise Risk by detailing the geography, populations and infrastructure of the Emergency Management West Region.

Area 3 covers the counties of Clare, Limerick and North Tipperary. It borders other Emergency Management Regions and the three counties comprise a total area of more than 3,186 square miles.

The governance structure of the HSE has undergone significant change previously with the establishment of the new Community Health Organisations (CHO's) structure. From an Emergency Management perspective, the EMO Mid-West supports the Mid-West Community Healthcare.

Acute Hospital services in Area 3 is provided by: -

UL Hospitals comprising of University Hospital Limerick, University Maternity Hospital Limerick, Croom Hospital, Ennis Hospital, Nenagh Hospital and St John's Hospital. The Community services are currently organised into Community Healthcare Organisations as depicted in the map below.

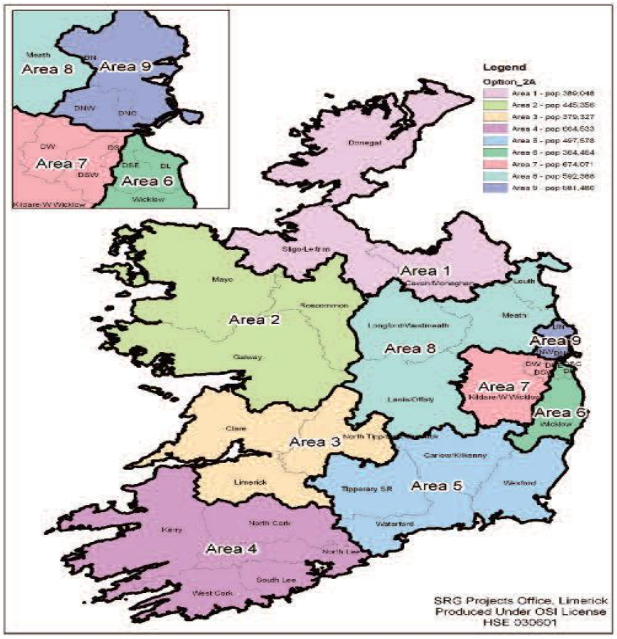


Table I Establishing the context - HSE Emergency Plan (Limerick Clare & North Tipperary)

Social Population Centres		
Population of Region (including entire County of Tipperary) as per 2022 census	**County**	
	Clare 127,938 Ennis 27,923	Disability 21% Elderly (>65yrs) 17% Children(<15yrs) 20%
	Limerick 209,536 Limerick City 102,895	Disability 23% Elderly (>65yrs) 16% Children(<15yrs) 19%
	Tipperary (Entire County) 167,895 Nenagh 9,895	Disability 23% Elderly (>65yrs) 17% Children(<15yrs) 20%

Primary Economic Drivers (Not exhaustive)	
Agriculture	Primarily Agricultural Region
Tourism	Foynes, Limerick Racecourse, Lough Gur Visitor Centre, Desmond Hall & Castle, Adare Castle, St. John's Cathedral, Askeaton Friary, The Burren, Doolin, Kilkee, Lisdonnvarna, Kilrush, Spanish Point, Doonbeg, Clare Castle, Holy Cross Abbey, Nenagh Castle, Cathedral of the Assumption, Bike Park Ireland, Keeper Hill, Arra Mountains, King Johns Castle, Ailwee Caves, Cliffs of Moher,
Industry **excludin**g Seveso Sites	Adhesive Research, Analog Devices, Applied Communications, ARI Europe, B.S. & B, CETRA, Channel Advisor, Chesapeakle, Cook, CTSI Europe, Dell, DTS, Ethicon, Glit, Info-Lab, Intepro, ITW Filtertrek, Johnson & Johnson, Kemp, Kostal, Matin Dawes Systems, Materion, Northern Trust, NT MDT, Power One, QAD, Regeneron, Rettig, RR Donnelley, Rusal Aughinish, Stryker, Te Connectivity, Teleflex, Thomas Reuters, Weener, ZMDI, Arbor, Arista, Beckman Coulter, Beta, Bijur Delimon, Connor Winfield, Deepak, Element 6, Emerson, Essidev SA, GE, Heraeus, Ptg Tools, IDEX, Ingersoll Rand Climate Solutions, John Crane, Lufthansa Tecknik, Magellan, Microsemi, Moster Cable, Phardiag, Roche, Spirit Aerosystems, Tecnotree, UCB Manufacturing, White Horse, WWT, Eltex, Procter & Gamble and Taylor Made Glass.
Education	• National University of Limerick (Approx 17,000 Students) • Technical University of the Shannon (Limerick, Ennis, Thurles & Clonmel) (Approx 6,900 Students) • Templemore Garda Training Centre (Approx 520 Students)

Principal Emergency Services	
Health Service Executive (HSE)	
Receiving Hospitals	• University Hospital Limerick
Private Hospitals	• Bon Secours Barrington's Hospital Limerick
National Ambulance Service **National Emergency Operations Centre (NEOC)**	• Ballyshannon • Tallaght
National Ambulance Service **Ambulance Stations**	**Limerick** Ambulance Station, St Nessan's Road, Dooradoyle, Limerick Ambulance Station, Glenbevin, Clareview, Limerick Ambulance Station, St. Ita's Hospital, Newcastle West, Limerick **Clare** Ambulance Station, Ennis General Hospital, Ennis Ambulance Station, Dergview, Mountshannon Road, Scarriff, Ambulance Station, Regina House, Kilrush, Co. Clare Ambulance Station, Ennistymon Community Hospital, Ennistymon, Co. Clare **Tipperary** Ambulance Station, Hospital of the Assumption, Thurles, Co. Tipperary Ambulance Station, Roscrea, Co. Tipperary Ambulance Station, Gortlandroe, Nenagh, Co. Tipperary

HSE Community Healthcare Organisations (CHO)	**Mid-West Community Healthcare** Limerick, Clare & North Tipperary
HSE Department of Public Health	**Mid-West Office** (Limerick, Clare & North Tipperary)

An Garda Síochána		
Clare / Tipperary Division	**Garda Districts**	Clare: • Ennis • Kilrush Tipperary: • Nenagh • Thurles
Limerick Division	**Garda Districts**	• Limerick City North • Limerick City South • Newcastle West • Bruff

Local Authorities: Fire Service		
	Clare County Council	• 7 Retained Stations
	Limerick City & County Council	• 1 Whole time Station
	Limerick City & County Council	• 6 Retained Stations (County)
	Tipperary Co. Council (North County)	• 7 Retained Stations
Other Emergency Responders		• Irish Coast Guard /RNLI

Environment	HSE Area	Clare, Limerick and North Tipperary
	Adjacent Counties	Galway, Offaly, Laois, South Tipperary, Cork and Kerry
Infrastructure	**Roads See** (Appendix 3.2)	Major routes include N18, N24, M7
	Shannon Tunnel Limerick	The Limerick Tunnel is a 675- metre-long, twin-bore road tunnel underneath the River Shannon on the outskirts of Limerick city. The tunnel forms part of the N18 Limerick Southern Ring Road. The tunnel is tolled
	Railway: (See Appendix 3.3)	Limerick to Waterford /Rosslare Limerick - Dublin Limerick – Ennis Galway – Limerick
	Ports/Shipping	Limerick Harbour Foynes Harbour
	Ferries:	Doolin to Aran Islands Killimer to Tarbert Ferry
	Airports:	Shannon Airport

Water supply	Uisce Éireann and Group Water Schemes	
Power Supply	ESB Networks	• Moneypoint Power Station • Ardnacrusha Power Station
Gas Supply	Bord Gáis natural Pipeline	• See Appendix 3.4 Map of Pipeline
Hazardous Sites	Upper Tier Seveso Sites	• Electricity Supply Board, Money Point Power Station Kilrush, Co. Clare • Shannon Aviation Fuels (Shannon Airport Authority), Shannon Co. Clare • Gouldings Fertilisers, Askeaton, Co. Limerick • Atlantic Fuel Supply Company Ltd, Foynes, Co. Limerick
	Lower Tier Sites	• Enva Ireland Ltd, Smithstown Ind Estate Shannon, Co. Clare • Grassland Agro Dock Road, Limerick City • Roche Ireland Ltd, Clarecastle, Co. Clare • Analog Devices International Raheen Business Park, Limerick • Avara Shannon Pharmaceutical Services Shannon Industrial Estate Shannon Co. Clare • Inter Terminals Shannon Ltd Foynes Harbour Foynes Co. Limerick
	Category A Extractive Sites	• Aughinish Alumni Co. Limerick • Lisheen Mines Co. Tipperary • Silvermines Co. Tipperary

Stage 2: Hazard identification

Table 2.1 - Natural Hazards			
Category	**Type**	**Subtype**	**Local Hazard**
Meteorological	Storm / Gale Both coastal and inland areas can be affected by high winds	Both coastal and inland areas can be affected by high winds	• Poor driving conditions • Loss of infrastructure • Flooding • Falling Trees
	Heavy Snow	Blizzards	• Poor driving conditions • Loss of infrastructure
	Severe Cold / Frost extremes of Temperature	Icy Roads /Impassable Roads Hypothermia Freezing of Supply Network	• Poor Driving Conditions • Public Health Risk • Loss of Water Supply • Loss of Heating Oil • Lack of Road Grit
	Thunder & Lightening		• Loss of Infrastructure
	Dense/ Persistent Fog	Road Traffic collisions	• Poor driving conditions
	Heat Wave /Drought		• Public Health Risk • Water Shortage

Hydrological	Flooding	Coastal / Inland	• Rivers • Shannon, Mulkear, Deel, Abbey, Feale, Aherlow, Clare, Fergus, Inagh, Doobeg, Aille, Dealagh, Abbert, Caher, Graney, Ardcloony, Cullenagh, Annageeragh, Glenomra, Bleach, Latoon, Annagh, Owenslieve, Anamullaghaun, Neagh, Newtown, Ballyfinboy and Annagh. • Lakes • Gur, Dromore, Graney, Bunny, Lickeen, Bridget, Doon, Inchiquin, Avoher, Atedaun, Cullaun, Doo, Clonlea, Rosroe, Finn, Rosslara, Cullaunyheeda, Muckanagh, Inchicronan, Gar, Enagh, Rathluby, Ballybeg, Ballycar, Ballycullinan, Cleggan, Tullaher, Donnell, Meelagh, Keagh and Lough Derg.
	Heavy Rain		• May lead to flooding in Low Lying areas or areas with poor drainage
Geological	Landslides		• Galtymore • Seefin • Lyracappul • Carron • Temple Hill • Moylussa • Slievecallan • Maghera Transmission Site, • Silvermine • Arra Hills • Devil's Bit • Ballyhoura
	Land Cave In		• Silvermines (disused) • Lisheenmines
	Forest / Wilderness fire • Air Pollution		There are numerous Forests throughout the region such as Curraghchase Forest Park, Ballyhoura Forest Park, Galte Castle Wood, Greenwood, Cratloe Woods, Doon Forest, Cahermurphy Forest and Castlelough.

2.2 - Transportation Hazards			
Category	**Type**	**Subtype**	**Local Hazard**
Aviation	Aircraft Collision /Loss	Mid Air and Land	• Shannon Airport • Coonagh Airfield
Rail	Mainline		• Limerick to Waterford /Rosslare • Limerick - Dublin • Limerick – Ennis • Galway – Limerick
	Bridge		• Bridgestrike
Road	Multiple Road Traffic Collision		• National Roads through Region
	Hazmat		• Hazmat Transport on all roads
	Bridge		• Shannon Bridge, Limerick • Thomond Bridge, Limerick • Sarsfield Bridge, Limerick • Abbey Bridge, Limerick • O'Briens Bridge, Clare • Macken Bridge, Clare • Corrofin Bridge, Clare, • Riverstown Bridge, Clare, • Mill Bridge, Clare, • Ballyoughter Bridge, North Tipperary • Portumna Bridge, North Tipperary • Killoloe Bridge, North Tipperary
	Tunnel		• Limerick Tunnel
Water	Inland Water ways	Pleasure Craft/Cruises	• Shannon River / Estuary • Lough Derg
		Pollution	
	Coastal	Car Ferry/ passenger Ferries	• Doolin to Aran Islands • Killimer to Tarbert Ferry • Foynes Ferries (Seasonal) • Cruise liners at Foynes

2.3 – Technological Hazards			
Category	**Type**	**Subtype**	**Local Hazard**
Industrial Accidents	Explosions		• Damage to Infrastructure • Personal Injuries/ fatalities
	Petrochemical Fires		• Personal Injuries, severe burns/ fatalities • Air Pollution
	Industrial Fires	LPG Tank Fire	
	Gas Emission		• Environmental Pollution • Plume
	Fluid/ Fuel Emission	Pipeline leak Fire Water Run Off	• Environmental Pollution • Plume
Explosions	Domestic	Natural Gas explosion	
	Bomb		• Terrorism
	LPG		• Restaurants • Nursing Homes/ Residential Units Domestic Houses
	Pipeline		• Bord Gais Pipeline
Fires			• Air Pollution
Building Collapse			• Hotel / Night Club, factories, Sports Venues, Musical Venues, Apartment Blocks Nursing Homes and Hospitals
Hazardous substance		Accident at site	• Seveso Sites
		Transportation accident	• Hazmat on roads
		Weapons	• Terrorism
	Biological	Leak/Weapons	
	Radiological	"Dirty Bomb"	• Terrorism
		Industrial Accident	
		Health facilities	• HSE Acute Hospitals • Private Hospitals
Pollution/Contamination	Air/Water Pollution		• Fire Water Run Off • Chemical Incident Near Water Course
	Extractive Mining sites	Category A Extractive Sites	• Aughinish Alumni Co. Limerick • Lisheen Mines • Silvermines Co. Tipperary

Table 2.4 Civil Hazards			
Category	**Type**	**Sub-type**	**Local Hazard**
Civil Disorder/ Disturbance	Protest Rioting		• Shannon Airport • Limerick Prison
Major Crowd Safety	(Movement, crushing etc.)	Pop Concerts Sports Events Fireworks displays Air shows	• Thomond Park • University Arena • Gaelic Grounds • Limerick Racecourse • Semple Stadium • Thurles Greyhound Stadium • Cusack Park • Shannon Airport
Loss of Critical Infrastructure	Energy and Power Supply	Electricity	
		Natural Gas	• Bord Gáis pipeline
		Fuel Oil	
		Communications	• Eircom network, mobile phone networks
Food Situation Crisis		Food Contamination Drought	• Multiple casualties/ fatalities
Water Supply		Shortage/ Contamination Freezing /Flooding	• Multiple casualties/ fatalities
Epidemics and pandemic		Communicable diseases	• Influenza pandemic • Respiratory Pandemic / Epidemic
Animal Disease		Foot & Mouth Avian Influenza	
Terrorism	Bombs	Car-bombs	• Terrorism
		Bombs in buildings	• Terrorism
		Fire-bombing	• Civil disorder
	CBRNE		• Terrorism
	Disruption	Bomb scares	• Terrorism

Stage 3: Risk Assessment

The next stage of this process is to consider the overall risks presented by these hazards. Risk assessment starts with an examination of the impact (severity of consequences to life and health, property and infrastructure, and the environment – see Table 4.1) of the hazards identified. The likelihood (probability) also has to be considered (see Table 4.2) and the resulting judgement recorded on a risk matrix in the next stage. The basis for making this judgement is set out on the individual hazard record sheet, and includes sources which influence the judgement (e.g. national/level intelligence and advice from available centres of expertise, information from risk holder/risk regulator).

A five-point scale is used for categorising both impact and likelihood, ranging as shown in the risk matrix. In considering the potential impact of a hazard, it is relevant to take two factors into account, - the type or nature of the impact, and the scale. The type or nature of impact may be considered in three fields:

- Impact on life, health and residual welfare of a community
- Social/environmental impact. Social impact may be thought of in terms of disruption/displacement of people affected by the event, while environmental is impact on the physical area
- Economic impact in terms of costs of property/ infrastructure damage as well as recovery costs or loss of economic production.

A simple approach to assessing the likelihood is used, expressed in Terms of Probability of an event occurring.

IMPACT

Ranking	Classification	Impact on life and health
1	Minor	Single severe damage, serious injury
2	Limited	Single death, a few serious injuries
3	Serious	A few deaths (<5), several serious injuries (20), up to 500 evacuated
4	Very serious	5 to 50 deaths, up to 100 serious injuries, up to 2000 evacuated
5	Catastrophic	>50 deaths, injuries in hundreds, more than 200 evacuated

LIKELIHOOD

Ranking	Classification	Likelihood
1	Extremely Unlikely	Less than once per 1000 years
2	Very Unlikely	Once per 100-1000 years
3	Quite Unlikely	Once per 10-100 years
4	Likely	Once per 1-10 years
5	Very Likely	More than once a year

Hazards are measured by judging the IMPACT of an event against the LIKELIHOOD of this event taking place. The hazards are detailed in the tables below:

Natural (Reference = NM)							
Ref.	**Category/ Sub-category**	**Hazard/Threat**	**Potential Outcome description**	**Relative Risk areas of Ireland/ Historical Evidence**	**Likelihood**	Impact	Risk Rating
NM1	Meteorological	Storm/Gale Both coastal and inland areas can be affected by high winds	Likely damage to property. Displacement and/or fatalities may occur.	All counties.	Likely	Serious	Planning and preparedness
NM2	Meteorological	Heavy Snow	Roads inaccessible Road Traffic Accidents Hypothermic patients	All counties 28/02/18 to 4/03/18 Storm Emma Significant snowfall widespread across the Country Winter 2010/2011 Heavy snow falls in some Counties & freezing conditions.	Likely	Serious	Planning and preparedness
NH3	Hydrological	Flooding (coastal/inland)	Displacement of communities Possible loss of life Possible Contamination of Drinking Water Public Health Risks	10/2019: Storm Lorenzo Flooding in North West 26/07/2013 & 5/08/2014 Letterkenny General Hospital 2009, 2013, 2014, 2017, 2018 & 2020 All counties Severe Flooding in West mostly along the Shannon	Likely	Serious	Planning and preparedness

				route in Leitrim, Roscommon, Galway, Clare, Limerick			
NG1	Geological	Landslide /Tsunami /Earthquake		Peat & Foresty Landslide Ballybofey Co. Donegal 2020 Bog Landslide Connemara Co. Galway 2016 Poullathomas Landslide, Mayo 2003 Derrybrien Landslide Co. Galway Arigna/Geevagh Landslide 2008 Tusanami Indonesia 2004 Tusnami Japan 2011 Meenbog Windfarm, Donegal November 2020	Extremely Unlikely	Catastrophic	Extendibility Zone

Transport (Reference = TR)							
TR1	Aviation	Air/Airport Accident	Possible to result in large number of casualties/fatalities	Airports: Shannon, Inverin, Sligo, Knock, Donegal Derry airport is also in close proximity. Airport Examples: Plane Crash 2P^{ndP}	Unlikely	Catastrophic	Planning and preparedness

				Futura Airlines crash Shannon Airport 3rd December 2000 November 2002, Inverin Airport Plane Crash 5P^{thP} July 2007 Cork Airport February 2011			
TR2	Road	Major car or bus accident	Multiple casualties and loss of life	All roads Examples: Gortahork 16/6/2006 Clarecastle 23/9/2007 Carrick-on - Shannon 3/10/2007 2010 Glasmullen Co. Donegal 8 fatalities 2012 Castleogry, Killybegs. 52 people on the bus all transferred to LGH for assessment	Likely	Very Serious	Planning and preparedness
TR 3	Rail	Train (passenger /freight) crash	Likely to result in a large number of casualties and/or fatalities. Possible evacuation/ displacement of local communities	Sligo Roscommon Leitrim Mayo Galway Clare Limerick North Tipperary Example: Claremorris Train Crash	Unlikely	Very serious	Planning and preparedness

				September 1989 Ballyneety, Limerick Bus Crash February 2018			
TR4	Water	Ship/boat/ ferry accident	Likely to result in a large number of casualties and/or fatalities	All counties Ferries/passenger crafts/ ships Galway Coast Bay, Lough Corrib & River Shannon	Unlikely	Very serious	Planning and preparedness

Technological (Reference = TE)							
TE 1	Fire/Explosion	Residential buildings, large offices, social /entertainment centres, hospitals, residential homes	Likely to result in large number of casualties and/or fatalities Air Pollution	All counties 2021 Glenisk's organic yoghurt factory in Killeigh, near Tullamore Extensive Fire destroys plant No loss of life or significant casualty load 1999 Fire Cow Comforts Plant Belmullet Co. Mayo Full evacuation of local Hospital required	Unlikely	Very serious	Planning and preparedness
TE 2	Fire/Explosion	Hazardous sites: Seveso sites	Potential casualties and fatalities within immediately affected area (1-3 kms). Evacuation of surrounding areas. Air Pollution	8 Upper Tier SEVESO sites: 9 Lower Tier Seveso Sites	Unlikely	Very serious	Planning and preparedness

TE 3	Fire/Explosion	Gas/natural gas/fuel/ethylene pipeline	Potential casualties and fatalities within immediately affected area 1-3kms. Evacuation of surrounding areas. Air Pollution	All counties	Very unlikely	Catastro phic	Planning and prepared ness
TE 4	Structural collapse	Building, bridge.	Potential casualties, fatalities and missing people	All counties Lennane Bridge Collapse	Unlikely	Very serious	Planning and prepared ness
TE 5	Hazmat (Chemical + Biological)	Release of harmful substances / Transport of Harmful Substances / Deliberate Release	Potentially large number of casualties. Evacuations may be required.	All counties	Unlikely	Very serious	Planning and prepared ness

TE6	Radiological	Accident at storage site, Accident during transport, Dirty bomb	Large number of casualties/fatalities, Evacuations of vulnerable people	Radiological sites area and local effects in many parts of Ireland. Examples: University Hospital Galway, Limerick Regional Hospital	Unlikely	Very Serious	Planning and preparedness
TE7	Nuclear	Radioactive substance release from nuclear reactor site**.** Could result in a wide area of Ireland being affected.	Large number of people affected, but fear and worry may be main consequences.	All counties	Unlikely	Very Serious	Planning and preparedness

Civil (Reference = C)							
C1	Civil disturbance	Rioting Likely to involve a large number of people resulting in large scale damage, fighting / disorder.	Likely to be multiple injuries resulting in hospitalisation	All counties: Large Crowd events, contentious situations	Likely	Very Serious	Planning and preparedness
C2	Crowd safety	Large crowd events	Potential large numbers of casualties/fatalities	Sports, entertainment events in all counties 2019 Donegal Rally 23rd June – 1 fatality 2019 April Letterkenny Swimming pool contamination 2012 - S*WEDISH HOUSE MAFIA Concert Phoenix Park* Thugs run riot - three drug deaths, nine stabbings over 30 arrests	Unlikely	Very serious	Planning and preparedness
C3	Loss of critical infrastructure	Water, Electricity, Gas, Fuel shortage, Communications	Potential casualties among most vulnerable people	All counties	Likely	Very Serious	Planning and preparedness
C4	Mass Shooting	Involves an unknown person or persons at large in the community with the intent of indiscriminately killing /seriously injuring people.	Likely to be fatalities and injuries resulting in hospitalisation.	All counties	Unlikely	Very Serious	Planning and preparedness

C5	Food/water contamination	Localized outbreak of food / water poisoning, examples include E Coli, Salmonella. Domestic and industrial water supply affected.	Impact on health with number of casualties presenting, may be fatalities	All counties. Examples: Vtec Outbreak Aghamore Mayo 2015 Crypto Outbreak Galway 2007 Ecoli Outbreak, Galway Sept. 2007	Likely	Very serious	Planning and preparedness

C6	Communicable Disease	Communicable Disease Examples include Carbapenemase producing Enterobacterales (CPE) which is currently a National Public Health Emergency, Legionella, Meningitis, Measles, TB, in hospital, school, prison	Localised outbreak of a disease that would cause a number of casualties with a possibility of some fatalities	All counties	Likely	Serious	Planning and Preparation
C7	Water Contamination	Likely to affect domestic and industrial supplies of water	Potential impact on health with the possibility of some fatalities	All counties Example: Crypto Outbreak Galway 2007	Likely	Serious	Planning and Preparation (Interagency would be Prevent and Mitigate- Security services)
C8	Flu Pandemic	Pandemic likely to occur in two waves, each lasting 12	One quarter of the population could be affected. High	National	Unlikely	Catastrophic	Planning & Preparedness

		weeks, overwhelming health and other services.	number of cases and consultations. Clinical attack rate of 35%, mortality assumption of 0.37-2.5%. Age range vulnerability - all ages, including children, likely to be affected.				
C9	Epidemic flu	Likely to be of much greater severity than the usual seasonal flu.	Significant increase in G.P. consultations for new episodes of flu-like illness.	All counties	Likely	Serious	Planning and preparedness
C10	Emerging public health threats	Severe respiratory infections e.g. SARS-Co-V2 (the causative virus for COVID-19)	Likely to cause a large number of casualties and fatalities	All counties	Unlikely	Very serious	Planning and preparedness
C11	Public Health issue at airports or ports	Infection or illness. Large number of people arriving at either airports or ports	Impact on health with number of casualties presenting	All ports and airports	Likely	Very Serious	Planning and preparedness

The following eleven scenarios were selected to provide a good basis for development of an all-hazards major emergency plan for the Emergency Management West Region:

1. **Extremes of Weather**
2. **Flooding**
3. **Landslide/Tsunami/Earthquake**
4. **Aircraft Incident**
5. **Major Road Traffic Accident / Hazmat**
6. **Rail Incident**
7. **Marine Incident**
8. **Large Building Fire**
9. **Hazardous Material Incident**
10. **Crowd Incident**
11. **Respiratory Pandemic / Epidemic**

HAZARD RECORD SHEET 1 EXTREMES OF WEATHER

HAZARD CATEGORY	SUB-CATEGORY
Natural	Severe Weather Event
Hazard Description	**Hazard Location**
An extreme weather event or prolonged instance of inclement weather	Mid-West (Clare Limerick North Tipperary)
Date Reviewed:	**Review Due:**
June 2024	June 2025

1. Overview of Hazard

Although Ireland's climate is generally moderate, severe weather events do occur.

An extreme storm could have the consequences of flooding, landslides, damage to properties and infrastructure or even fatalities. Storms with gale force winds are a regular occurrence in the western region.

An extended cold spell is possible in Ireland during winter months, expected impacts as follows:

- Icy roads would have an impact on infrastructure
- water distribution system would be severely compromised resulting in a prolonged period of water shortages and repair
- severe cold would have an impact on over ground power transmission systems
- elderly persons would be particularly at risk
- lack of water for firefighting purposes

During summer months a prolonged heat wave may occur. Drought conditions could impact upon water supply reservoirs and animals.

2. Key Historical Evidence

Storms in Ireland:

- 2021 December, Storm Barra, sustained winds of 104 km/h with gusts of 135 km/h recorded, fallen trees, damaged electricity lines and floods, work, education and childcare closures for two days.
- 2021 November, Storm Arwen, sustained winds of 96 km/h with gusts of 130 km/h recorded in Ireland, 1 fatality in Northern Ireland and 2 in Great Britain.
- 2020 August, Storm Francis, sustained winds of 80 km/h with gusts of 96 km/h recorded, flooding in Cork (significant damage to shops and properties), 37 people evacuated from flooded area in Northern Ireland.
- 2020 March, Storm Jorge, sustained winds of 100 km/h with gusts of 133 km/h recorded, power outages, overturned truck in Galway (no casualties).

- 2019 October, Storm Lorenzo, sustained winds of 89 km/hr with gusts of 107 km/h recorded, substantial flooding in Donegal, power outages.
- 2018 September, Storm Ali, gusts of 143km/h were recorded resulting in fallen trees, power supply interruptions and structural damage – 2 fatalities.
- 2018 February/March, Storm Emma, sub-zero temperatures and snow with high winds creating blizzard-like conditions. Widespread disruptions to roads, rail and air travel, with work and school closures – 42 fatalities across Europe (18 in Poland).
- 2017 October, Storm Ophelia, sustained winds (10-minute mean) of 111km/h and gusts of up to 156km/h resulting in costal damage, fallen trees, structural damage, power supply interruption and flooding – 3 fatalities.
- 2014 January & February, Storm Darwin, high winds and spring tides resulted in widespread costal damage, falling trees, structural damage, power supply interruption and flooding, widespread damage and disruption to services caused.
- 2010 & 1982, Severe snow and frost
- 1996 August, Hurricane Charlie, East and Southeast of country affected by flooding and loss of power transmission lines.
- 1974 January, 2 storms, gust of 124 m.p.h. was recorded at Kilkeel in County Down, many thousands of trees blown down, extensive damage to roads and vessels, some coastal roads destroyed, power & telephone outages (for over a week in some areas), island of Innisboffin off County Donegal was 'cut in two' by waves sweeping over its central area – 5 lives lost and many minor injuries reported.
- 1961 Sept, Hurricane Debbie, winds reached hurricane force resulting in 12 Fatalities and widespread damage
- 1839 January, winds reached hurricane force and between a fifth and a quarter of all houses in Dublin had damage ranging from broken windows to complete destruction.

Storms in Other Countries

S. England: 1987, Hurricane and storms, 20 fatalities.

West Country, UK: 1990, Gales and floods, 45 fatalities.

Belgium: 1990, Severe storms, 19 fatalities.

Severe Cold in Ireland and Other Countries:

Ireland: 2009 – 2010, prolonged cold spell

Ireland: 1970's, a series of cold winters experiences, a number of elderly fatalities.

Ireland: 1947, Prolonged snow storms.

India: 2006, 1 week of prolonged cold temperatures, 200 fatalities.

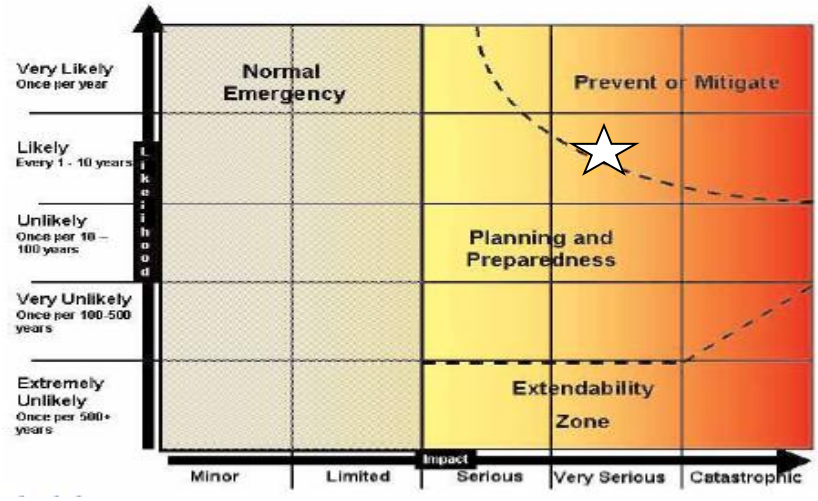
Baltic states: 2006, prolonged cold weather, 30+ fatalities.

USA: 2004, North & South Carolina, 50+ fatalities.

3. Assessment of Impact and Likelihood

Hazard	Impact				Likelihood
	Human Welfare	**Environment**	**Physical Infrastructure**	**Social**	
Extremes of Weather	Very Serious - 5-50 fatalities, up to serious 100 injuries depending on number of people involved and the nature of the incident.	Minor - No contamination, localised effects.	Very Serious -	Serious - Community functioning poorly, minimal services available	Likely (Once per 1-10 years)

4. Position on Risk Matrix



5. Prevention/Control/Mitigation Measures in Place

- Met Éireann Forecasting
- 'Be Winter Ready' and 'Be Summer Ready' campaigns
- HSE Severe Weather Planning Guidance for Services
- Local Authority Severe Weather Plans
- Local Authority Salting / Gritting Plans – Icecast System
- Local Authority plans for emergency accommodation centres with necessary equipment and supplies.
- Use of water tankers for water distribution
- Road Design

6. Risk Management Approach: Prevention/Control/Mitigation Measures Required

- Ongoing development of plans for emergency accommodation centres with necessary equipment and supplies
- Community Resilience Planning
- Coastguard / Air Corp Assistance
- Transportation requirements of all Agencies – Vehicles
- Business Continuity Planning to ensure that personnel can attend work / do not have to attend work
- Review Storage of Salt / Grit Supplies – (National / Regional / Local)

HAZARD RECORD SHEET 2 FLOODING

HAZARD CATEGORY	SUB-CATEGORY
Natural	Hydrological
Hazard Description	**Hazard Location**
Urban flooding in areas susceptible to flooding	Mid-West (Clare Limerick North Tipperary)
Date Reviewed :	**Review Due:**
June 2024	June 2025

1. Overview of Hazard

A number of rivers flow through the Mid-West including the Maigue, Feale, Suir, Fergus, Deel, Mulcair, and most notably, the River Shannon. Lakes, which have a history of flooding in the region, are Lough Derg (connected with the River Shannon) and Lough Girroga, Ennis (connected to the Clare river network). An overview of historical data has identified areas of the region are susceptible to flooding caused by the combination of some/all of:

- Heavy rain
- Prolonged rainfall
- Tides (Spring)
- Low atmospheric pressure
- Winds – W, SW, WSW (in the case of Limerick City and Ennis, Co. Clare)

Significant recent floods in the region took place during November 2009 and February 2020.

November 2009, County Clare experienced severe flood incidents throughout the county. Rainfall for the month of November in Ennis was approximately five times the previous average.

- 169 houses and several businesses were affected, in some cases the occupants had to be evacuated
- Business properties and stock damaged
- Agriculture livestock cut off from fodder supplies
- Roads became impassable, temporarily blocked and ultimately suffered severe damage from flood waters
- Bridges were subject to previously unknown water pressures and required constant supervision to ensure their structural integrity.

February 2020, An extremely wet month had left rivers high across wide areas in particular along the Shannon river basin, prompting some evacuations.

- The provisional rainfall totals for the period 1 to 24 February 2020 was at 225% of Ireland's average.
- Newport, County Mayo, recorded 283.5 mm of rain during this period while the highest daily rainfall total was 51.5 mm at Knock Airport, County Mayo.
- Some evacuations took place on 23rd Feb 2020 as water from the Shannon crept closer to the village of Springfield, Clonlara in County Clare. Sandbags and pumping stations were delivered to ten houses in the village.
- Troops had been assisting in erecting flood defences in the Castleconnell area of County Limerick, on the banks of the River Shannon.

2. Key Historical Evidence

Irish Examples:

- February 2022 – Storms Francis & Ciara
- February 2020 – Heavy rainfall in parts of the country triggered minor flooding on roads, with some of the worst reported near Ballymote, County Sligo and near Inagh in County Clare.
- August 2017 – Inishowen Flooding, Donegal
- Winter 2015/16 – In December 2015 to January 2016, protracted rainfall events and storms led to flooding in a number of areas. In Springfield, Clonlara, Co. Clare, a total of 14 houses were directly affected by these flood events – either by way of being flooded or under threat of flooding or by way of being isolated due to flood inundation of lands surrounding them. This involved a coordinated response by Clare County Council, Clare County Fire & Rescue Service, Clare Civil Defence, and the Defence Forces. Other impacts of this severe weather was protracted road closures throughout Co. Clare and 3 bridges were seriously compromised or demolished.
- September 11th 2015 – Intense Rainfall event, Miltown Malbay, Co. Clare
- February 2014 – Multiple incidents of flooding in many counties due to severe weather incidents.
- March 2013 – Cork City – Flooding
- Various 2012 – Cork County – Flooding
- November 2009 – Flooding in Cork (City & County) and along River Shannon affecting parts of Co. Clare & Co. Limerick
- August 2008 – Newcastle West, Co. Limerick
- November 2004 – Clonmel – Flooding/Heavy Rain
- November 2002 – Dublin – Flooding

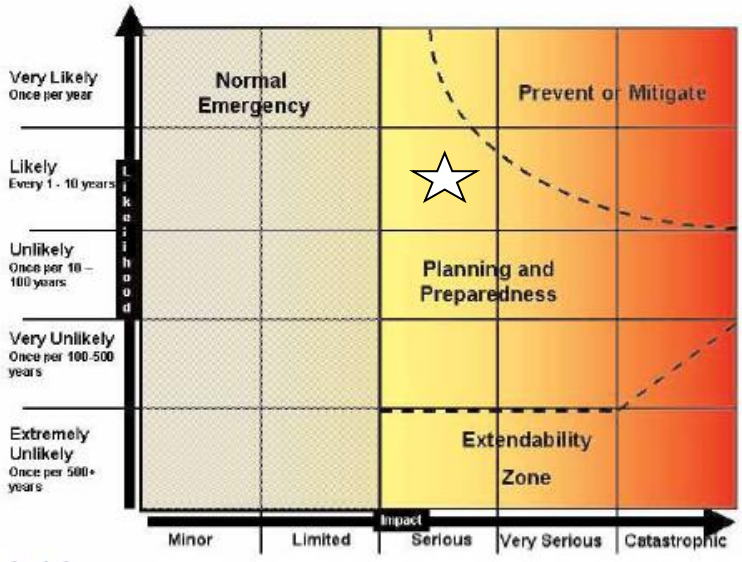
International Examples:

- 2020 – Heavy rain from Storm Ciara caused flooding in England, Scotland and Ireland. Strong winds of up to 150km/h from Storm Ciara – known as Sabine in Germany and Switzerland and Elsa in Norway – left thousands of homes without power, and caused hundreds of flights to be grounded and rail services cancelled in Germany, France, Belgium, the Netherlands and the UK. There was around 550 properties in England affected by flooding as a result of the severe weather.
- 2012 – United Kingdom flooding incidents costing £1.2 billion
- 2007 – Gloucestershire, England – Flooding/Heavy Rain
- 2002 – Prague – Heavy Rain

3. Assessment of Impact and Likelihood

Hazard	Impact				Likelihood
	Human Welfare	Environment	Physical Infrastructure	Social	
Major Flooding in Urban/ Residential area	Serious - Evacuation, disruption to access/egress to/from homes & businesses, restrictions on emergency services, disease, drowning risk	Serious - Contamination by sewage, risk of contamination to public water supply	Serious - Water damages to property, Traffic congestion or blockages, contamination of water and pipe networks	Serious: Community only partially functioning, some services available	Major flooding – Likely (once per 1-10 years)

4. Position on Risk Matrix



5. Prevention/Control/Mitigation Measures in Place

- Local Authority development controls, e.g. County Development Plans, flood impact assessments.
- Local Authority flood Response Plans
- Local Authority maintenance works e.g. clearing of gullies, storm drains, shores, roads and bridge culverts where required prior to onset of severe rain.
- Maintenance of adequate stocks of sandbags and flood barriers.
- Ensure measure availability of stocks of appropriate signs, including flood signs, indicating roads closed etc. and notification of An Garda Síochána as to their location and means of access etc.
- Flood mapping of flood risk areas is currently performed by the OPW and is available to the public via the website www.floodinfo.ie
- Information on protecting your health in the event of flooding can be found here: https://www.hse.ie/eng/services/list/5/publichealth/publichealthdepts/extreme/flood%20risks.html

6. Risk Management Approach: Prevention/Control/Mitigation Measures Required

- Ongoing development of flood response plans – guidance from National Directorate
- Work with OPW to collate data and anticipate future flood risks.
- Develop plans for emergency accommodation centres with necessary equipment and supplies.
- Community Resilience Plans: National → Regional → Local
- Investigate provision of additional equipment and training for responding to flooding emergencies. E.g. boats, survival equipment, rapid water rescue etc.
- Involvement of Coastguard in training.

HAZARD RECORD SHEET 3 Landslides/Earthquakes/Tsunami

HAZARD CATEGORY	**SUB-CATEGORY**
Natural	Geological
Hazard Description	**Hazard Location**
Landslides/Earthquakes/Tsunami	Mid-West (Clare Limerick North Tipperary)
Date Reviewed:	**Review Due:**
June 2024	June 2025

1. Overview of Hazard

According to Geological Survey Ireland, historical records and geological evidence indicate that, while unlikely, the Irish coast is vulnerable to tsunamis from distant earthquakes and submarine landslides. The Lisbon earthquakes of 1755 and 1761 caused tsunamis that reached Ireland. Submarine landslides mapped by INFOMAR on the Rockall Bank probably caused tsunamis although coastal effects have not been recognised. Likely worst case tsunamis around Ireland would be similar to the level of coastal flooding seen during storm surges, but with greater momentum and less time to react. Tsunami is included in the National Major Emergency Management guidelines, with the Department of Communications, Climate Action & Environment as the Lead Government Department. Tsunami was added to the National Risk Matrix in 2017.

The term "landslide" describes a wide variety of processes that result in the downward and outward movement of materials under the force of gravity; this includes materials like rock, debris, earth, mud and peat, or a combination of these. Ireland's location, terrain and climate result in landslides occurring mainly in areas with steep slopes where rock meets the surface and peat covers the terrain. It does not require spectacularly huge landslide events to cause serious disruption or loss of life. Relatively small landslides in terms of the volume of material displaced can damage bridges and roads, and also cause injury and death.

The Irish National Seismic Network (INSN) is a network of seismometers installed across Ireland to detect earthquakes. Major investment expanded the network in 2018 resulting in more stations, greater coverage and more accurate recording of earthquakes in Ireland.

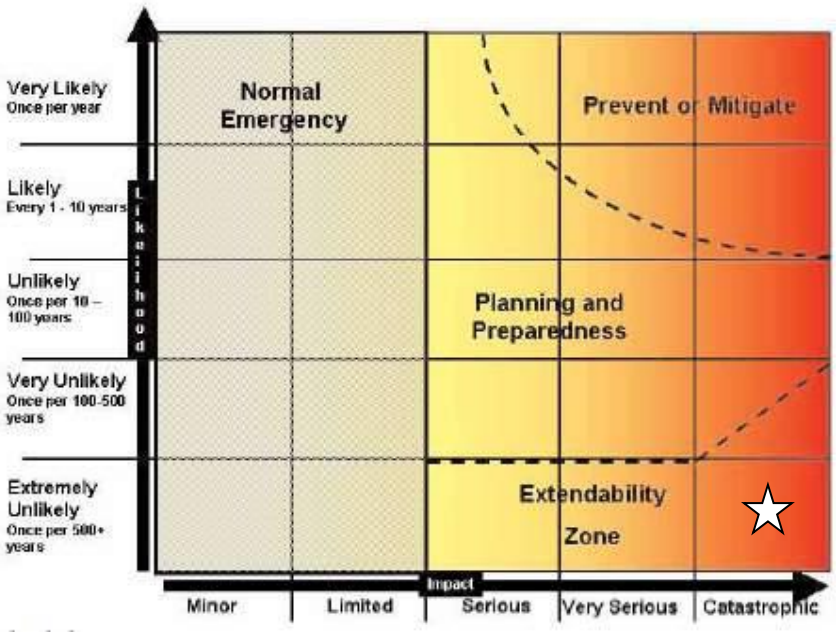
2. **Key Historical Evidence**

- 2016, June, Clifden, Co Galway, mudslide causing closure of N59
- 2011, Japan, magnitude 9.0–9.1Mw undersea megathrust earthquake causing a tusnami resulting in 19,747 fatalities and 6,157 non-fatal injuries; estimated cost of damage $360 billion USD
- 2009, Donegal, Glencolmcille mudslide covering 800m of country road, cutting of 20 families
- 2008 Arigna/Geevagh Landslide, tons of debris down through forest, covering or sweeping 50-foot trees away
- 2004, Indonesia Tusanami, magnitude 9.1–9.3Mw undersea megathrust earthquake causing a tsunami resulting in 227,898 fatalities
- 2003, Mayo, Poullathomas Landslide, 200,000 cubic metres of debris swept down the mountainside leaving locals homeless, killings hundreds of livestock, destroying the local graveyard and sweeping five human remains out to sea.
- 2003, Galway, Derrybrien Landslide, dislodged 450,000 cubic metres of peat, and causing disruption to water supply of local townland and the perishing of 50% of fish in the lake.

3. Assessment of Impact and Likelihood

Hazard	**Impact**				**Likelihood**
	Human Welfare	**Environment**	**Physical Infrastructure**	**Speed of Development / Escalation**	
Landslides/ Earthquakes/T sunami	Loss of life	Pollution/health risks to Public and Rescue Personnel from sewerage systems, fuel storage tanks and other sources of pollution	Major damage to property and surrounding land. Structural damage/closure of bridges and roads/rail lines and other infrastructure. Landslides	Slow	Evidence suggests that extremely unlikely.
	Serious	Serious	Catastrophic		Extremely unlikely

4. Position on Risk Matrix



5. Prevention/Control/Mitigation Measures in Place

- Existing Major Emergency Plan
- The Irish National Seismic Network (INSN)
- The Geological Survey Ireland (GSI)
- Public announcements

6. Risk Management Approach: Prevention/Control/Mitigation Measures Required

- More training required for emergency personnel on how to deal with such an event.
- Environmental impact assessments to be completed before planning permission granted for new developments

HAZARD RECORD SHEET 4 AIRCRAFT INCIDENT

HAZARD CATEGORY	SUB-CATEGORY
Transportation	Aviation
Hazard Description	**Hazard Location**
Aircraft Collision/Loss	Mid-West (Clare Limerick North Tipperary)
Date Reviewed:	**Review Due:**
June 2024	June 2025

1. Overview of Hazard

Shannon Airport

Shannon Airport opened its doors in 1945 and has continually grown and developed over the years. Shannon Airport is 24 kilometres north of Limerick city and 22 kilometres south of Ennis town. The asphalt runway is 3199 metres long and 45 metres wide with 8 metre shoulders each side. It is known as a 'Category 2' in the airline sector and have 30 Aircraft stands on-site. Shannon Airport is a dedicated airport for emergency landings for the eastern half of the North Atlantic airspace. Ireland's longest runway, combined with 24 hour unrestricted operations with no slots or curfews.

The annual number of passengers recorded in 2020 was **352,403.** The growth of Shannon Airport is ongoing and remains a vital piece of infrastructure for the social and economic benefit of those living, working and holidaying in the Mid-West and West of Ireland.

Air Ambulance Helicopter Transportation has increased significantly at the major Receiving Hospital in the Mid-West. Helicopter Transport to large crowd events has also increased.

Approximately 80% of all aviation accidents occur shortly before, after or during take-off or landing and are typically the result of human error and/or unregarded technical problems within an aircraft. An aircraft collision with other aircraft, maintenance vehicles, the ground or buildings are the most frequent type of collision involving aircraft at or near airports.

An accident survey of 2,147 aircraft accidents worldwide from 1950 through 2004 determined the causes to be as follows:

- 45% pilot error;
- 33% undetermined or missing in record;
- 13% mechanical failure;
- 7% weather;
- 5% sabotage (bombs, hijackings etc);
- 4% other human error (air traffic control, improper loading, improper maintenance, fuel contamination etc);
- 1% other cause.

A study by Boeing (1996 to 2005) determined the primary cause of airline hull loss accidents to be:

- 55% Flight crew error;
- 17% Airplane;
- 13% Weather;
- 7% miscellaneous/other;
- 5% Air Traffic Control (ATC);
- 3% Maintenance.

There is little evidence to suggest that an accident at Shannon Airport will be because of anything different and the dangers associated with weather conditions, which can only be exacerbated given its status as a dedicated airport for emergency landings for the eastern half of the North Atlantic airspace.

The most serious accident would be a collision of 2 aircraft on the runway. However given the current schedule of flights the chances of this type are extremely remote. A single collision on landing/ take off is therefore considered the most serious hazard and could result in large numbers of fatalities/ injuries with possible structural damage.

2. Key Historical Evidence

- 2017 Rescue 116 Coastguard, Black Sod, Mayo – 4 fatalities
- 2011 Manx2 Commuter Flight, Cork Airport – 6 fatalities
- 2011 Aer Arann ATR 72-212, Shannon Airport – No casualties
- 1999 Aer Corp, Waterford – 4 fatalities;
- 1985 Air India Boeing 747, Off South Coast of Ireland – 329 fatalities
- 1968 Aer Lingus Flight 712, Tuskar Rock, county Wexford – 61 fatalities
- 1961 President Airlines DC-6b, Shannon Estuary – 83 fatalities
- 1960 Alitalia DC-6, Clonloghan, Co. Clare – 34 fatalities
- 1958 KLM Super Constellation, off the West Coast (after fuelling in Shannon) – 99 fatalities
- 1954 KLM Constellation, Shannon Estuary – 28 fatalities
- 1948 Pan-American Lockheed Constellation, Shannon Airport – 30 fatalities

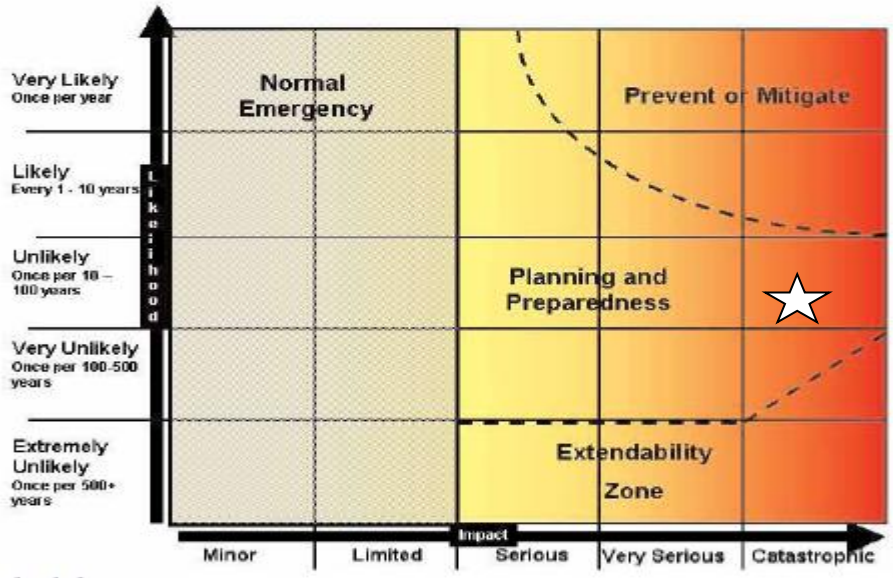
3. Assessment of Impact and Likelihood

Hazard	**Impact**				**Likelihood**
	Human Welfare	**Environment**	**Physical Infrastructure**	**Social**	
Catastrophic Mechanical Failure Mid-Air	Catastrophic - Death/Serious Injury *	None	None	Limited: Normal community functioning with some inconvenience	Unlikely (Once per 10 to 100 years)
Collision with Ground	Catastrophic - Death/Serious Injury *	Serious - Fire damage/ destruction	Serious - Impact/crash	Limited: Normal community functioning with some inconvenience	Unlikely

Fire and/or Explosion	Catastrophic - Death/Serious Injury *	Serious -Fire damage/ destruction	Serious - Impact/crash Debris	Limited: Normal community functioning with some inconvenience	Unlikely
Public Health Hazard	Catastrophic - Death / serious illness *	None	None	Limited: Normal community functioning with some inconvenience	Unlikely

* Dependant on aircraft type and occupancy / content

4. Position on Risk Matrix



5. Prevention/Control/Mitigation Measures in Place

The Irish Aviation Authority commits to maintain explicitly, safety standards which at least comply with the requirements of:

- Legislation in the Republic of Ireland
- The International Civil Aviation Organisation
- Eurocontrol
- The European Union (EU)
- The Safety Regulation Division of the Irish Aviation Authority
- Live exercise with principal response agencies and airport every 2 years
- ICAO Regulations
- Knowledge of flight paths

6. Risk Management Approach: Prevention/Control/Mitigation Measures Required

- Inter-PRA Cooperation and Training, Exercising.
- Measures to provide for clean-up and repair after an incident.

HAZARD RECORD SHEET 5 MAJOR RTA/HAZMAT

HAZARD CATEGORY	**SUB-CATEGORY**
Transportation	Road
Hazard Description	**Hazard Location**
Multiple Vehicle RTC	Mid-West (Clare Limerick North Tipperary)
Date:	**Review Date:**
June 2024	June 2025

1. Overview of Hazard

There is a total of 1,016km of National Primary routes through the region, as follows:

Local Authority	Motorway	Dual Carriageway	Single Carriageway	Total
Clare	21.200	20.518	193.416	235.134
Limerick City	-	-	7.640	7.640
Limerick County	21.374	2.470	167.576	191.419
Tipperary County	64.803	-	265.063	328.866

The national primary routes cater for 48% of all road traffic. The national primary routes throughout the region are:

N6 M7 / N7 M8 / N8 M18 / N18 N19 N20 N21 N24

N52 N62 N65 N67 N68 N69 N85

See Appendix 1 Road Network

There is a 675m road tunnel under the River Shannon.

There was an average of 142 fatalities per year on Irish Roads between 2018 and 2021.

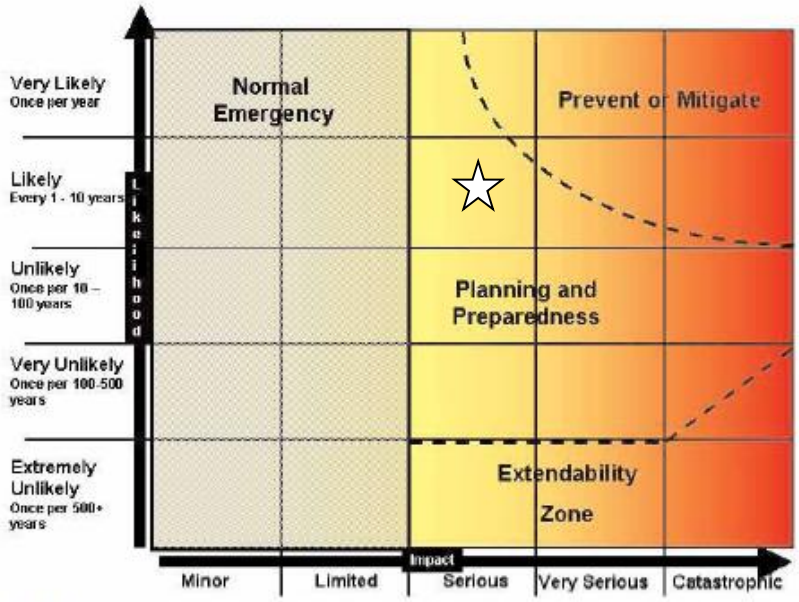
2. Key Historical Evidence

- 2018, School bus crash near Caherconlish, Limerick, no fatalities
- 2007, Wellington Road, Cork, bus crash, 40 casualties
- 2014, Knockaderry Hill, Farranfore, Co. Kerry, Bus Crash, 15 casualties
- 2010, Buncrana to Clonmany Road Crash, Donegal, 8 Fatalities
- 2007, M7 Motorway, Kildare, Multiple vehicle collision, 1 fatality, 30 casualties
- 2005, Kentstown, Navan, Co. Meath, Bus Crash, 5 fatalities, 40 casualties
- 2004, Wellington Quay, Dublin, Bus Crash, 5 fatalities, 17 casualties

3. Assessment of Impact and Likelihood

Hazard	**Impact**				**Likelihood**
	Human Welfare	**Environment**	**Physical Infrastructure**	**Social**	
Multiple Vehicle Collision / Bus Crash	Serious – Death/Serious injury, Mental health	Limited - Traffic Congestion	Limited - Damage to road surface or Boundary with Road	Limited: Normal community functioning with some inconvenience	Likely (Once per 1-10 years)
Fire	Serious – Death/Serious injury, Burns, Toxic poisoning	Limited – Fire damage, Smoke damage, Ground/Surface water contamination, Traffic congestion	Limited – Fire destruction, Fire damage, Smoke damage	Limited: Normal community functioning with some inconvenience	Likely

4. Position on Risk Matrix



5. Prevention/Control/Mitigation Measures in Place

- Irish Road Safety Week
- Garda enforcement of Traffic Law – New measures in recent years – Garda Traffic Corp established, Penalty points system introduced, random breath testing in place.
- Forensic collision investigators
- NCT and Road Safety Authority Vehicle testing and road side inspection programmes.
- Road Building & Maintenance Programmes – NRA & Local Authorities.
- Road Safety Officer appointed in each Local authority.
- Inter-Agency co-operation, training & exercising
- Involvement of Gardaí & Ambulance Service in Fire Service RTA Training Course.
- Inter-agency tunnel training and exercises
- Fire service training in dealing with Hazmat incidents.

6. Risk Management Approach: Prevention/Control/Mitigation Measures Required

- Inter-Agency agreements in response to Road Traffic Accidents
- Traffic Management Plan
- Knowledge of high accident locations
- Knowledge of level of hazardous material transported through county
- Fire Service equipped to manage accidents on motorways.
- Protocol for response to tunnel incidents.
- Driver Education
- Interagency cooperation, training and exercises.

HAZARD RECORD SHEET 6 RAIL INCIDENT

HAZARD CATEGORY	**SUB-CATEGORY**
Transportation	Rail
Hazard Description	**Hazard Location**
Derailment / Collision / Fire	Mid-West (Clare Limerick North Tipperary)
Date:	**Review Date:**
June 2024	June 2025

1. Overview of Hazard

The main Dublin-Cork/Limerick line passes through Tipperary and Limerick. There are also secondary rail links from Limerick to Nenagh and Limerick to Athenry. See Appendix 2 Rail Network.

Below is an overview of the rail activity on the Limerick Iarnród Éireann district

- Trains running 24/7, 363 days a year – mainly passenger
- Hourly service Dublin / Cork – 51 trains per day – 22,000 seats
- Limerick-Limerick Junction – 30 trains – 2 or 3 Railcar sets
- Limerick-Limerick Junction-Waterford – 2 trains per day
- Limerick-Ballybrophy – 3 trains per day
- Limerick-Dublin – 6 direct trains per day each way
- Limerick-Ennis-Athenry – 20 trains per day – 1800 seats
- Limerick Station – 64 Trains/day – 12,000 seat
- Freight trains transporting goods such as cement and timber also travel along rail lines through the region.

<u>Safety Risks include:</u>

- Level Crossings
- Derailment/Collision
- Bridge Strike
- Bridge Collapse
- Environmental – Severe weather, storms etc.
- Equipment failure
- Human error
- Potential damage to water supply, rivers or wildlife in the vicinity of an incident.
- Restricted access to incidents on the rail line.

2. Key Historical Evidence

Ireland

- Gorey, Co. Wexford 1975 – Under bridge strike, 5 fatalities
- Buttevant, Co. Cork 1980 – Derailment, 18 fatalities
- Cherryville, Co. Kildare 1983 – Collision involving two trains, 7 fatalities
- Claremorris, Co. Mayo 1989 – Derailment
- Knockcroghery, Co. Roscommon 1997 – Derailment
- Malahide Viaduct Accident 2009 – Viaduct Collapse
- Car Strikes Train at Lelev Crossing, Knockaphunta, Co. Mayo, June 2014
- Vehicle Struck by Train at Corraun, Co. Mayo, February 2014
- Vehicle struck by train at Cartron level crossing, Co. Mayo, August 2018

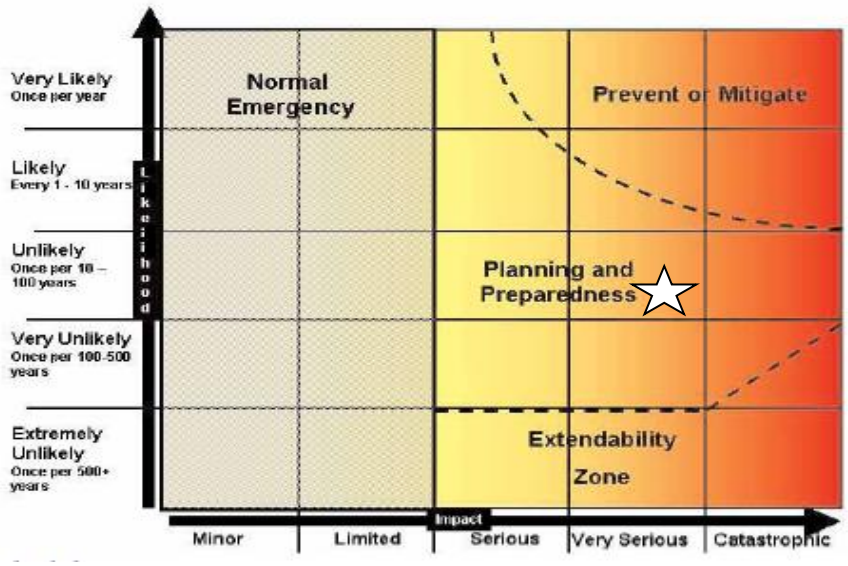
International

- Train derailment, Bavarian Alpine resort in southern Germany, June 2022, 4 fatalities, many injured.
- Vehicle drove onto rail line at level crossing, Hungary, April 2022, 5 fatalities.
- Commuter train crash, Germany, February 2016, 10 fatalities, 80+ injured.
- Santiago de Compostella train derailment, July 2013, 79 fatalities, 150+ injured.

3. Assessment of Impact and Likelihood

Hazard	**Impact**				**Likelihood**
	Human Welfare	**Environment**	**Physical Infrastructure**	**Social**	
Derailment/ Collision	Very Serious - Death / Serious Injury	Limited – Fuel Spill Soil Contamination Ground Water or Surface Water Contamination	Serious - Damage to rail line, structural collapse of bridge, closure of mainline	Limited: Normal community functioning with some inconvenience	Unlikely (Once per 10-100 years)
Fire	Serious – Death/Serious Injury, burns, toxic poisoning	Limited – Fire Damage Smoke Damage Deposition of Toxic Materials Soil Contamination Ground/Surface Water Contamination Fire Water Runoff	Serious – Fire destruction, fire/smoke damage, closure of mainline, traffic congestion	Limited: Normal community functioning with some inconvenience	Unlikely

4. Position on Risk Matrix



5. Prevention/Control/Mitigation Measures in Place

- Iarnród Éireann is licensed to operate by the Railway Safety Commission.
- Safety Management system in place in Iarnród Éireann.
- Railway Traffic monitored by Central Traffic Control, Connolly Station, Dublin.
- Electronic / Mechanical emergency controls in locomotives.
- Hold joint Interagency exercises with Iarnród Éireann – Table top/on site
- Rail Accident Investigation Unit

6. Risk Management Approach: Prevention/Control/Mitigation Measures Required

- Obtain suitable equipment to help the Fire Service respond to such an incident.
- Map access points for emergency services to the rail line.
- Continue identification of higher risk areas on the tracks & map bridges and crossings.
- Increase public awareness on the dangers of railway crossings.
- Malahide Viaduct Accident Investigation Report 2010
- Memorandum of Understanding with PRA's concerning access to railway lines
- Hold joint exercises with Iarnród Éireann – Table top and On-site

HAZARD RECORD SHEET 7 MARINE INCIDENT

HAZARD CATEGORY	SUB-CATEGORY
Transportation	Marine
Hazard Description	**Hazard Location**
Ship/boat incident on inland waterway or at sea	Mid-West (Clare Limerick North Tipperary)
Date:	**Review Date:**
June 2024	June 2025

1. Overview of Hazard

Examples of a marine incident on inland waterway or at sea include collisions, fire, vessel grounding, extreme weather, medical evacuations, unfamiliar or unskilled mariners with pleasure /charter craft, etc.

The Mid-West region includes the River Shannon and Lough Derg, the Shannon Estuary, the Atlantic Ocean to the west and Galway Bay to the north of County Clare. The total length of coastline in the region is 360km This consists of 192 km of Atlantic seaboard and an estuarial coastline of approximately 168 km.

The River Shannon and the Clare coastline is used by a large number of recreational craft. Shannon Ferries Ltd. operates a ferry crossing between Killimer, County Clare and Tarbert, County Kerry. Shannon Ferries Ltd. carries approximately half a million passengers per year, each of the ferries used by Shannon Ferries Ltd are capable of carrying 60 cars each. The Doolin Ferry Company operates a ferry service to the Aran Islands from Doolin Pier, Co. Clare carrying approximately 300,000 passengers annually.

Cargoes handled at the Estuary facilities typically consist of :

- Liquid Bulk Products including oils and chemicals
- Dry Bulk products ranging from fertilisers and animal feedstuffs to coal and construction materials
- Bulk products such as timber and steel

Cruise Liners berth at Foynes Port (150 – 450 Passengers).

Current ship movements amount to some 2,000 annually. Cargo throughput is in the order of 11.5 M tonnes.

Ships as large as 220,000 DWT regularly use the Shannon Estuary; the lower Estuary is capable of handling ships as large as 400,000DWT.

2. Key Historical Evidence

Ireland:

- 2020 Fatal Incident Involving Fishing Vessel FV Myia in Galway bay.
- 2018 Fatal incident Involving a Vessel off Portronan Donegal, 2 fatalities
- 2003, Off Rosslare Europort, Stena Europe ferry lost all power with 155 passengers and 65 crew aboard. The ship was adrift for three hours in winds of 35-45 knots.
- 1991, Dublin Bay collision between 2 cargo ships, 3 fatalities.
- 1986, Cork, Kowloon Bridge ran aground, major oil pollution.
- 1979, Whiddy Island, Bantry, oil tanker explosion, 50 fatalities.

UK:

- 1989, River Thames, pleasure boat collided with dredger, 51 fatalities.

Belgium:

- 1987, Zeebrugge Ferry capsized, 193 fatalities

Italy:

- 2012, Isola del Gigl, Italian Cruise Ship, Costa Concordia ran aground – 32 fatalities

EU:

- Key figures for 2020, Statistics on marine casualties and incidents which: involve ships flying a flag of one of the EU Member States; occur within EU Member States' territorial sea or internal waters, 38 fatalities, 46 very serious casualties, 675 persons injured.

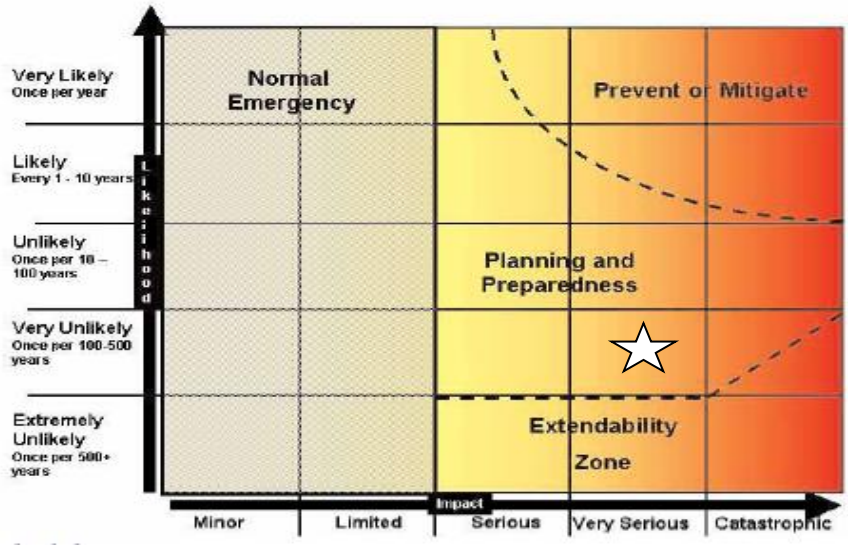
South Korea:

- 2014, 'Sewol' Ferry capsized off south coast of Korea with loss of 304 lives

3. Assessment of Impact and Likelihood

Hazard	**Impact**				**Likelihood**
	Human Welfare	**Environment**	**Physical Infrastructure**	**Social**	
Marine Incident	Very Serious Dependent on type of boat and capacity.	Very Serious - Heavy contamination if it involves cargo, localised effects of extended duration.	Serious – 3-10M Euros	Limited: Normal community functioning with some inconvenience	Very Unlikely (Once per 10 - 100 years)

4. Position on Risk Matrix



5. Prevention/Control/Mitigation Measures in Place

- Irish Port Safety Week
- European Maritime Safety Agency (EMSA)
- Marine Casualty Investigation Board (MICB)
- Marine Notices from the Department of Transport
- Marine safety procedures and protocols
- Maritime law
- Dublin Fire Brigade Marine Emergency Response Team available to region (Tasked by Coastguard)
- Shannon Estuary Anti-Pollution Team (SEA-PT)
- Shannon Foynes Port Company emergency plans
- Shannon Estuary Serious Incident and Major Emergency Strategic Co-Ordination Document
- Plan exercises involving coastguard and PRAs

6. Risk Management Approach: Prevention/Control/Mitigation Measures Required

- Further exercises involving coastguard and PRAs.
- Co-operation with and participation in any principal agency training, exercises and protocols that may be put in place in this regard.
- Ship firefighting training required for all responding officers and fire fighters.

HAZARD RECORD SHEET 8 LARGE BUILDING FIRE

HAZARD CATEGORY	SUB-CATEGORY
Technological	Fires
Hazard Description	**Hazard Location**
Fire in a large building housing a large number of occupants.	Mid-West (Clare Limerick North Tipperary)
Date:	**Review Date:**
June 2024	June 2025

1. Overview of Hazard

This individual hazard record sheet assesses the risks which could develop should a fire occur in a large building such as a housing complex, nightclub or hotel. There are numerous hotels in the region with nightclubs and/or holding public dance licenses, with a number of other premises types holding public dance licenses. Some premises may hold over 1000 people at any one time.

2. Key Historical Evidence

Irish Examples:

- 2015 Dublin, Carrickmines Halting Site,10 fatalities
- 1981 Dublin, Stardust nightclub fire. 48 fatalities.
- 1980 Bundoran, Central Hotel fire. 10 fatalities.

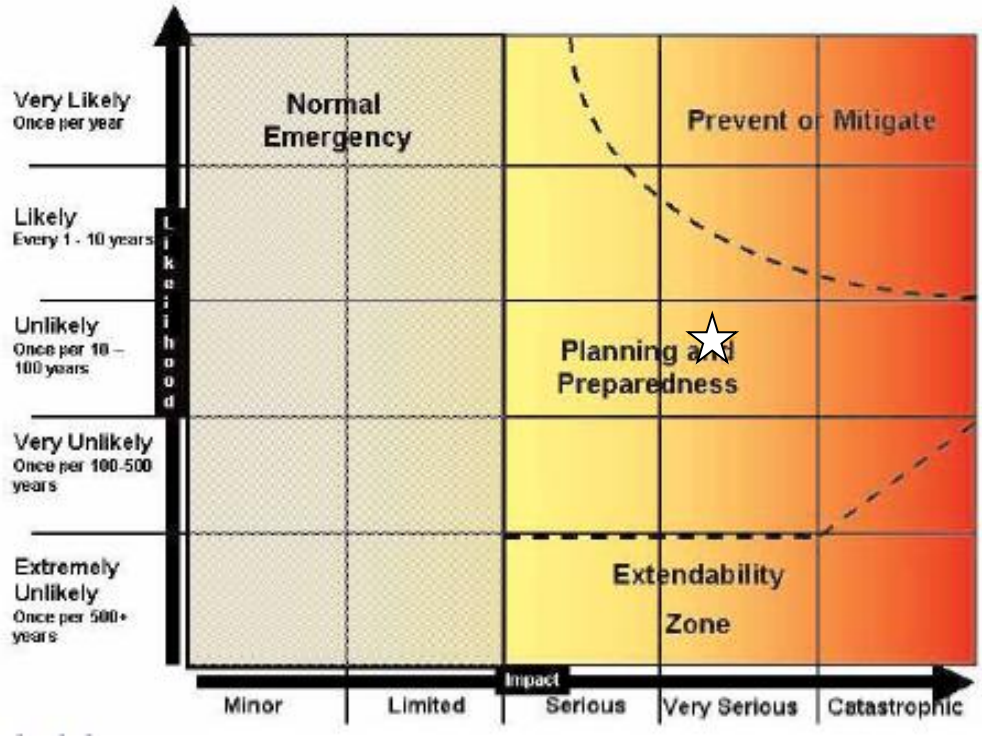
International Examples:

- 2022 Bronx apartment building fire, 19 fatalities (including 9 children)
- 2020 ICU Hospital Fire Piatra Neamt, Romania, 10 fatalities
- 2017 Grenfell Tower, UK, Residential Building, 72 fatalities, 70 injured
- 2013 Rio Grande do Sul, Brazil, Nightclub – 242 fatalities
- 2013 Novgorod region, Russia, Nursing Home, 37 fatalities
- 2009 Perm, Russia, Nightclub fire, 113 fatalities, 140 injured
- 2009 Bangkok, Nightclub, 64 fatalities
- 2008 Shenzhen, China, , Nightclub fire, 43 fatalities
- 2001 Volendam, Netherlands, Cafe/nightclub fire. 10 fatalities.
- 1998 Gothenburg, Sweden, Dance hall fire. 63 fatalities.

3. Assessment of Impact and Likelihood

Hazard	Impact				Likelihood
	Human Welfare	**Environment**	**Physical Infrastructure**	**Social**	
Fire	Very Serious – Death/injury, burns, toxic poisoning	Limited – Fire damage/destruction, smoke damage, fire water run-off	Serious – Fire/structural damage to building	Limited: Normal community functioning with some inconvenience	Unlikely (Once per 10-100 years)

4. Position on Risk Matrix



5. Prevention/Control/Mitigation Measures in Place

- Health and Safety Authority
- Health and Welfare at work Act 2005
- During performance inspections if appropriate.
- Building Control Legislation.
- Fire Services Legislation.
- Planning Legislation.
- Pre fire planning/familiarisation visits.
- Inspection & enforcement by Building Regulations and Planning sections.
- During performance inspections.
- Fire Services Act 1981

6. Risk Management Approach: Prevention/Control/Mitigation Measures Required

- Fire safety enforcement.
- Event safety plans.
- Agreed inter-agency response protocols and procedures.
- Multiservice liaison and exercising.

HAZARD RECORD SHEET 9 HAZARDOUS MATERIAL INCIDENT

HAZARD CATEGORY	**SUB-CATEGORY**
Technological	Hazardous Substance
Hazard Description	**Hazard Location**
Hazardous material incident	Mid-West Clare Limerick North Tipperary)
Date:	**Review Date:**
June 2024	June 2025

1. Overview of Hazard

There are a number of Seveso sites in Area 3, as follows:

Upper Tier Sites:

- Atlantic Fuels, Foynes, Co. Limerick
- Gouldings, Askeaton, Co. Limerick
- Money Point Power Station Kilrush, Co. Clare
- Shannon Aviation Fuels, Shannon Co. Clare

Lower Tier Sites:

- Analog Devices, Raheen Business Park, Limerick
- Enva Ireland Ltd, Shannon, Co. Clare
- Grassland Agro Dock Road Limerick City
- Irish Bulk Liquid Stairage, Foynes Harbour, Co. Limerick
- Roche Ireland Ltd, Clarecastle, Co. Clare
- UCB Manufacturing Ireland Ltd, Shannon Industrial Estate Shannon Co. Clare

The region also contains a large number of chemical industries. LPG and Natural Gas are used commonly throughout the region both commercially and domestically. The Irish ring-main gas line runs through the region, and there are a number of pumping stations associated with this line.

2. Key Historical Evidence

Ireland

- 2022 Creeslough, Donegal, Petrol station/convenience store/apartments 10 fatalities
- 2008, Little Island, Corden PharaChem, Chemical explosion, 1 fatality
- 2006, Ennis, Gas line rupture, a number of people evacuated.
- 2005, Kilmallock, Co. Limerick, 24-hour disruption to local services.
- 2004, Lahinch, Co. Clare, gas leak causing explosion, severe structural damage to premises.
- 2003, Limerick City, Acetylene cylinder explosion, 1 fatality.
- 1994, Cork, Hicksons Pharmaceutical plant, 36 injured, major environmental damage
- 1993, Newport Pharmaceuticals plant in dublin, 500+ evacuated
- 1993, Hicksons Pharmacies, Ringaskiddy, Co. Cork
- 1979, Whiddy Island, Co. Cork, 50 fatalities

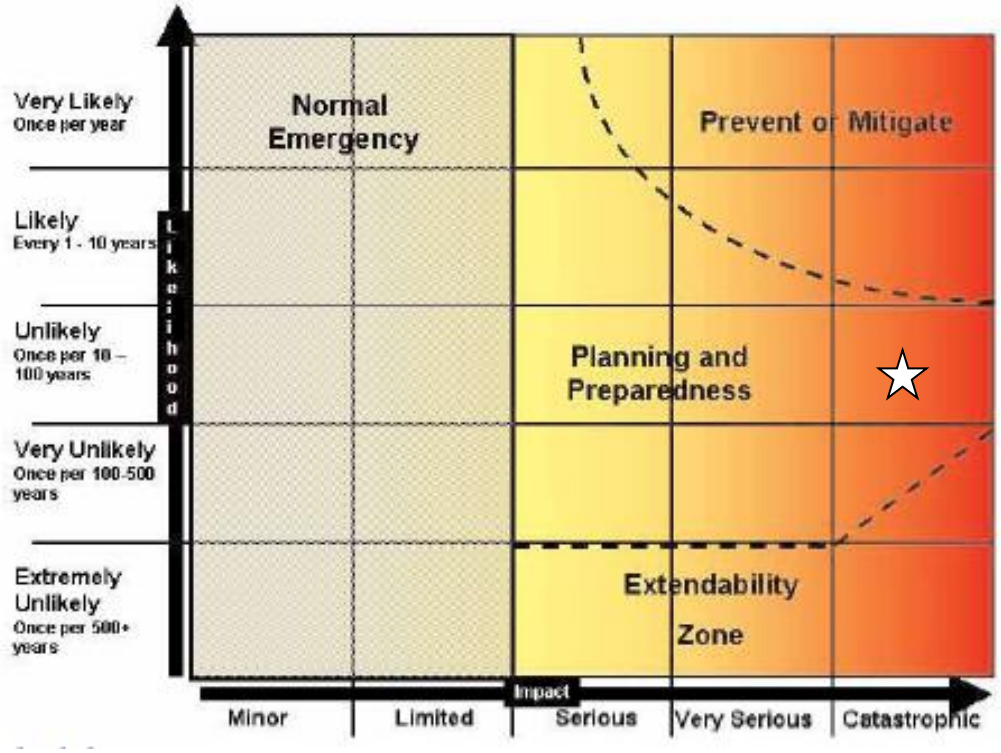
International

- 2018, Prince George, Canada, Gas line explosion no injuries 100 evacuated from homes.
- 2018, Pennsylvania, MA, Gas line explosion no injuries.
- 2016, New Mexico, Gas line explosion at campsite 10 Fatalities others injured.
- 2016, Gazipur, Bangladesh, a boiler explosion in factory, 23 Fatalities and many injured.
- 2012, Fukushima Daiichi Nuclear Power Plant, Japan – releases of radioactivity to the atmosphere – 1,600 related deaths.
- 2010, San Bruno, California, Gas pipeline explosion, 8 fatalities, many others injured.
- 2005, Buncefield (UK), Fuel Terminal explosion and fire. No fatalities or injuries.
- 2001, Toulouse, Chemical factory explosion, 29 deaths and 2, 500 injured.

3. Assessment of Impact and Likelihood

Hazard	Impact				Likelihood
	Human Welfare	Environment	Physical Infrastructure	Social	
Hazardous material incident occurring at a industrial site	Catastrophic: 5 to 50 fatalities, up to 100 serious injuries, up to 2000 evacuated.	Very serious: Heavy contamination localised effects or extended duration.	Serious	Serious: Community only partially functioning, some services available.	Unlikely (Once per 10-100 years)

4. Position on Risk Matrix



5. Prevention/Control/Mitigation Measures in Place

- Seveso III Directive 2012/18/EU)
- Internal and External emergency plans.
- Site specific protocols and safety procedures and emergency response teams.
- Fire Services Legislation & Planning Legislation.
- Provision of Fire service including equipment and training.
- Fire service training with risk holders to include frequent site visits with local crews.
- Gas Networks Ireland provides a 24-hour Emergency Helpline.
- Gas Networks Ireland 'Dial before you Dig' service provides information, advice and maps on the pipeline network layout available to the construction, agriculture and related industries.

6. Risk Management Approach: Prevention/Control/Mitigation Measures Required

- Ongoing inter-agency co-operation, training & exercises
- Development of plans/procedures/protocols for dealing with HAZMAT incidents.
- Advice and expertise of private sector to be utilized in the response to hazardous materials incidents.
- Pre-incident planning for industrial facilities containing large quantities of chemicals that are not under Seveso III regulations.
- Ensure relevant sites have bund capability where required.

HAZARD RECORD SHEET 10 CROWD INCIDENT

HAZARD CATEGORY	SUB-CATEGORY
Civil	Crowd Disorder / Disturbance
Hazard Description	**Hazard Location**
Crowd incident at an organised event involving large numbers of people	Mid-West Clare Limerick North Tipperary)
Date:	**Review Date:**
June 2024	June 2025

1. Overview of Hazard

Organised events are a regular occurrence in the Mid-West region in sporting venues such as Thomond Park, the Gaelic Grounds, Cusack Park, Semple Stadium and the University Arena. Concert / festival events also occur on occasion, e.g. Willie Clancy Annual Festival (18,000 people), Thomond Park, University Concert Hall events.

Civil disorder at unorganised events through a disturbance or rioting may occur at nightclubs, music events, sporting events, organised protests (e.g. anti-war protests at Shannon Airport) or during visits of controversial public figures.

2. Key Historical Evidence

Ireland: 2012, Swedish House Mafia concert in Phoenix Park – Stabbings
2006 – 2008, Corrib Gas Line disturbances
2004 – 2007, Shannon Airport anti – war protests
2006, Co. Clare President Bush visit
2006, Love Ulster riots, Dublin
1995, Lansdown Road riots at international soccer match

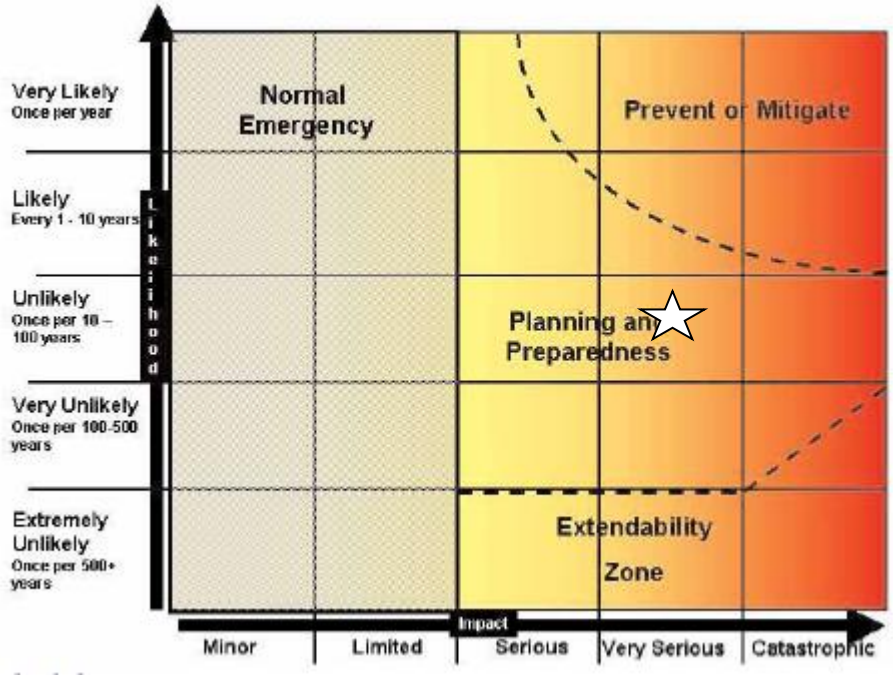
International:

South Korea:	2022, Stampede of partygoers on streets of Seoul during Halloween weekend, 156 people killed and 152 injured
Indonesia:	2022, Crowd crush at football match, 133 fatalities and 583 injuries
Italy:	2017, Turin stampede, 2 fatalities and 1,672 injuries
Germany:	2010, Love Parade disaster, 21 fatalities and 500+ injuries
U.K:	1989, Hillsborough, 96 fatalities
	1971, Ibrox Park, Glasgow, crush of spectators, 66 fatalities
Belgium:	1985, Hysel Stadium, 38 fatalities, 400 injuries

3. Assessment of Impact and Likelihood

Hazard	Impact				Likelihood
	Human Welfare	Environment	Physical Infrastructure	Social	
Crowd incident at an event involving large numbers of people	Very Serious - 5-50 fatalities, up to serious 100 injuries depending on number of people involved and the nature of the incident.	Minor - No contamination, localised effects.	Limited - 0.5-3M Euros	Limited - Normal community functioning with some inconvenience.	Unlikely (Once per 10-100 years)

4. Position on Risk Matrix



5. Prevention/Control/Mitigation Measures in Place

- Event Management / Risk assessment.
- Planning legislation – "Event Licence" including interagency meetings
- Code of Practice for Safety at Sports Grounds
- Code of Practice for Safety at Outdoor Pop Concerts (and other outdoor musical events)
- Co-operation and planning by each Principal Response Agency prior to and during an organised event.
- LGMA Events Management Guidance Document

6. Risk Management Approach: Prevention/Control/Mitigation Measures Required

- Guidance required when dealing with unlicensed events.
- Continued event management and risk assessment.
- Ongoing co-operation with and participation in any principal agency training, exercises and protocols that may be put in place in this regard.

HAZARD RECORD SHEET 11 RESPIRATORY PANDEMIC / EPIDEMIC IN IRELAND

HAZARD CATEGORY	**SUB-CATEGORY**
Civil Hazards	Communicable Diseases
Hazard Description	**Hazard Location**
Respiratory Pandemic / Epidemic in Ireland	Mid-West (Clare, Limerick, North Tipperary)
Date Reviewed:	**Review Due:**
June 2024	June 2025

1. Overview of Hazard

1.0 Pandemics and Endemics

Influenza / respiratory *pandemics* (whether mild, moderate or severe) affect a *large proportion of the population*, which puts significant strains on health and other essential services and may result in significant economic losses. As an influenza / respiratory pandemic may last months or even years, this requires a sustained response in the health sector but also in other sectors providing essential services, such as Principal Response Agencies as well as energy and food production. Large numbers of staff are likely to be absent from work at any one time.

Influenza / respiratory *epidemics*, which consist of outbreaks of flu or respiratory viruses *within regions*, can also have similar and severe impacts on services even if the virus is not a new one.

1.1 Influenza

1.1.1 Seasonal Influenza

In the Northern Hemisphere, the influenza season commences in October and continues through to May. Seasonal influenza is vaccine-preventable and the mechanisms for flu vaccines are very well established. The World Health Organization (WHO) makes a recommendation every year as to which strains of influenza need to be included in the seasonal flu vaccine. The flu vaccine is available in Ireland from October to end of April each year; it is recommended for all healthcare workers and vulnerable members of the population (people aged 65 and over, pregnant women and people with long-term health conditions). Children and young people aged between 2 and 17 years can get the nasal flu vaccine free of charge.

1.1.2 Pandemic Influenza

Pandemic Influenza, however, can occur at any time of the year. An influenza pandemic is a global epidemic, caused by a new influenza virus to which there is little or no pre-existing immunity in the human population.

An influenza virus undergoes minor changes on its surface regularly as it multiplies. When more major changes occur in the structure of the virus such that a new virus subtype is produced, this is known as antigenic shift. This is of major importance, as the general population will not have any protection against this new virus and therefore need to be vaccinated annually. The new subtype can cause a pandemic if it has the ability to spread rapidly from person to person and if it is virulent. As a result, large numbers of people all over the world are affected over a relatively short space of time and some cases can prove fatal.

The most recent *influenza* pandemic was caused by an Influenza A (H1N1) virus; it began in Mexico in April 2009 and lasted until August 2010, causing an estimated 100,000 – 400,000 deaths globally in the first 12 months.

1.1.3 Zoonotic Influenza Viruses

Animal influenza viruses (or 'non-seasonal influenza') are distinct from human seasonal influenza viruses. These viruses transmit from animals to humans directly (through direct or indirect contact) and can cause disease in humans ranging from a mild illness to death.

Examples of zoonotic influenza viruses that have recently caused human infections include highly-pathogenic avian influenza A(H7N9), A(H5N1), and A(H5N6); low-pathogenic avian influenza A(H7N2), which was transmitted from a cat; and swine influenza A(H1N2)v and A(H3N2)v.

Because influenza viruses are circulating in animal and human populations continuously, it is not possible to eradicate influenza viruses. It also means that these viruses are mixing and could create a new pandemic influenza virus at any time.

1.2 Other Respiratory (non-influenza) Viruses

Other respiratory corona viruses have also emerged with a narrow interval between them, which indicates an increasing frequency of novel viruses emerging (See Reference): Covid-19 (2019), SARS (2003) and MERS (2012).

The key challenge of these non-influenza pandemics is developing a vaccine. For the Covid-19 pandemic, it was by no means certain that the development of a vaccine would be possible; this added to the uncertainty of how long the pandemic would continue. The Covid-19 vaccines required novel technologies and took ten months to develop. Another example, the H1N1 (2019) vaccine took 6 months to develop.

1.3 Ongoing Surveillance of Viruses

The global community needs to be continually alert to the possibility of a pandemic strain emerging at any time, as pandemics, like the viruses that cause them, are unpredictable.

Influenza and viral surveillance can provide information that may help detect and manage a pandemic. This involves the collection of both clinical and virological data. Clinical surveillance monitors the impact of the illness on the health service and the community, while virological surveillance confirms that influenza / virus is circulating and also identifies the current strain. See background information on Global Public Health Disease Surveillance Systems, Now and in the Future.

The WHO Global Influenza Surveillance and Response System comprises 153 institutions in 114 countries. The network acts as a global alert mechanism, monitoring circulating influenza viruses in order to detect the emergence of those with pandemic potential.

In Ireland, Influenza is a notifiable disease and is reported to Area Departments of Public Health who are responsible for the surveillance, investigation and control of infectious diseases. Outbreaks of influenza are usually managed by Area Departments of Public Health.

The Health Protection Surveillance Centre in partnership with the Irish College of General Practitioners (ICGP) and the National Virus Reference Laboratory (NVRL) have established a network of sentinel general practices which report on a weekly basis the number of patients seen with influenza-like illness. Virological confirmation identifies the type, and subtyping of influenza is often undertaken by the NVRL.

Following collection of the data, a weekly influenza report is compiled throughout the influenza season, which runs from October to May. Reports of influenza activity in Europe and Worldwide are also provided as part of the overall monitoring of influenza activity.

1.4 Planning and Preparedness

At a European level, the EU 'Guide to revision of national pandemic influenza preparedness plans: Lessons learned from the 2009 A (H1N1) pandemic' recommends strategic planning at both national and subnational level, inter-sectoral planning, business continuity and surge capacity planning.

There was an 'Intra-Action Review of the HSE Health Protection response to the COVID-19 pandemic during 2021' (available online), which was published in April 2022. The findings of the review focus on enhanced communication and governance. An overall review of the health protection response to the Covid-19 pandemic has not been published by the time of this interagency Risk Assessment review.

The WHO also issued a 'Strategic preparedness, readiness and response plan to end the global COVID-19 emergency in 2022' (available online)

2. Key Historical Evidence

2.1 Influenza Pandemics

In the past 300 years, there have been at least ten influenza pandemics and four of them have occurred in the last ninety years. In the 20th century, there were three influenza pandemics: 'Spanish flu' (1918-1919), 'Asian flu' (1957-1958) and 'Hong Kong flu' (1968-1969).

Of these pandemics, the Spanish flu, which was caused by an avian influenza virus, had the most devastating impact and resulted in about 40 million deaths worldwide. The Asian flu caused more than two million deaths worldwide, while the Hong Kong flu resulted in about one million deaths.

Influenza is a significant cause of mortality. The annual number of deaths reported in Ireland from Influenza in recent years are shown below*:

Flu Season	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2021/ 2022	2022/ 2023
# Deaths	38	58	66	84	95	222	97	110	12	198

2.2 Covid-19 Pandemic

The Covid-19 pandemic was caused by a zoonotic virus, SARS-Cov-2, originating in China in late 2019. On 29th February 2020, the first case of COVID-19 in Ireland was reported.

Within months, governments worldwide initiated a series of strict protocols around social distancing, hand hygiene, face coverings as well as lockdowns of major parts of their economies in a bid to curtail the spread. In Ireland, The National Public Health Emergency Team (NPHET) for COVID-19 was established on 27th January 2020 in the Department of Health (see gov.ie); chaired by the Chief Medical Officer, it provided national direction, guidance, support and expert advice on the development and implementation of a strategy to contain COVID-19 in Ireland.

Schools, colleges and childcare facilities were closed and people were asked to work from home on 12 March 2020. This was quickly followed by advice to avoid all non-essential travel (16th March). The first national lockdown in Ireland was announced with the "Stay at home" order on the 27th March. The Government published a roadmap in May 2020 for the phased easing of lockdown restrictions and a medium-term plan in Oct 2020 for living with COVID-19 with details of a 5-level approach to restrictions.

There were several waves of cases in Ireland in April 2020, October 2020 and Jan 2021. Between March 2020 and May 2023 there were 1,712,654 cases and 8,979 deaths attributed

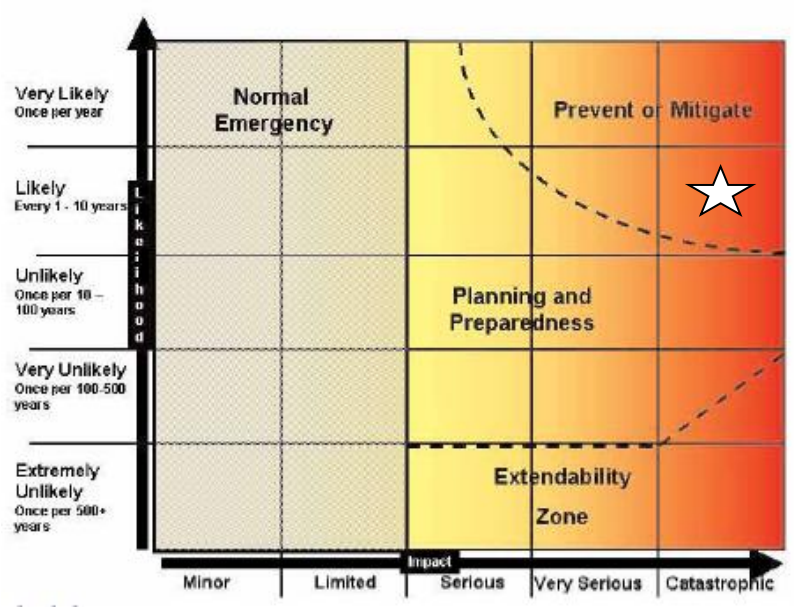
to COVID-19 in Ireland (source: Health Protection Surveillance Centre – accessed June 5th 2023).

Multiple vaccines were developed and mass vaccination programmes were rolled out internationally. In Ireland, 95.7% of the population aged over 18 years (and 99.9% of people aged over 65 years) completed the primary course of vaccination – one of the highest uptakes in Europe. Following the roll-out of vaccinations, most restrictions were lifted during 2022. On May 5th 2023 the Director General of WHO determined that COVID-19 is now an established and ongoing health issue which no longer constitutes a public health emergency of international concern (PHEIC).

3. Assessment of Impact and Likelihood

Hazard	Impact				Likelihood
	Human Welfare	Environment	Physical Infrastructure	Social	
Respiratory pandemic (Likely)	Catastrophic– significant fatalities, illness, loss of essential services due to absenteeism. Inability of staff to assist other agencies.	Minor	Minor	Very Serious: Community functioning poorly, minimal services available	Likely (Once per 1-10 years)

4. Position on Risk Matrix



5. Prevention/Control/Mitigation Measures in Place

- Plans have been developed from the work of expert groups in the HSE on vaccines and antiviral medicines, surveillance, communications, case management, laboratory operation, personnel and supplies.
- Antiviral medication should be available for cases and chemoprophylaxis influenza.
- Each PRA has learning from the Covid-19 pandemic which can be applied again (e.g. updated and new HR policies, improvements to layout of work places, changes to work practices)

6. Risk Management Approach: Prevention/Control/Mitigation Measures Required

- Identify essential functions and posts whose absence would place business continuity at particular risk.
- Put in place measures to maintain core business activities for several weeks with high levels of staff absenteeism.
- Identify which services could be curtailed or closed down during all, or the most intense period, of the pandemic.

- Identify inter-dependencies between organisations and make sure they are resilient. For example, suppliers delivering services under contract should have arrangements in place to continue to provide their service.

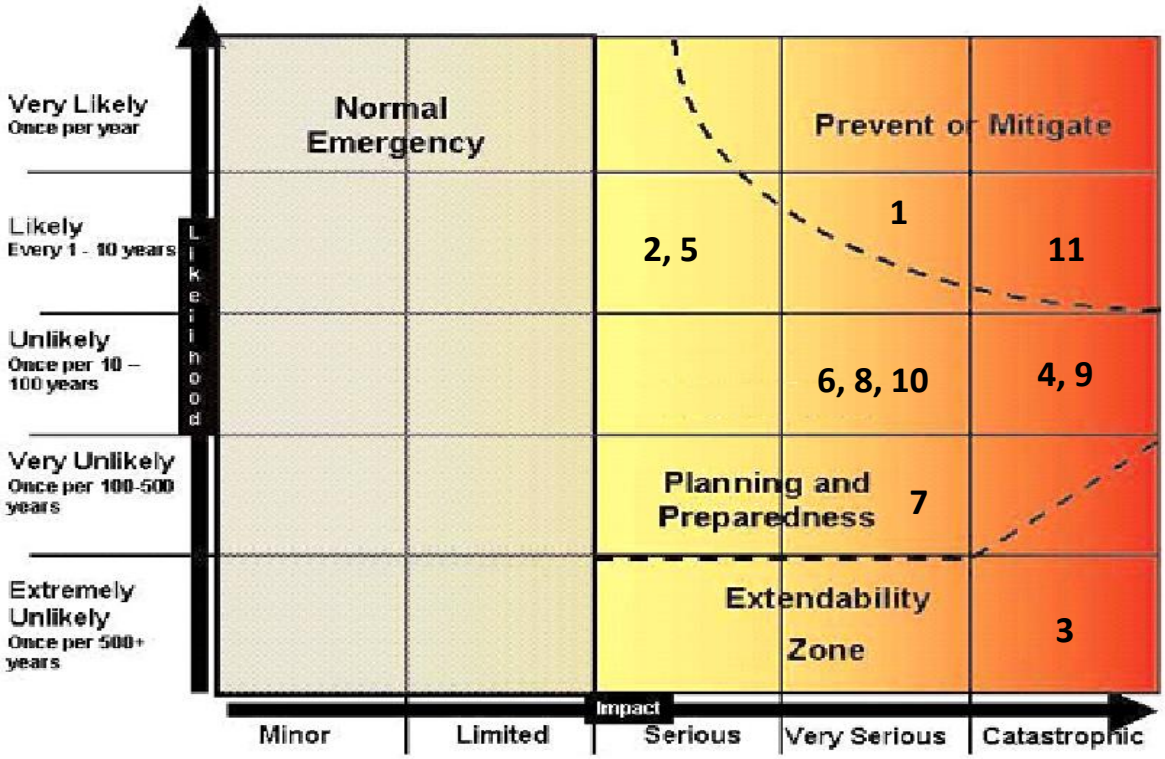
- Ensure employees are aware of official advice on how to reduce the risk of infection during a pandemic. (This will be available as part of the HSE communications plan during a pandemic)

- Ensure that adequate hygiene (e.g. hand-washing) facilities are routinely available.

- Regional mitigation measures including vaccination roll-out would be based on advice and guidance from national structures such as NPHET, Scientific and Technical Advisory Committee (STAC), the Health Protection Surveillance Centre and the National Immunisation Advisory Committee.

Stage 4 Emergency Management West Region - Risk Matrix

The scores from the Risk Assessment in Section 3 are recorded on the Matrix below.



Appendix Risk Assessment 3.2 - Road Map of Ireland

This map shows motorways and major roads throughout the island of Ireland.


Malin Head
Rathlin Island
Coleraine
Glens of Antrim
DERRY
A29
A26
BALLYMENA
Lifford
Blue Stack Mountains
Sperrin Mountains
A6
M2
BELFAST
N15
A5
Lough Neagh
Omagh
A29
Donegal Bay
Lurgan
M1
Lisburn
Portadown
Lough Erne
Enniskillen
ARMAGH
Downpatrick
Killala Bay
Sligo
N16
Monaghan
NEWRY
Mourne Mountains
Lough Corrib
Carrick on Shannon
Cavan
Dundalk
Achill Island
N2
Clew Bay
Castlebar
N5
R. Shannon
Longford
Irish Sea
Navan
N1
Roscommon
Lough Mask
Lough Ree
N17
Mullingar
R. Boyne
N3
Royal Canal
Connemara
Lough Corrib
Athlone
N4
Grand Canal
R. Liffey
DUBLIN
GALWAY
N6
Tullamore
Dún Laoghaire
Naas
Galway Bay
R. Shannon
N7
Bray
Slieve Bloom Mountains
Portlaoise
Wicklow Mountains
N11
The Burren
Aran Islands
N9
Wicklow
Atlantic Ocean
Ennis
Lough Derg
Carlow
R. Barrow
Kilkenny
LIMERICK
N24
N8
N21
Galty Mountains
Clonmel
Tralee
N20
R. Suir
WATERFORD
Wexford
Dingle Peninsula
Knockmealdown Mountains
R. Blackwater
Killarney
Boggeragh Mountains
Macgillicuddy's Reeks
N22
R. Lee
N25
CORK
Celtic Sea
Mizen Head
0 Km 20 40 60
0 Miles 20 40 50

APPENDIX RISK ASSESSMENT 3.3 - IRISH RAIL NETWORK

Appendix 1

Track Configuration Map 1 of 2
(See Appendix 1A for Dublin / Cork Areas)

Iarnród Éireann
Irish Rail
Version 1.0 August 2020

APPENDIX RISK ASSESSMENT 3.4 - BORD GÁIS PIPE NETWORK

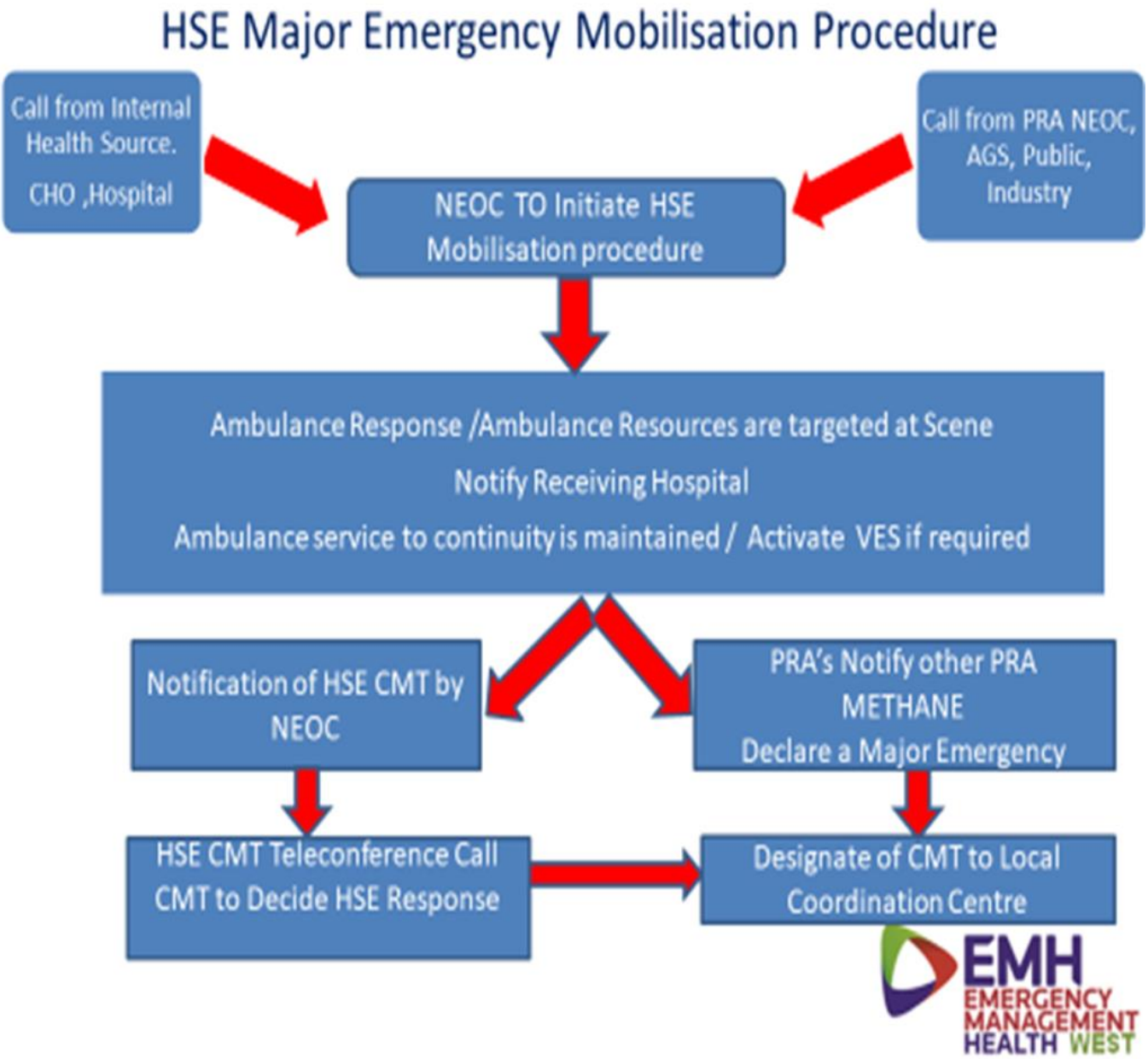
APPENDIX 4 - NATIONAL AMBULANCE SERVICE STATIONS & RECEIVING HOSPITAL LOCATIONS

Limerick
Ambulance Station, St Nessan's Road, Dooradoyle, Limerick
Ambulance Station, Glenbevin, Mayorstone Upper, Mayorstone, Limerick
Ambulance Station, St. Ita's Hospital, Newcastle West, Limerick

Clare
Ambulance Station, Ennis General Hospital, Ennis, Co. Clare
Ambulance Station, Ballyminoge, Scarriff, Co. Clare
Ambulance Station, Kilrush Community Hospital, Cooraclare Road, Kilrush, Co. Clare
Ambulance Station, Dought, Ennistymon, Co. Clare

Tipperary
Ambulance Station, community Hospital of the Assumption, Castlemeadows, Thurles, Co. Tipperary
Ambulance Station, Bunker Hill, Convent Road, Roscrea, Co. Tipperary
Ambulance Station, Gortlandroe Industrial Estate, Wilton Road, Nenagh, Co. Tipperary

APPENDIX 5 - HSE MOBILISATION PROCEDURE



APPENDIX 6 – MID-WEST INTERAGENCY PUBLIC COMMUNICATION PLAN

(Available on Request from HSE Emergency Management, West Office)

APPENDIX 7 - DEFENCE FORCES AIDE TO CIVIL AUTHORITY (1 BRIGADE)

Óglaigh na hÉireann
DEFENCE FORCES IRELAND

Rannóg Oibríochtaí
Operations Section

Aide Memoire on Seeking Defence Forces Assistance in Aid to the Civil Authority

1. 1 Brigade are tasked by Defence Force Headquarters to be prepared to provide Aid to the Civil Authority[1] (ACA) within the Brigade's Area of Operations (AO). For ACA purposes only, 1 Brigade AO covers the counties of Cork, Kerry, Limerick, Clare, Tipperary, Waterford, Kilkenny, Wexford, Carlow, Galway, Mayo and Roscommon.

2. Operations Section, 1 Brigade, which is located in Collins Barracks, Cork is the point of contact for agencies seeking ACA within this AO.

3. Troops responding to requests will normally be deployed from either Collins Barracks in Cork, Sarsfield Barracks in Limerick, Stephens Barracks in Kilkenny or Dún Uí Mhaoilíosa (Renmore Barracks) in Galway. In time critical situations, direct contact may be made with the Barracks.

4. As the Defence Forces are not a Principal Response Agency in terms of Emergency Management a lead in time is required before 1 Brigade are in a position to respond to requests. This lead in time will be dependent on the type and timing of the request. It is therefore recommended that agencies include the Defence Forces in contingency planning regarding potential Emergency Situations.

5. Operations Section, 1 Brigade is contactable by telephone 24 hours a day, 7 days a week.

6. The attached proforma outlines the contact details of Operations Section, Collins Barracks and of the other Barracks. It also contains the information required regarding the requested Operation. It is assumed that the agency seeking assistance will vet and prioritise all internal requests for support prior to contacting the Defence Forces.

[1] The term *Civil Authority* generally refers to Government Departments, Local Authorities and the Health Service Executive.

Ceanncheathrú, Chéad Bhriogáid an Deiscirt, Dún Uí Choileáin, Corcaigh
Headquarters, 1 Southern Brigade, Collins Barracks, Cork.
t: +353 (0) 21 451 4113 f: +353 (0) 21 4502666 **email:** robert.kiely@defenceforces.ie
www.military.ie

Contact Numbers Nationally

Name	Office	Telephone No.	Fax. No.
Department of Defence		087 235 6045 087 994 7396 087 946 2724	
Collins Barricks, Cork	Operations Section, 1 Brigade 1 Brigade Duty Officer (after hours)	021 451 4113 021 451 4266 021 451 4115	021 450 2666
Army Custume Barracks, Athlone	Orderly Office Duty Officer	090 64 92631 (24hr) 090 64 21000 (day) 090 64 92631 (night) 090 64 21305	
Dun Ui Mhaoiliosa, Renmore, Galway	Operations Officer Orderly Officer (24 hour)	(091) 751156 (091) 751157 087 377 9093	091 752 616 01 5042 000
Sarsfield Barracks, Limerick	Operations Officer	061 314 233	061 416 216
Stephens Barracks, Kilkenny	Operations Officer	056 772 1174	056 772 2533
Irish Air Corp Casement Aerdorome Baldonnell Dublin 22 (Helicopter Service)	Squadron Commander & Group Duty Officer	01 403 7502 (24 hr) 01 403 7503 01 403 7591	
Irish Coastguard Leeson Lane Dublin 2		01 662 0922 (24 hr) 01 662 0923 01 678 2304	
Baldonnell	Helicopter Rescue Service	01 403 7591 01 403 7590	01 403 7502
Finner Air and Sea Search and Rescue		071 912 2992 (24 hr) 071912 2993	

Procedure for Requesting Assistance from the Defence Forces

The following is the procedure for requesting assistance from the Defence Forces:

(1) Where **time is critical**, contact should immediately be made directly with the Department of Defence. It is then advisable that contact be made to the local military post, to advise them that a formal request has been made and to provide this relevant post with the necessary information. (*This will have the effect of speeding up the practical and logistic issues at a local level, while the formal 'due process' is being carried out*). In addition, Garda Authorities should then be notified as soon as possible.

(2) Where **time is not critical,** the request should be made, (*in the case of Local Authorities*), through the Department of the Housing, Planning & Local Government. This Department will in turn formally eMail the Secretary at the Department of Defence situate at Parkgate, Dublin 8, using the form outlined in **Section (e)** of this Appendix and the eMail addresses of **1sbdeops@defenceforces.ie and bdo.south@defenceforces.ie .** As in para 1 and in the case of non-time critical events, local liaison still should be carried out with the local military post to allow them to begin planning.

The following arrangements should be made locally in relation to (1) above:

(i) The local agencies should each designate a Senior Official who would filter and pass on the request for assistance to the Garda Authorities.

(ii) Discussions between designated officials and local senior military personnel should be held on a regular basis.

APPENDIX 8 - DEFENCE FORCES AIDE TO CIVIL AUTHORITY (2 BRIGADE)

Aide Memoire on Seeking Defence Forces Assistance in Aid to the Civil Authority

1. 2 Brigade is tasked by Defence Force Headquarters to be prepared to provide Aid to the Civil Authority[1] (ATCA) within the Brigade's Area of Operations. The 2 Brigade provides ATCA cover to the following Major Emergency Management (MEM) Areas and the associated counties outlined in Table 1. Troops responding to requests will normally be deployed from the Barracks responsible for each MEM area.

MEM Areas	Counties	Barracks Responsible
East	Dublin Kildare Wicklow	Cathal Brugha Barracks, Rathmines, Dublin
Midlands	Longford Westmeath Offaly Laois	Custume Barracks, Athlone, Co Westmeath
North East	Cavan Monaghan Meath Louth	Aiken Barracks, Dundalk, Co Louth
North West	Donegal Sligo Leitrim	Finner Camp, Co Donegal

Table 1

2. Agencies requesting assistance should contact Operations Section, 2 Brigade, which is contactable by telephone 24 hours a day, 7 days a week and is located in Cathal Brugha Barracks, Dublin.

Timings	Contact Details
0830 -1630 Monday to Friday	Telephone: 01 8046218 Facsimile: 01 4974027
1630 – 0830 Monday to Friday weekends and Public Holidays	Telephone: 01 8046294 Facsimile: 01 4974027

Table 2

3. As the Defence Forces are not a Principal Response Agency in terms of Emergency Management a lead in time is required before 2 Brigade are in a position to respond to requests. This lead in time will be dependent on the type and timing of the request. It is therefore recommended that agencies include the Defence Forces in contingency planning regarding potential Emergency Situation.

4. The attached proforma Annex A should be completed when requesting ATCA from the Defence Forces. It is assumed that the agency seeking assistance will vet and prioritise all internal requests for support prior to contacting the Defence Forces.

5. Annex B outlines the 2 Brigade areas of responsibility for the provision of Aid to the Civil Authority to the MEM areas.

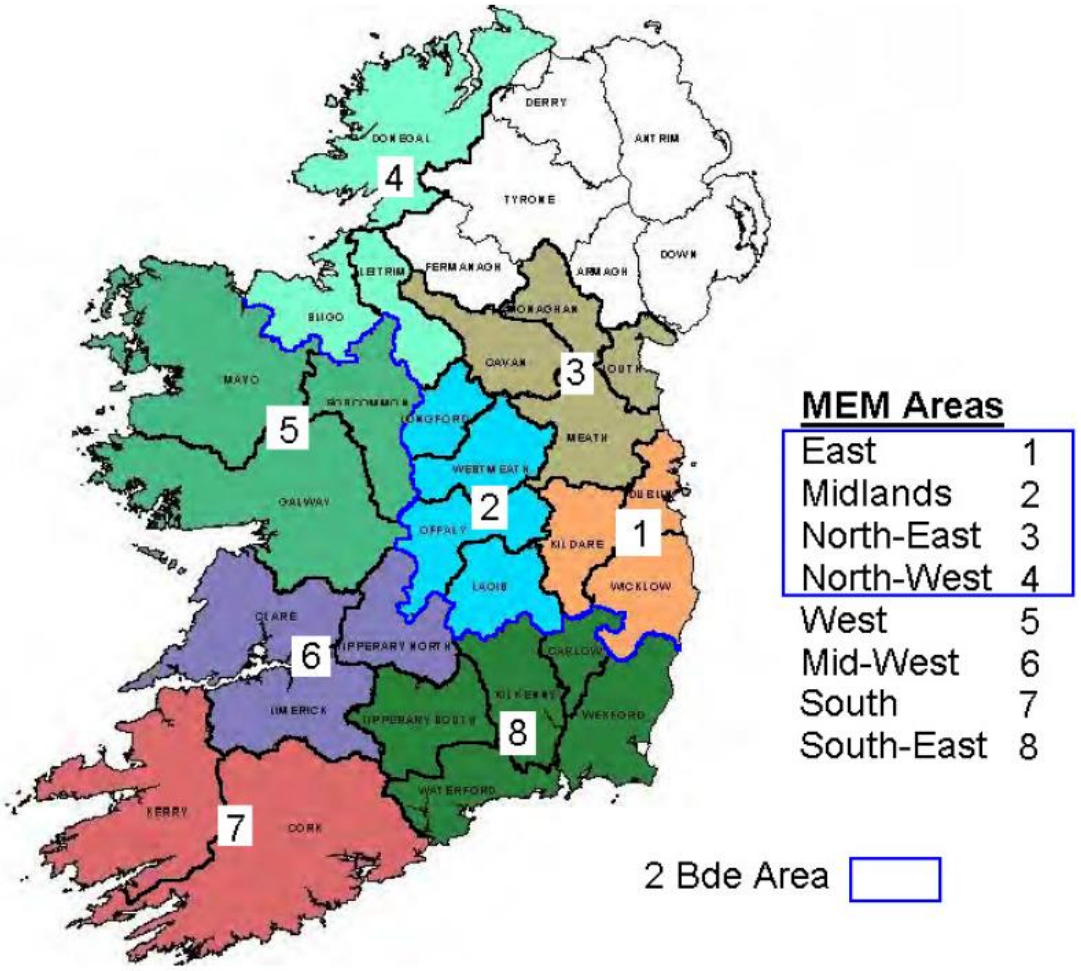
[1] The term *Civil Authority* generally refers to Government Departments, Local Authorities and the Health Service Executive.

Annex A

Request for Defence Forces Assistance in Aid to Civil Authority	
Request From: (Name, Title & Agency e.g. Government Departments, Local Authorities and the Health Service Executive)	
Contact Names:	
Contact Numbers:	
Date & Time Required:	
Nature of Task: (Is specialist equipment required?)	
Location of Task:	
Rendezvous Point: (If not the same as the Location of Task)	
Point of Contact at Location of Task: (or Rendezvous point)	
Point of Contact Telephone Number:	
Submit by telephone or fax the above information to Current Operations Section, Cathal Brugha Barracks, Rathmines.	
0830 – 1630 Monday to Friday	**Telephone: 01 8046218** **Facsimile: 01 4974027**
1630 – 0830 Monday to Friday **Weekends and Public Holidays**	**Telephone: 01 8046294** **Facsimile: 01 4974027**

For Defence Forces Use Only	
Defence Forces Task Number:	
Action Taken:	

Annex B


DERRY
DONEGAL
ANTRIM
4
TYRONE
DOWN
LEITRIM
FERMANAGH
ARMAGH
SLIGO
MONAGHAN
CAVAN
3
MAYO
LONGFORD
MEATH
5
WESTMEATH
2
GALWAY
OFFALY
KILDARE
1
LAOIS
WICKLOW
CLARE
6
TIPPERARY NORTH
CARLOW
KILKENNY
LIMERICK
TIPPERARY SOUTH
8
WEXFORD
WATERFORD
KERRY
7
CORK
MEM Areas
East 1
Midlands 2
North-East 3
North-West 4
West 5
Mid-West 6
South 7
South-East 8
2 Bde Area

APPENDIX 9 - CASUALTY BUREAU AND ROLE OF THE CORONER

Protocol Between An Garda Síochána and the HSE

Introduction

In the event of a Major Emergency involving a significant number of casualties, An Garda Síochána will establish a Casualty Bureau to collect and collate the details of all casualties and survivors, in accordance with Clause 5.7.4 of **A Framework for Major Emergency Management (2006)**.

This is a critical element of the process, coordinated and provided by the Principal Response Agencies for casualties, their relatives and friends in the aftermath of a Major Emergency.

Hospital Role

When the Garda Team arrives at a hospital, it is important that people and procedures are in place (as detailed in the Hospital Major Emergency Plan) to accommodate the arrival and work of the Team.

To achieve this, each hospital, which may receive casualties from a Major Emergency, must have (as far as possible):

- A nominated individual (with alternates), who will act as liaison officer between the hospital and the Garda Documentation Team, i.e. The Hospital /Garda Casualty Liaison Officer
- A location (office) where the Garda Casualty Team can work, which has
    - a telephone (or preferably 2)
    - access to a printer / photocopier

Key Information

The Garda Casualty Form is an extensive document, but the key information fields that the Garda Documentation Team will be seeking to complete, in the case of each individual casualty, are

- Hospital Patient Reference Number
- Surname
- Forename
- Date of Birth (or Approximate Age)
- Sex
- Condition
    - Minor Injuries
    - Seriously Injured
    - Life threatening injuries
    - Deceased

Obviously in the case of some casualties (for example unconscious casualties) some of this key information may not be available.

Other information fields, such as current address, nationality and details of next of kin, will be completed, where practical.

Further Information:

An Garda Síochána will provide the services of a Casualty Bureau in conjunction with the other two Principal Response Agencies.

Casualty Information

The accuracy of information in relation to casualties is of vital importance and the key information sought must be verified before distribution to media outlets. The following is an indication of the core information required in the aftermath of a Major Disaster:

- How many were killed or injured
- Of those injured, how serious is their condition
- How many uninjured of the total involved
- Were any of the victims prominent persons
- Where were those involved in the aftermath of the incident
- Hospitals, Rest Centres, Friends / Relatives Reception Centre
- Facilities to deal with injured / deceased

THE GARDA CASUALTY FORM

As part of this process, An Garda Síochána have prepared a standard Casualty Form which is used to collect information on casualties. For this purpose casualties include any person, who is killed or injured, as well as survivors, missing persons and evacuees.

When casualties from a Major Emergency are brought to a hospital, a Garda Casualty Documentation Team will be sent to the hospital to complete (as much as possible) a Casualty Form in respect of each casualty.

An Garda Síochána

Form CB1

Use BLOCK CAPITALS and black ink

Location Ref No

CB Ref

Casualty Bureau
CASUALTY

Casualty Surname	
Casualty Forename(s)	
Date of Birth (or approx age)	
Sex	☐ Male ☐ Female Unknown ☐

CASUALTY (continued)

HOSPITAL (or location)	Hospital Ref. No.
Maiden/Other Name	Nationality
Current address (and home address if different)	English Understood ☐ Yes ☐ No If no please state native language
	Religion
	Tel. Contact No.

Age Grouping: ☐ Baby ☐ Toddler ☐ Small Child ☐ Large Child ☐ Adult

BRIEF DESCRIPTION OF INJURIES

Condition (Triage):
☐ Minor Injuries (Green)
☐ Seriously Injured (Yellow)
☐ Life Threatening Injuries (Red)
☐ Deceased (White)
☐ Conscious
☐ Unconscious / Unresponsive

Detained in Hospital ☐ Yes ☐ No

Appearance: (if dead)
☐ Normal
☐ Disfigured
☐ Mutilated

Suitable for identification: ☐ Yes ☐ No

Garda use only

Specify:

IDENTIFICATION

If identified, show source of identity details:
☐ Self identification or legal guardian
☐ Other persons (specify)
☐ Other (specify) _____

☐ Passport
☐ National ID
☐ Driving Licence

Document No: _____
Country of Issue: _____

☐ Unidentified
If unidentified, complete PART 2 Descriptive Form

NEXT OF KIN / PERSON TO BE INFORMED

Surname	Forename(s)
Relationship to Casualty	Telephone Contact No.
Contact Address	Special Circumstances (eg elderly, ill health, pregnant etc)
Next of Kin informed ☐ Yes ☐ No If yes, by whom	Time/Date

ADDITIONAL INFORMATION

☐ Body Label Ref ☐ Other Ref (eg Rest Centre) | Location at the time of incident | Current Location of casualty

Comments / accompanied at time of incident by

PERSON COMPLETING THE FORM

Name	Reg. No	Time	Date
Checked by			

NOTE: If unconscious or dead, complete Casualty Descriptive form **PART 1**

The form is reproduced here for information only. It is a Garda task to complete this form. This form once completed is forwarded to the Casualty Bureau and/or Incident Room, collated and cross referenced with other information.

Release of Casualty Bureau number to the Press and to the Public

At the time of an incident, the Gardai will establish a dedicated Casualty Bureau phone number that will be made available to the public through the media. This process will be coordinated by the Garda Press Office in conjunction with the Casualty Bureau Supervisor and Senior Officer in Charge of the incident.

It is worth noting that there is a time lag between the activation of procedures to establish the Casualty Bureau and activation of the dedicated call centre at Garda Headquarters.

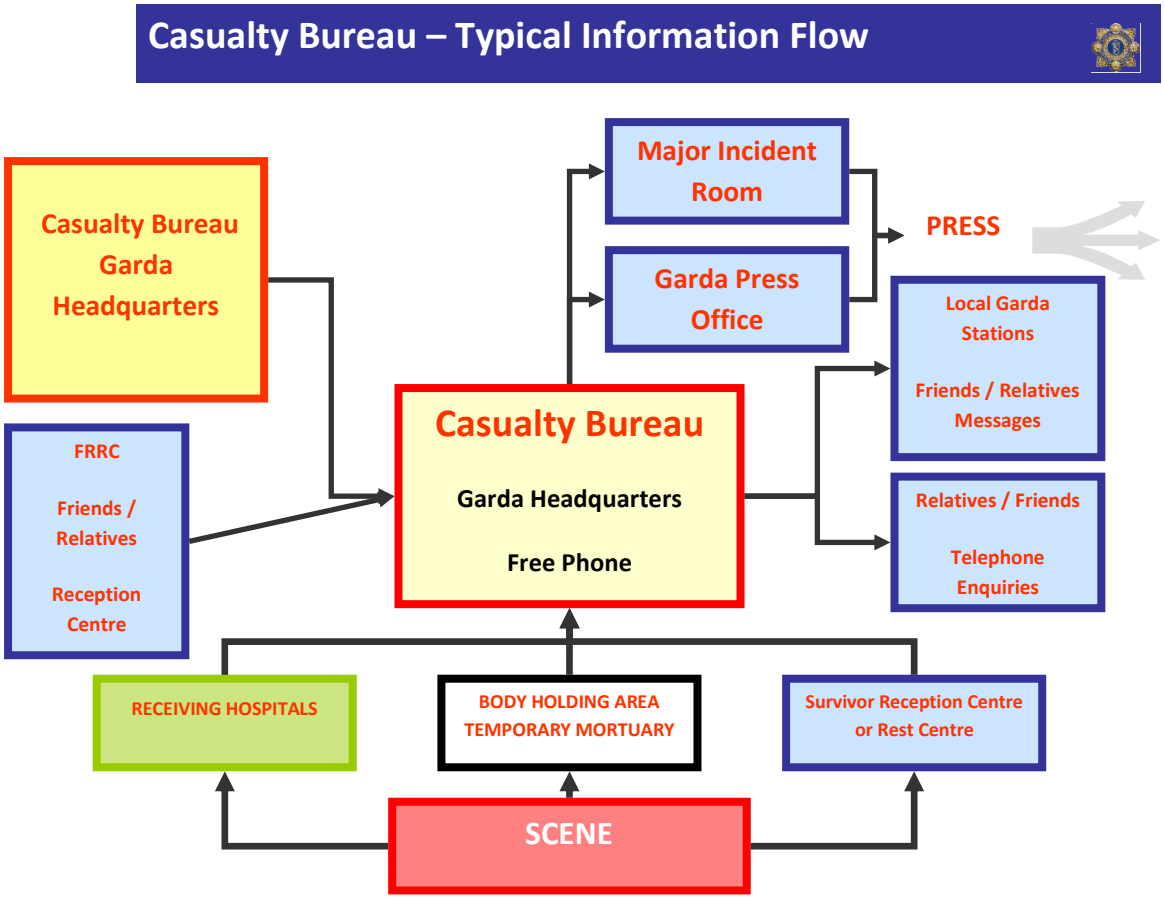
Advice to the public (via the media) will be given through the Garda Press Office of when the Casualty Bureau dedicated telephone lines are operational.

An Garda Síochána will request families of persons missing to **nominate one Person to contact the help lines / casualty bureau** to minimise the number of queries, duplicate records and as far as possible the burden on the recording system and personnel involved.

Closure of Casualty Bureau

Closure of the Casualty Bureau will take place after consultation between the Casualty Bureau Supervisor and the Senior Garda Officer in charge of the incident and Inspector in charge Garda Communications Centre, Harcourt Square.

The following diagram is an outline of the planned procedures.



The Role of the Coroner

The Coroner is an independent judicial officer, who has responsibility for investigating all sudden, unexplained, violent or unnatural deaths. It is the task of the Coroner to establish the 'who, when, where and how' of unexplained deaths. All such deaths in Ireland are investigated under the Coroners' Act, 1962.

The Coroners' Act, 1962

S 17.—Subject to the provisions of this Act, where a coroner is informed that the body of a deceased person is lying within his district, it shall be the duty of the coroner to hold an inquest in relation to the death of that person if he is of opinion that the death may have occurred in a violent or unnatural

manner, or suddenly and from unknown causes or in a place or in circumstances which, under provisions in that behalf contained in any other enactment, require that an inquest should be held.

The Coroner has overall responsibility for the identification of bodies and remains and s/he is entitled to exclusive possession and control of a deceased person until the facts about their death have been established. A full post-mortem and forensic examination will be carried out on everybody from a major emergency and each death will be the subject of an Inquest. The post-mortem is carried out by a Pathologist, who acts as the 'Coroners Agent' for this purpose.

List of Coroners Districts

The coroner's districts listed in the appropriate Garda Division Major Emergency Plan. The districts are roughly equivalent to Local Authority areas, although there are some cases where a number of Coroners operate in the same Local Authority area. Each of the districts has one Coroner and a Deputy Coroner, who acts for the Coroner in the event of absence or illness. All Coroners must be either registered medical practitioners or practising solicitors or barristers for five years.

Planning for Fatalities

Multiple fatalities are a feature of many major emergencies and each Principal Response Agency should have robust arrangements in place, which set out that agency's role in dealing with fatal casualties. Once rescue is complete, and there are no further live casualties at the site, the focus of work there turns to evidence recovery. No removal/recovery of the dead will usually take place without the Coroner's authority, except as provided for in Section 5.7.2 of the Framework.

The following table shows sequentially the stages for dealing with fatal casualties and the agency responsible for each stage:

Stage	Who	Action	Facilities Required	Who may assist
Finding the casualty	Any agency			
Recognising as dead	Doctor or Paramedic	Label casualty as 'DEAD'	Triage Labels	
Pronouncing dead	Doctor	Sign Triage Label with date and time		
In-situ Forensic examination and recording	Garda	Gather evidence and photograph	Forensic kits Cordons	Forensic Pathologist
Removal of remains to Body Holding Area	Garda	Move body and maintain chain of evidence	Designated Body Holding Area Body Bags Stretchers	Local Authority
Removal of body to Mortuary/Temporary Mortuary	Garda	Move body and maintain chain of evidence		Undertakers
Identification	Garda	Casualty Identification Form		Specialist teams
Notification of relatives	Garda			
Stage	**Who**	**Action**	**Facilities Required**	**Who may assist**

Viewing for Identification purposes	Garda		Viewing facilities	Next of kin/ relation/ friend/ Psychosocial Support
Viewing for grieving purpose	Garda		Viewing facilities	HSE staff, Clergy/ psychosocial support
Post Mortem	Pathologist		Suitably equipped mortuary	Pathology technicians
Certification of Death	Registrar of Deaths			
Handover to relatives	Garda			
Burial/Cremation	Family or Local Authority			
Criminal Investigation (if appropriate)	Garda	Investigation of criminal responsibility		
Inquest (in the case of criminal investigation the inquest will be adjourned until investigation complete)	Coroner	Determination of cause of death		

Contact Details

Incident email: CB@garda.ie (only live at the time of incident)

General email queries: major_emergency@garda.ie (only live at the time of incident)

MEM Region	Garda Representatives	Contact Details	An Garda Síochána Region
North West	Ursula Hussey Paul McGee	ursula.hussey@garda.ie paul.g.mcgee@garda.ie	North West
West	Tom Waters	tomas.z.waters@garda.ie	West
	John Conway	raymond.j.conway@garda.ie	
Mid-West	Inspector Paul Slattery	Paul.Slattery@garda.ie	Clare & Tipperary
	Inspector Padraig Sutton	padraigh.l.sutton@garda.ie	Limerick

APPENDIX 11 - LIST OF MAJOR EMERGENCY PLANS

HSE Plans

- National Ambulance Service West Regional Major Emergency Plan
- University Limerick Hospital Group Major Emergency Plan
- Mid-West Community Healthcare Major Emergency Plan
- HSE Residential Centre Plans

Seveso Plans

- Gouldings Fertiliser Askeaton Co. Limerick
- Atlantic Fuels, Foynes, Co. Limerick
- ESB Moneypoint, Kilrush, Co. Clare
- Shannon Fuel Farm, Shannon Airport, Co. Clare

Airport Plans

- Shannon International Airport

Site Specific Plans

- Limerick Tunnel Plan

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