Exercise REVLIS

Regional Mass Casualty Table Top Exercise
Wednesday 6th December 2017
Mossely Mill

Author: Name Redacted Emergency Planning, PHA
Date: February 2018

Contents

Glossary of Terms and Acronyms

Glossary of Terms

Battle Rhythm	Is the synchronised working of staff at all levels to achieve a common goal
Capability	A demonstrable capacity to respond to and recover from a particular threat or hazard
Cascade	A succession of stages or procedures
Casualty	A person directly involved in or affected by the incident (injured, uninjured, deceased or evacuee)
Command	The authority for an agency to direct the actions of its own resources (both personnel and equipment).
Control	The authority to direct strategic and tactical operations in order to complete an assigned function and includes the ability to direct the activities of other agencies engaged in the completion of that function
Co-ordination	The harmonious integration of the expertise of all the agencies involved with the object of effectively and efficiently bringing the incident to a successful conclusion
Health Silver	HSCB, the PHA and BSO (Health Silver) will provide strategic health and social care advice and direction in response to the health consequences of a Significant (Level 1) emergency whenever two or more Health and Social Care (HSC) Trusts are responding to the emergency, including the response to CBRN. Also see Tactical Level
Integrated Emergency Management	The process of emergency management carried out across partner bodies so that arrangements are coherent and support each other
Major Incident	Any emergency that requires the implementation of special arrangements by one or more of the emergency services, the NHS or the local authority
Mass Casualty Incident	An incident (or series of incidents)causing casualties on the scale that is beyond the normal resources of the emergency and healthcare services' ability to manage. A mass casualty incident may involve hundreds or thousands of casualties with a range of injuries, the response to which will be beyond the capacity of normal major incident procedures to cope and require further measures to appropriately deal with casualty numbers.
METHANE Report	A mnemonic used by the emergency services to report the details of an incident
Mutual Aid	The provision of services and assistance by one organisation to another

Receiving Hospital	A hospital designated to be the principal location to which casualties are sent
Recovery	The process of restoring and rebuilding the community, and supporting groups particularly affected, in the aftermath of an emergency
SitRep	Situation report
Strategic Level (Gold)	The level of management which is concerned with the broader and long-term implications of the emergency
Tactical Level (Silver)	The level at which the emergency is managed, including issues such as, allocation of resources, the procurement of additional resources, and the planning and co-ordination of ongoing operations
Triage	A process of assessing casualties and deciding the priority of their treatment and / or evacuation
Warn and Inform the Public	Establishing arrangements to warn the public when an emergency is likely to occur or has occurred and to provide them with information and advice subsequently.

Acronyms

BHSCT	Belfast Health and Social Care Trust
BSO	Business Services Organisation
BTS	Blood Transfusion Service
CBRN	Chemical, Biological, Radiological & Nuclear
C&C	Command & Control
CCC	Casualty Capability Charts
CCaNNI	Critical Care Network Northern Ireland
CCF	Civil Contingencies Framework
CRIP	Common Recognised Information Picture
DoH (NI)	Department of Health (Northern Ireland)
DPH	Director of Public Health
ED	Emergency Department
EXCON	Exercise Control
HP	Health Protection
HSC	Health & Social Care

HSCB	Health & Social Care Board
ICT	Incident Control Team (Silver)
IT	Information Technology
JREP	Joint Response Emergency Plan
MA	Multi Agency
MOU	Memorandum of Understanding
MTFA	Marauding Terrorist Firearm Attack
NHSCT	Northern Health and Social Care Trust
NIAS	Northern Ireland Ambulance Service
NIFRS	Northern Ireland Fire & Rescue Service
PHA	Public Health Agency
PHE	Public Health England – established 1st April 2013
PMSI	Performance Management & Service Improvement
PR	Public Relations
PSNI	Police Service of Northern Ireland
SHSCT	Southern Health and social Care Trust
SEHSCT	South-eastern Health and Social Care Trust
SITREP	Situation Report
SPOC	Single Point Of Contact
STAC	Scientific & Technical Advice Cell
SOP	Standard Operating Procedure
WHSCT	Western Health and Social Care Trust

1.0 Background

The last three years have seen health care systems in the UK and Europe increasingly involved in the management of mass casualties. Increasing media coverage and the prevalence of terrorist activity and infectious diseases (e.g. Ebola) have resulted in raised general awareness.

A mass casualties incident for the health services is defined as an incident (or series of incidents) causing casualties on the scale that is beyond the normal resources of and healthcare services' ability to manage *(NHS England (EPRR) Concept of Operations for managing Mass Casualties 2017).* Learning from recent incidents has shown that casualties are likely to be a mixture of categories with 25% requiring immediate lifesaving intervention, 25% requiring intervention that can be delayed and 50% being walking wounded or minor injuries.

Following the recent terrorist attacks in the UK and Europe, a NI Regional Mass Casualty Task and Finish group was established. The purpose of this group was to:-

- Develop a Mass Casualty Plan for Northern Ireland;
- Review existing HSC Trust Major Incident Plans
- Develop mutual aid arrangements for a mass casualty response
- Develop a table top exercise to test the health response to a mass casualty incident.

The group was jointly chaired by the Director of Performance and Corporate Services and the Director for Public Health. Membership of the Regional Task and Finish group can be seen in appendix 5.

Regional planning for a health response to a mass casualty incident was consolidated in a regional table top exercise on the 6th December 2017. This exercise built on a five month project of joint planning, training and shared learning with colleagues from Manchester and Public Health

England. This report reflects the outcomes of the HSC SILVER (HSCB; PHA and BSO) debrief which was held on the 24th January 2018.

2.0 Aims and Objectives

2.1 Aim

The aim of the event was to exercise HSC 'Silver Command' tactical response to a mass casualty incident involving large numbers of casualties with traumatic injuries.

2.2 Objectives

The exercise objectives were as follows;

- To explore the capability of the HSCNI to respond to a mass casualty incident.
- To practice HSC Silver command, control and co-ordination arrangements in NI.
- To exercise the interoperability between Health Trusts and NIAS.
- To exercise the arrangements for surge capacity and casualty distribution in response to a mass casualty incident.

3.0 Methodology

The exercise was opened by Mrs. Mary Carey (exercise lead), Emergency Planning, PHA and was facilitated by Dr. David McManus, previous Medical Director, NIAS. After a detailed exercise briefing and initial scene setting pseudo news bulletin, the morning was divided into three inject led discussion sessions. Feedback from nominated tables following each inject was facilitated by Dr. McManus. The scenario and injects enabled participants to consider their understanding of current procedures, roles, responsibilities and capabilities; to share information; and highlight potential areas of vulnerability. Each table nominated a spokesperson to lead their group's discussion and a note taker who was tasked to capture the main decisions taken, issues raised and opportunities for

improvement. A member of Exercise Control (EXCON) was allocated to each table to provide guidance to participants on the exercise process as necessary and to highlight areas for discussion to the exercise lead.

Exercise injects were interspersed with presentations from invited Subject Matter Experts (SMEs) (see appendix 7 for list of participating SMEs).

To meet the exercise objectives, exercise REVLIS was designed to facilitate two exercises running in parallel, a command post exercise and casualty flow exercise.

3.1 Command Post Exercise

The command post injects were designed to test HSC SILVER regional co-ordination of a mass casualty response. A series of injects were developed to test the interface between HSC SILVER and Trust Incident Control Teams. Injects were designed to test communications, decision making and the co-ordination of Situation Reports (Sit Reps) from Trusts.

3.2 Casualty Flow Exercise

As part of the development of Trust Mass Casualty Plans, each Trust was asked to complete site specific Casualty Capability Charts (CCC). In adherence to national planning assumptions *(NHS England (EPRR) Concept of Operations for managing Mass Casualties 2017)*, all receiving hospitals should have plans to enable them to free up 20% of their total bed base, 10% which should be in the first six hours, and a further 10% within twelve hours of the incident declaration, allowing patients from the incident scene to be rapidly placed and allow patient flow. Hospitals not directly receiving patients from the scene are considered a supporting hospital for the incident. Nominated supporting hospitals are expected to maximise capacity in their bed base to a maximum of 20% of their total bed base within twelve hours of the incident declaration.

Due to the number of casualties generated by the incident, casualty distribution was predetermined for the exercise. The purpose of the casualty flow element of the exercise was to test Trust

planning assumptions and casualty capability charts. As part of the exercise, casualties were dispersed to Trusts from the scene based on the information recorded in each Trusts CCC. In addition, each Trust was required to incorporate a number of patient transfers from the Regional Major Trauma Centre (RVH) in support the release of capacity to deal with Priority 1 casualty dispatched from the scene. Support for the co-ordination of casualty transfers and communication from the incident scene was provided by a NIAS HALO who was allocated to each Trust table. Many participants commented that this demonstrated the value of pre-agreed casualty dispersal process in response to a mass casualty incident. Feedback suggested that Trusts should review their current CCCs and develop established structures for the distribution and mapping of casualties. It was also noted that this should also be supported by testing of plans, beyond a table top using simulation based exercises; specific training for surgical teams and a review of out of hours plans.

4.0 Exercise Scenario

The table top exercise scenario was based on a Marauding Terrorist Firearms Attack (MTFA) incident in a shopping centre in Belfast city centre resulting in significant numbers of adult and paediatric casualties. Three hundred and eighty eight casualties were generated by this incident and distributed to receiving hospitals across the HSC NI. A summary of the exercise casualties can be seen in appendix 2.

The scenario for Exercise REVLIS was designed to draw out the challenges presented by a mass casualty incident that quickly went beyond the capability of the initial responding Trust. This required collaborative working and communication across the HSC as well as co-ordination of assets and resources.

5.0 Participants

Participants in the exercise included representation from the PHA, HSCB, BSO, Trusts, NIAS, NI Blood Transfusion Service, NI Critical Care Network and the NI Trauma Network. Both Health and non-Health Subject Matter Experts were available at the exercise. These included;

- Public Health England
- Pennine Acute Hospitals Trust
- DoH (NI) Emergency Planning Branch
- Police Service Northern Ireland (PSNI)
- Northern Ireland Fire and Rescue Service (NIFRS)

A complete list of participants can be seen in appendix 6.

6.0 Exercise Planning

The exercise planning team included representatives for PHA, HSCB, NIAS, NI Trauma Network, BHSCT and NHSCT. A full list of acronyms for this report are included in the glossary at page 3.

7.0 Exercise evaluation and debrief process

The evaluation plan

An important tool for improving preparedness and planning is the evaluation of events and exercises, not only in identifying areas for improvement, but also identifying areas that are working well. The evaluation of exercise REVLIS was based on the aim and objectives and was drawn from a number of sources: the observation and assessment of the exercise facilitators; responses to injects and issues highlighted during the exercise discussions; participant evaluations.

In addition each Trust was asked to complete a debrief of the exercise for their organisation. Copies of these debrief reports and action plans are appendixes in this report.

On reflection, it was agreed that the exercise was ambitious and it would have been more suited to a full day event rather than a half day. Participants were fully engaged in the exercise and welcomed the opportunity to test and discuss plans with colleagues.

This report covers of a number of issues in terms of strengths and good practice as well as identifying learning as identified by the HSC SILVER team for the exercise.

8.0 Lessons Identified

Objective 1- To explore the capability of the HSC NI to respond to a mass casualty incident.

A mass casualty incident (MCI) may occur for a number of reasons: a transport collision; weather phenomena; the result of an act of terrorism; or the accidental or deliberate release of a Chemical or Biological substance, Radiation or Nuclear Explosion (CBRNE).An MCI will require regional surge arrangements and will be implemented to facilitate the transition from operational normality to mass casualty response and impending casualty load.

It is widely recognised that such an incident would require a multi-agency response, however the focus of Exercise REVLIS was on the response by NI Health and Social Care (HSC).

Observations and Strengths

The exercise provided an opportunity to test HSC SILVER and Trust and regional planning assumptions for the management of a response to a mass casualty incident. All organisations quickly established their ICTs and established command and control arrangements and reviewed the composition of their ICT in light of the incident there was clear evidence of leadership and knowledge of plans across each organisation.

Lessons Identified

Trusts quickly became overwhelmed by the number and frequency of casualty transfers from the scene. It quickly became evident that clear and immediate lines of communication were required across all parts of the organisation to establish a 'Battle Rhythm' for creating immediate capacity and support the implementation of Trust CCCs. Some Emergency Departments (EDs) quickly became overwhelmed and process had to be quickly put in place to clear 'bottle necks'. This aspect of the exercise worked well as it allowed participants to visualise vulnerabilities that may contribute to difficulties in implementing plans to free immediate capacity. Some Trusts quickly reorganised their ICTs in response to these issues.

It was acknowledged that while direct communications between Trusts are necessary, HSC SILVER should be kept informed of key decisions made or when Trusts are reaching their threshold capacity.

The HSC GOLD response was out of scope for the objectives of this exercise. On reflection, it was agreed that it would have been beneficial to have the DoH (NI) participating as an active participant rather than an observer as response to the scenarios highlighted the requirement for the establishment of early lines of communication between HSC SILVER and HSC GOLD. This action is important to provide an early indication to HSC GOLD that mutual aid arrangements may have to be invoked as Trusts quickly reached their capacity thresholds.

Lesson identified 1:

Trusts should review processes to support the implementation of CCCs.

Lesson identified 2:

Development of a Memorandum of Understanding (MoU) with the Health Service Executive (HSE) RoI to support a mass casualty response.

Objective 2- To practice HSC Silver command, control and co-ordination arrangements in NI

It is widely recognised that a response to a mass casualty incident would require a multi-agency response, however the focus of exercise REVLIS was on the HSC SILVER co-ordination of the response.

Observations and Strengths

A mass casualty incident is likely to be declared as a Joint Response (JR) level 4 incident, which requires regional co-ordination. In adherence to the DoH (NI) Emergency Powers and Directions (2010), no. 2 direction gives the HSCB, PHA and BSO the collective authority, when and emergency affects the operational area of two or more HSC Trusts, to direct and redeploy all necessary health and social care resources to deliver a response for the duration of the emergency (see appendix 5).

There was evidence of clear leadership in HSC SILVER. The structures for command and control are described in the Joint Response Emergency plan (JREP) and appeared to be well understood. Most senior decision makers were familiar with the JREP, but the practical application of principles proved more complex as the exercise progressed due to the large number of participants.

Lessons Identified

The composition of HSC SILVER was too large. This contributed to challenges in allocating roles and responsibilities.

Lesson 3

Review of membership of HSC SILVER

In adherence to agreed activation process for a mass casualty response, it was observed that some Trusts immediately activated their mass casualty plans in response to the METHANE message issued by NIAS. Some Trusts appeared to be unaware of the requirement to immediately activate their mass casualty plan following communication from NIAS. Instead they adhered to the process outlined in their Trust major incident plan, whereby a decision to activate a response is made at local level.

The absence of an immediate clear line of communication from HSC SILVER to declare regional command and control of the situation contributed to a delay in establishing the regional battle rhythm. Evaluation of feedback confirmed that the early establishment of a battle rhythm would strengthen existing command and control structures.

To date, experience around the co-ordination of an emergency response scenario has been predominately based around a response to a 'rising tide' scenario, for example Pandemic Flu. The exercise highlighted that specific planning and training is required for staff to support a response in hours and out of hours to a 'big bang' major incident/ mass casualty scenario.

A review of the exercise observations of HSC SILVER highlighted the requirement to formally embed the *Joint Emergency Services Interoperability Principles* (JESIP) in to decisions and actions taken. These are;

- Co-locate
- Communicate
- Co-ordinate
- Jointly understand Risk
- Shared Situational Awareness

Although largely not tested in Exercise REVLIS, incorporation of these principles into the agenda for HSC SILVER meetings would provide a consistent framework for the Incident Director for co-ordinating a response for the duration of a mass casualty response. Moving forward was agreed that command and control structures across all organisations should be tested and exercised on a more regular basis. This would assist in supporting clarification of roles and responsibilities and test lines of communication.

Lesson identified 4

Command and Control- review process for the establishment of lines of communication between Trusts and HSC SILVER.

Lesson identified 5

All HSC organisations to develop a process to support the regular testing of command, control and communication processes for their organisation.

To assist activation and co-ordination of the response, the agenda for the first meeting of HSC SILVER should be reviewed to include the following actions;

- Initiation of staff communication cascade throughout the three organisations (HSCB, PHA, BSO)

- Establishment of lines of communication with multi-agency co-ordination groups and the nomination of senior liaison officers to represent HSC SILVER as required.
- Establishment of a consistent Single Point of Contact (SPOC) with each Trust for the duration of the incident response.
- Appointment of a senior media spokesperson
- Co-ordination of the response and communication with staff if Linenhall Street and BSO are within the incident exclusion zone.

Lessons Identified 6

Review the agenda template for the first meeting of HSC SILVER.

Currently, the HSC SILVER response relies on the availability of senior staff who have experience in emergency response. Organisational change, movement and retirement of staff have contributed to a decrease in the number of staff who have experience and training in emergency preparedness. Discussion followed around the need to review the role of Directorate Services across the three organisations (PHA, HSCB and BSO) and identification of staff training needs to support emergency response.

It was agreed that absence of clear ownership of the emergency preparedness agenda in each Directorate has contributed to vulnerability in emergency response as follows;

- Emergency response relies on the availability of a few experienced individuals
- Emergency response, business continuity and recovery are viewed as three distinct entities and not intrinsically linked. Business continuity and recovery should commence immediately following activation of the emergency response. Directorate staff should be aware of their roles and responsibilities in supporting business continuity and recovery as part of an emergency response.

Lesson Identified 7

Bespoke training required for all staff who are part of HSC SILVER.

Lesson Identified 8

Ownership of the Emergency Planning agenda in each Directorate to be clarified and training identified for relevant staff across the three organisations (PHA, HSCB and BSO).

Discussion followed around how communication with staff is managed as part of an emergency response. The Controls Assurance Standard for Emergency Planning and the NI Civil Contingencies Framework (2011) requires that organisations test their staff call out cascade on a six monthly basis. The exercise scenario highlighted the need to have a clear process corporately and within each Directorate to communicate with staff both in hours and out of house as part of an emergency response. It was agreed that there is a requirement for all Directorates to regularly update review their staff confidential contacts lists. Directorate emergency response plans should outline how staff are communicated with (in hours and out of hours) and include test arrangements.

Lessons Identified 9

Staff contacts details to be updated and reviewed on a 6 monthly basis by all Directorate services.

Processes for information sharing and the provision of situation reports are required by HSC SILVER and Trust ICTs to support the co-ordination of a mass casualty response. The provision of timely accurate reports and situation assessments from Trusts plays a crucial role in assisting the decision making process at HSC SILVER in responding to the incident and preparing for recovery. The exercise demonstrated that the absence of timely situation awareness contributed to the slow establishment of the exercise 'battle rhythm' across the HSC.

An absence of clear procedures for quality assuring Sit Reps prior to submission to HSC SILVER was noted across all participating Trusts. On convening the HSC SILVER meeting, Trust representatives reiterated the information which had already been submitted, contributing to delay in exception reporting and the identification of issues that required action by HSC Silver and regional co-ordination. The meeting exceeded the allocated time, placing increased pressure on

the Incident Director (SILVER) and contributing to challenges in determining the accuracy of reporting.

The exercise highlighted the requirement to move from paper SitReps to an electronic system/ dashboard for obtaining 'live' information around capacity following activation of a Mass Casualty response. The proposed system should build on existing systems for reporting pressures in the system. It was noted that HSC SILVER and Trusts did not actively seek input or a SitRep from NIBTS. This highlighted scope for improved awareness of roles and responsibilities of all health and non-health responders to such an incident and the contribution they make to the HSC SILVER response.

Lesson Identified 10

Development of an electronic system for the collation of 'live' up to date Situation Reports from Trusts. SITREPS to be simplified, be specific to the needs of the incident and focus on unresolved issues in each sector.

Coordination of the media response is a key part of the organisations emergency response. Communications rotas for the PHA and HSCB ensure that one person is on call at for each organisation to co-ordinate a media response as part of normal business and emergency response. The incident scenario highlighted that one person on call (out of hours) would not be sufficient to co-ordinate the media response on behalf of HSC SILVER. Support from additional members of the team would be required. Discussion highlighted, that in hours and out of hours, there is no method to initiate a group call out to the team to support a response or contact Communications colleagues in Trusts apart from the on call person (out of hours) or a nominated individual (in hours) telephoning relevant staff individually. This is an unstainable approach during a major or mass casualty incident highlighting vulnerability in the organisations Communications Team response. It was agreed that a mobile group call alerting system is required. Currently there is no policy around the use of Apps to support group call outs using corporate mobiles. This issue

has been previously highlighted by the Communications Team and it was agreed that this now requires urgency action by IT.

Lesson Identified 11

Communications Team to review and update all staff contact details including those of Trust Communications Teams . Requirement of for the development of a group call out platform to support emergency response to be highlighted to IT for action.

Lesson Identified 12

All members of the communications team across the HSC who have a role in emergency response should attend bespoke emergency preparedness training.

Lesson Identified 13

Clarification is required in plans on the interface between HSC Silver Communications and the Executive Information Service (EIS).

Objective 3- To exercise interoperability between Health Trusts and NIAS

Observations and strengths

Throughout the exercise there was evidence of good communication, co-ordination and decision making across the individual teams.

Lessons identified

Once the organisations ICTs established themselves, command and control was evident within each organisations response, but there was little evidence of cross Trust working, with the exception of NIAS. In adherence to current planning, a NIAS HALO was allocated to each receiving hospital, facilitating communications between the scene and receiving sites.

Each organisation was aware of their individual response to the incident and it was observed that with the exception of HSC SILVER, there was an absence of wider situational awareness of the

extent of the incident and level of response required. This prompted a question around how issues requiring inter-organisational interventions are escalated and communicated. It was noted that only one Trust contacted NIBTS and NIAS directly as part of their response.

Lesson Identified 14

Requirement for development of live process for obtaining regional situation awareness across all responding Trusts and sharing information across the HSC.

Objective 4- To exercise arrangements for surge capacity and casualty distribution in response to a mass casualty incident.

Observations and Strengths

Casualty distribution was predetermined for the exercise in adherence to Trust Casualty Capability Charts (CCCs). Many participants commented that the exercise provided an opportunity to test the Trust CCCs and some commented that planning for the management of up to five hundred casualties regionally may be too ambitious in light of available resources.

Capacity was quickly identified and it was observe red that Trusts rapidly reached the threshold capacity as reflected in their CCCs.

Lessons identified

For the purposes of the exercise, on scene triage and decision making was out of scope and the exercise commenced at the point of casualties having been triaged and being ready for dispatch from scene to all Trust pre-identified receiving hospitals. Initially Trusts focused on the casualty prioritisations which were being dispatched to their Trust. It was observed that it took some time for the Trust Incident Directors to gain situational awareness of the wider impacts of the incident across the HSC and to gain information regarding capacity to receive patients. Although numbers of casualties dispatched to each Trust were based on individual Trust Casualty Capability Chart,

some Trusts expressed concern over the numbers received in addition to the repatriated patients from BHSCT.

Following initial challenges to freeing capacity in the ED for receipt of casualties, as the exercise progressed; Trusts were able to quickly create capacity in response to the incident. On discussion, it was highlighted, that Trusts should review plans to prepare for receipt of a second phase of casualties from the scene. It was observed that the timely identification of capacity, particularly in the community, conflicted with the daily activity reports which reflect challenges to identifying community beds as part of normal business arrangements. It was agreed that the community response to a mass casualty incident and the role of domiciliary care should be further explored as part of the review of Trust mass casualty plans.

Additional planning is required on numbers of patients who can be transferred off site to create capacity for incoming casualties and how transport arrangements would be implemented. NIAS should review plans to consider how secondary transfers can be supported as part of a mass casualty response.

The issue of maintaining business continuity for all services was quickly identified as a key area requiring further consideration as part of a response to a mass casualty response. The exercise demonstrated that response, business continuity and recovery are intrinsically linked. As increased numbers of casualties were dispersed across the system, it quickly became evident to all Trust ICTs and HSC SILVER that plans should consider how a response to a protracted incident is maintained, additional capacity created and the management of staff shifts to support the response, including the replacement of ICTs as necessary.

As part of the exercise scenario, a number of children were transferred to RBHSC. To support current mass casualty planning processes, it was agreed that a regional Paediatric Mass Casualty Response plan should be developed and should reflect cross Trust arrangements for the management of paediatrics.

Lesson Identified 15

Trusts to review their Casualty Capability Charts and ability to free up capacity in light of learning from the exercise and prepare for 2nd phase.

Lesson Identified 16

Review of Trust processes for tracking casualties from mass casualty incidents, and in particular secondary transfers

Lesson Identified 17

Arrangements for community discharge including the role of domiciliary care should be further explored to support Trust mass casualty planning.

Lesson Identified 18

Development of a Regional Paediatric Mass Casualty Plan

Additional Learning

Care of the Bereaved

Following the success of the BHSCT 'Learning from Manchester' event in October 2017, Professor Jennifer Leeming (Her Majesty's Coroner) and Fiona Murphy (Assistant Director of Nursing, Salford NHS Trust) were invited to share their learning for the management of the bereaved and discuss the Swan Model. It is important to note that at this time, HSC NI does not have a bespoke bereavement service as advocated by the Swann Model. Instead, each Trust relies on the services of Bereavement Co-ordinator. In light of shared learning, it was agreed that a system for the management of the Bereaved should be incorporated into Trust mass casualty plans.

Lesson Identified 19

A system for the management of the bereaved should be developed and incorporated into Trust mass casualty plans.

Exercise format

Feedback from the EXCON debrief, was that it was an ambitious exercise which highlighted a number of areas for improvement. On reflection, it was agreed that there were too many participants at each table, contributing to difficulties for exercise information flows. The absence of a comprehensive table plan meant that participants were not entirely aware as to which organisations were represented at the exercise.

Lesson Identified 20

Future exercises should limit the number of exercise participants from each organisation based on the exercise objectives.

9.0 Conclusion

Exercise REVLIS was well received by the participants, who are to be commended for their positive engagement and support to the aims and objectives of the exercise. This half day table top exercise enabled participants from Trusts, the HSCB, PHA, BSO, mental health, community providers, critical care, trauma, paediatrics and NIAS as well as observers from DoH (NI), NIFRS and PSNI to consider the response to a large scale incident where effective command and control, co-ordination and information sharing is essential to the delivery of a safe and effective response.

The collective training opportunity enhanced understanding of the importance of a co-ordinated response and collaborative working to ensure the most seriously injured casualties are triaged and transported to the most appropriate point of care.

All participating organisations have well established command , control, co-ordination and communication arrangements. However the exercise identified that a clear, visible structure for leadership and direction from HSC SILVER needs to be supported byt prompt decision making and clear command and control process across all parts of the HSC.

It is important that the lessons identified in the exercise are reviewed by the appropriate organisations to assess further action as necessary.

Appendix 1 **Summary of lessons identified**

Number	Lesson Identified	Action required by	Date for completion
1.0	Trusts should review processes required to support the implementation of Casualty Capability Charts (CCCs) and prepared for 2nd wave of casualty transfers.	Trusts	April 2018
2.0	Development of and Memorandum of Understanding (MoU) with the Health Service Executive (HSE) RoI to support Mass Casualty response.	HSCB/ PHA/ DoH(NI)	September 2018
3.0	Review of the membership of HSC SILVER	HSCB/PHA/BSO	April 2018
4.0	Command and Control- review process for the establishment of lines of communication between Trusts and HSC SILVER.	HSCB/PHA/Trusts	April 2018
5.0	All HSC organisations to develop a process to support the regular testing of command, control and communication processes for their organisation.	HSC Trusts HSCB/PHA/BSO	April 2018
6.0	Review the agenda template for the first meeting of HSC SILVER.	HSCB/PHA	April 2018
7.0	All staff who are part of HSC SILVER to attend bespoke training.	HSCB/PHA	April 2018
8.0	Ownership of the Emergency Planning agenda in each Directorate to be clarified and training identified for relevant staff across the three organisations (PHA, HSCB and BSO).	HSCB/PHA/BSO	April 2018

9.0	Staff contacts details to be updated and reviewed on a 6 monthly basis by all Directorate services.	HSCB/PHA/BSO	April 2018
10.0	Development of an electronic system for the collation of 'live' up to date Situation Reports (SitReps) from Trusts. SITREPS to be simplified and should be specific to the needs of the incident and focus on unresolved issues in each sector.	HSCB/PHA/BSO	April 2018
11.0	Communications Team to review and update all staff contact details including those of Trust Communications Teams Requirement of for the development of a group call out platform to support emergency response to be highlighted to ICT for action.	HSCB/PHA Communications Teams	April 2018
12.0	All members of the Communications Team across the HSC who have a role in emergency response should attend bespoke emergency preparedness training.	HSCB/PHA/ Trusts Communications Teams	April 2018
13.0	Clarification required in plans on the interface between HSC Silver Communications and the Executive Information Service (EIS).	HSCB/PHA Communications Teams	April 2018
14.0	Review of Trust processes for tracking casualties from mass casualty incidents, and in particular secondary transfers	Trusts and NIAS	April 2018
15.0	Arrangements for community discharge including the role of domiciliary care should be further explored to support Trust mass casualty planning.	Trusts	April 2018
16.0	Development of a Regional Paediatric Mass Casualty Plan	Regional Paediatric Forum	April 2018

17.0	A system for the management of the bereaved and their families should be developed and incorporated into Trust mass casualty plans.	Trusts and Regional Bereavement Co-ordinators Forum	April 2018
18.0	Future exercises should limit the number of exercise participants from each organisation based on the exercise objectives.	EXCON	ongoing

'Exercise REVLIS'
Wednesday 6th December 2017

Appendix 2 — Exercise REVLIS Casualty Summary

BHSCT

INJECT 1				
BHSCT	P1	P2	P3	Paed
RVH	3	0	4	
MIH	1	0	2	(1 P3)
RBHSC	2	1	0	(2 P1)
TOTAL	6	1	6	

INJECT 2				
BHSCT	P1	P2	P3	Paed
RVH	13	13	1	
MIH	0	4	19	
RBHSC	3	2	10	
TOTAL	16	19	30	

OVERALL TOTAL				
BHSCT	P1	P2	P3	Paed
RVH	16	13	5	
MIH	1	4	21	
RBHSC	5	3	10	
TOTAL	22	20	36	
TOTAL Casualties BHSCT			78	

SEHSCT

INJECT 1				
SEHSCT	P1	P2	P3	Paed
UHD	4	3	6	
TOTAL	4	3	6	

INJECT 2				
SEHSCT	P1	P2	P3	Paed
UHD	6	8	17	
TOTAL	6	8	17	

OVERALL TOTAL				
SEHSCT	P1	P2	P3	Paed
UHD	10	11	23	
TOTAL	10	11	23	
TOTAL Casualties SEHSCT			44	

SHSCT

INJECT 1				
SHSCT	P1	P2	P3	Paed
Craig	1	2	2	
DH	0	2	6	
TOTAL	1	4	8	

INJECT 2				
SHSCT	P1	P2	P3	Paed
Craig	5	12	17	
DH	0	12	10	
TOTAL	5	24	27	

OVERALL TOTAL				
SHSCT	P1	P2	P3	Paed
Craig	6	14	19	
DH	0	14	16	
TOTAL	6	28	35	
TOTAL Casualties SHSCT			69	

NHSCT

INJECT 1				
NHSCT	P1	P2	P3	Paed
AAH	1	2	3	
CAUSE	0	4	3	
TOTAL	1	6	6	

INJECT 2				
NHSCT	P1	P2	P3	Paed
AAH	5	24	47	
CAUSE	5	4	11	
TOTAL	10	28	58	

OVERALL TOTAL				
NHSCT	P1	P2	P3	Paed
AAH	6	26	50	
CAUSE	5	8	14	
TOTAL	11	34	64	
TOTAL Casualties NHSCT			109	

WHSCT

INJECT 1				
WHSCT	P1	P2	P3	Paed
SWAH	0	0	5	
ALTNA	0	0	8	
TOTAL	0	0	13	

INJECT 2				
WHSCT	P1	P2	P3	Paed
SWAH	3	10	27	
ALTNA	4	10	21	
TOTAL	7	20	48	

OVERALL TOTAL				
WHSCT	P1	P2	P3	Paed
SWAH	3	10	32	
ALTNA	4	10	29	
TOTAL	7	20	61	
TOTAL Casualties WHSCT			88	

Overall Total of Casualties	388

'Exercise REVLIS'
Wednesday 6th December 2017

From the Chief Medical Officer
Dr Michael McBride

Department of
Health, Social Services and Public Safety
www.dhsspsni.gov.uk

AN ROINN
Sláinte, Seirbhísí Sóisialta agus Sábháilteachta Poiblí

MÄNNYSTRIE O
Poustie, Resydènter Heisin an Fowk Siccar

Castle Buildings
Stormont Estate
Belfast BT4 3SQ
Tel: Irrelevant & Sensitive
Fax:
Ema I&S @dhsspsni.gov.uk

Chief Executives of HSC Trusts (incl. NIAS)
Chief Executive HSCB
Chief Executive PHA
Chief Executive BSO
Chief Executive NIBTS
Chief Fire Officer NIFRS

Your Ref:
Our Ref:
Date: 3 August 2010

DEPARTMENT OF HEALTH, SOCIAL SERVICES AND PUBLIC SAFETY EMERGENCY POWERS DIRECTIONS

My purpose in writing to you is to bring your attention to the fact that the Emergency Planning Directions of 2004 have been revised to take account of current HSC structures, roles and responsibilities.

The revised 2010 Directions are attached at **Annex A**. The main changes to the 2010 Directions:

(i) reflect the changing Health and Social Care (HSC) landscape, responsibilities and structures following the implementation of the Review of Public Administration (RPA) in 2009;

(ii) provide clarity on the established command and control structures: GOLD (DHSSPS strategic response); SILVER (Regional Agency, Regional Board and RBSO tactical response) and BRONZE (HSC Trusts and Special Agencies operational response);

(iii) remain unsigned until such time as an emergency warrants their activation; and

(iv) no longer embed performance management arrangements.

'Exercise REVLIS'
Wednesday 6th December 2017

Application of the 2010 Directions

There are 3 Directions:

(1) when signed, the **No.1 Direction**, or 'DHSSPS GOLD Emergency Powers Direction 2010' gives the Chair of the Regional Health Command Centre (RHCC) the authority to direct and redeploy all necessary Health and Social Care resources to deliver an effective health response for the duration of the health emergency. This Direction will be signed by a Senior Officer of the DHSSPS and communicated to all HSC organisations following the template attached at **Annex B**;

(2) when signed, the **No.2 Direction**, or 'HSC SILVER Emergency Powers Direction 2010' gives the HSCB, PHA and the BSO the collective authority, when an emergency affects the operational area of two or more HSC Trusts, to direct and redeploy all necessary Health and Social Care resources to deliver an effective health response for the duration of the health emergency. It is therefore, imperative for the 'HSC SILVER Command Centre' to provide the DHSSPS with regular and early alerting on which a decision to sign the No.2 Direction can be made. This Direction will be signed by a Senior Officer of the DHSSPS and communicated to all HSC organisations following the template attached at **Annex B**;

(3) when signed, the **No.3 Direction**, or 'HSC BRONZE Emergency Powers Direction 2010' requires all HSC Trusts and Special Agencies to cooperate, liaise, work and redeploy resources as required by the activated 'HSC SILVER Command Centre', to deliver an effective health response for the duration of the health emergency. The signing of the No.3 Direction will always follow the signing of the No.2 Direction. This Direction will be signed by a Senior Officer of the DHSSPS and communicated to all HSC organisations following the template attached at **Annex B**.

Activation and authorisation of the 2010 Directions

A formal on-call arrangement for out-of-hours is currently being developed. The appropriate information will be cascaded to you shortly.

'Exercise REVLIS'
Wednesday 6th December 2017

Thank you to colleagues who provided helpful comments towards revising the Emergency Powers Directions for Health. All comments have been discussed in detail with the Departmental Solicitor and changes incorporated as appropriate taking account of constraints imposed by the requirement to make the Directions under the Health and Personal Social Services (Northern Ireland) Order 1972 and subsequent legislation. The revised 2010 Directions are attached at **Annex A.**

Any queries regarding the Directions should be directed to the Head of Emergency Planning Branch, on (**Irrelevant & Sensitive**

Yours sincerely

Personal Data

DR MICHAEL McBRIDE
Chief Medical Officer

'Exercise REVLIS'
Wednesday 6th December 2017

ANNEX A

No.1 Direction

THE HEALTH AND PERSONAL SOCIAL SERVICES (NORTHERN IRELAND) ORDER 1972

DEPARTMENT OF HEALTH, SOCIAL SERVICES AND PUBLIC SAFETY (EMERGENCY POWERS) DIRECTION (NORTHERN IRELAND) 2010*

The Department of Health, Social Services and Public Safety **(a)** being of the opinion that an emergency exists and in order to secure the effective continuance of services under health and social care legislation, in exercise of the powers conferred on it by Article 52 of the Health and Personal Social Services (Northern Ireland) Order 1972 **(b)** hereby directs as follows:

Citation Commencement and Interpretation

1. (1) This Direction may be cited as the DHSSPS GOLD Emergency Powers Direction 2010 and shall come into operation on _____ (Insert date).

(2) In this Direction –

"the Regional Health Command Centre Strategic Cell" means a group comprising of Departmental and non-Departmental staff, chaired by a senior officer of the Department, convened to respond to the emergency.

Implementation of DHSSPS GOLD Emergency Powers Direction:

2. During the period of the emergency the Chair of the Regional Health Command Centre Strategic Cell, shall have powers to direct and redeploy all necessary health and social care resources, including staff, in health and social care bodies **(c)** in order to secure and advance the health and social care of the people of Northern Ireland.

Senior Officer of Department of Health,
Social Services and Public Safety

_____ (Insert date).

(a) S.I. 1999/283(N.I.1)
(b) S.I.1972/1265 (N.I.14) as amended by Schedule 5 of S.I.1991/194(N.I.1)
(c) See section 1(5) of the Health and Social Care (Reform) Act (Northern Ireland) 2009

* The No.1 Direction was reviewed by DHSSPS officials on 25 February 2016 without change

'Exercise REVLIS'
Wednesday 6th December 2017

No.2 Direction

THE HEALTH AND PERSONAL SOCIAL SERVICES (NORTHERN IRELAND) ORDER 1972

THE EMERGENCY POWERS (FUNCTIONS OF THE REGIONAL BOARD, THE REGIONAL AGENCY AND RBSO) DIRECTION (NORTHERN IRELAND) 2010**

The Department of Health, Social Services and Public Safety **(a)** in exercise of the powers conferred on it by section 6 of the Health and Social Care (Reform) Act (Northern Ireland) 2009 **(b)** hereby directs as follows:

Citation and Commencement

1. (1) This Direction may be cited as the HSC SILVER Emergency Powers Direction 2010 and shall come into operation on _____ (Insert date).

(2) This Direction applies to the following health and social care bodies **(c)**:-

(a) the Regional Board,
(b) the Regional Agency, and
(c) RBSO.

Exercise of Emergency Powers Functions of the Regional Board, the Regional Agency and RBSO

2. The bodies to which this Direction applies shall, in response to an emergency that affects the operational area of two or more HSC Trusts **(d)**:-

(i) coordinate redeployment of the health and social care resources, including staff;

(ii) provide briefing, support and situation reports to the Department and other organisations as required by Department;

(iii) establish a health and social care troika, consisting of representatives and chaired by a representative, of the bodies to which this Direction applies, to be known as the "HSC SILVER Command Centre" to coordinate the health and social care response.

Senior Officer of Department of Health,
Social Services and Public Safety

_____ (Insert date).

(a) S.I. 1999/283(N.I.1)
(b) Health and Social Care (Reform) Act (Northern Ireland) 2009 c. 1(N.I.)
(c) See section 1(5) of the Health and Social Care (Reform) Act (Northern Ireland) 2009
(d) See section 1(3) of the Health and Social Care (Reform) Act (Northern Ireland) 2009

** The No.2 Direction was reviewed by DHSSPS officials on 25 February 2016 without change

'Exercise REVLIS'
Wednesday 6th December 2017

No.3 Direction

THE HEALTH AND PERSONAL SOCIAL SERVICES (NORTHERN IRELAND) ORDER 1972

THE EMERGENCY POWERS (FUNCTIONS OF HSC TRUSTS AND SPECIAL AGENCIES) DIRECTION (NORTHERN IRELAND) 2010***

The Department of Health, Social Services and Public Safety **(a)** in exercise of the powers conferred on it by Article 4 of the Health and Personal Social Services (Special Agencies) (Northern Ireland) Order 1990 **(b)** and paragraph 6(2) of Schedule 3 to the Health and Personal Social Services (Northern Ireland) Order 1991 **(c)** hereby directs as follows:

Commencement and Citation

1. (1) This Direction may be cited as the HSC BRONZE Emergency Powers Direction 2010 and shall come into operation on _____ (Insert date).

(2) In this Direction –

"the HSC SILVER Command Centre" means a troika comprising of representatives of the Regional Board, the Regional Agency and RBSO.

(3) This Direction applies to the following health and social care bodies **(d)**:-

(a) HSC trusts; and
(b) special agencies.

Exercise of emergency powers functions of HSC trusts and special agencies

2. The bodies to which this Direction applies shall, in response to an emergency requiring the establishment of the HSC SILVER Command Centre, during the period of the emergency and in order to ensure an effective response to the emergency -

(i) cooperate, liaise and work with each other and other organisations as required by the HSC SILVER Command Centre;

(ii) provide briefing and information to the HSC SILVER Command Centre and onwards to the Department;

(iii) redeploy all appropriate resources, including staff, in accordance with the instructions of the Chair of the HSC SILVER Command Centre.

Senior Officer of Department of Health,
Social Services and Public Safety

_____ (Insert date).

(a) See S.I. 1999/283 (N.I.1)
(b) S.I. 1990/247 (N.I.3)

(c) S.I.1991/194(N.I.1)
(d) See section 1(5) of the Health and Social Care (Reform) Act (Northern Ireland) 2009

*** The No.3 Direction was reviewed by DHSSPS officials on 25 February 2016 without change

ANNEX B

TEMPLATE

DEPARTMENT OF HEALTH, SOCIAL SERVICES AND PUBLIC SAFETY – RHCC EMERGENCY COMMUNICATION

1. I am writing to advise you that the Department of Health, Social Services and Public Safety being of the opinion that an emergency exists and in order to secure the effective continuance of services under health and social care legislation, in exercise of the powers conferred on it by Article 52 of the Health and Personal Social Services (Northern Ireland) Order 1972 and Section 6 of the Health and Social Care (Reform) Act (Northern Ireland) 2009, has signed and attached the following Emergency Powers Directions:

   - **DHSSPS GOLD Emergency Powers Direction 2010** [delete as appropriate]
   - **DHSSPS SILVER Emergency Powers Direction 2010** [delete as appropriate]
   - **DHSSPS BRONZE Emergency Powers Direction 2010** [delete as appropriate]

2. I would like to take this opportunity to thank everyone who will be involved or affected by this action and will issue further communications on the likely duration of the emergency once the impact to Health is more fully understood.

Senior Officer of Department of Health,
Social Services and Public Safety

_____ (Insert date).

Appendix 4 **Exercise Control (EXCON)**

Table	Facilitator
Exercise Controller	Name
EXCON Observer	Dr. Name Redacted
BHSCT	Dr.
SEHSCT	Name Redacted
SHSCT	Name Redacted
NHSCT	Name Redacted
WHSCT	Name Redacted
HSC Silver	Name Redacted
Observers	Dr. (Name Redacted

Appendix 5 **Membership of Regional Mass casualty Task and Finish Group**

PHA	Name Redacted	Emergency Planning Lead
	Name Redacted	Dir of Public Health
	Name Redacted	AD Public Health
	Name Redacted	Nurse Consultant
	Name Redacted	PH Consultant
	Name Redacted	PH Consultant
HSCB	Name Redacted	Emergency Planning Lead
	Name Redacted	Specialist Services
	Michael Bloomfield	Deputy CX/Dir Performance and CS
DoH(NI)	Naresh Chada	Senior Medical Officer
NIAS	Name Redacted	Emergency Planning Lead
BHSCT	Name Redacted	Emergency Planning Lead
	Name Redacted	Emergency Department Consultant
	Frank Young	Co-Director
	Brian Armstrong	Co-Director
	Name Redacted	Lead Clinician NI Major Trauma Network
	Name Redacted	ED Consultant, RBHSC (Paediatric Representative on Regional T&F Group)
NHSCT	Name Redacted	Emergency Planning & Business Continuity Manager
	Audrey Harris	Assistant Director Medicine and Urgent Pathways
SEHSCT	Charlie Martyn	Medical Director
	Myra Weir	Director of Human Resources & Corporate Affairs
	Irene Low	Assistant Director Risk Management & Governance

	Name Redacted	Head of Risk Management Advisory Services
	Name Redacted	Emergency Medicine Consultant
WHSCT	Name Redacted	Emergency Planning Lead
SHSCT	Name Redacted	Emergency Planning Lead
	Simon Gibson	AD Medical Directors Office
	Name Redacted	Emergency Dept colleague
NIBTS	Name Redacted	Head of HR and Corporate Services
	Name Redacted	
	Name Redacted	Business Continuity and Risk Manager
NIFRS	Name Redacted	Group Commander
BSO	Name Redacted	Head of Logistics

Appendix 6 **Exercise REVLIS Participants**

NAME	ORGANISATION	ROLE
Name Redacted	PHA	Facilitator
Dr. Nick Gent	PHE	Speaker
Name Redacted	PHA	Facilitator
Name Redacted	CCaNNI/ WHSCT	Consultant Anaesthetist, WHSCT
Name Redacted	NIBTS	Consultant in Transfusion Medicine (Silver Rep
Name Redacted	NIBTS	
Name Redacted	NIBTS	
Name Redacted	NIBTS	
Name Redacted	NIBTS	
Name Redacted	SEHSCT	Clinical Manager, Medical Specialties & Acute Medicine for Older People
Myra Weir	SEHSCT	Lead Director (Emergency Planning & Business Continuity
Charlie Martyn	SEHSCT	Medical Director (Co-Chair of EP /BC committee)
Name Redacted	SEHSCT	Unscheduled Care and Improvement Lead, Medicine
Name Redacted	SEHSCT	Critical Care - Consultant Anaesthetist, Surgery- Anaesthetics, Theatres and ICU
Name Redacted	SEHSCT	Paediatrics - Neonatal Ward Manager
Name Redacted	SEHSCT	Emergency Dept - Consultant, Emergency Medicine
Name Redacted	SEHSCT	Patient Flow - Senior Manager Patient Flow, Emergency Medicine
Sharon McRoberts	SEHSCT	Senior Nurse - Assistant Director of Nursing Regulation, Workforce Planning, Education and Development, Primary Care Elderly and Nursing
Name Redacted	SEHSCT	Corporate Communications - Head of Communications
Jeff Thompson	SEHSCT	Support Services - Assistant Director Patient Experience
Linda Johnston	SEHSCT	Community Services – Assistant Director, Older Peoples Services
Name Redacted	SEHSCT	Medical Directorate - Clinical Coordinator Medicine
Irene Low	SEHSCT	Assistant Director RM&G
Name Redacted	SEHSCT	Head of Risk Management Advisory Services
Name Redacted	SEHSCT	EP & BC Officers
Name Redacted	SEHSCT	EP & BC Officers
Dr Seamus O'Reilly	NHSCT	Lead Director
Name Redacted	NHSCT	Unscheduled Care

'Exercise REVLIS'
Wednesday 6th December 2017

NAME	ORGANISATION	ROLE
Name Redacted	NHSCT	Critical Care
	NHSCT	Critical Care
	NHSCT	Paediatrics
	NHSCT	Emergency Department NHSCT
	NHSCT	Emergency Department NHSCT
	NHSCT	Emergency Department NHSCT
	NHSCT	Emergency Department NHSCT
	NHSCT	Patient Flow & Senior Nursing
	NHSCT	Corporate Communications
	NHSCT	Support Services
	NHSCT	Community Services
	NHSCT	Emergency Planning
	HSCB	Emergency Planning
	HSCB	Dir PM & CS
	HSCB	Communication Rep
	HSCB	DoIC
	HSCB	DoIC
	HSCB	PMSI
	HSCB	PMSI
	HSCB	DoIC
	HSCB	SCC
	HSCB	Comms
	HSCB	CS
	HSCB	DoIC
	BSO	Chief Executive, BSO
	BSO	Director of HR&CS
	BSO	Head of Procurement
	BSO	Head of Operations (ITS)
Ronan O'Hare		Director of Acute Services
Mark Gillespie	WHSCT	Assistant Director Acute Services Operational and Service Improvement
Name Redacted	WHSCT	Theatre Manager
	WHSCT	Ward Manager, Paediatrics
	WHSCT	Consultant Emergency Medicine
	WHSCT	Service Manager Unscheduled Care
Brian McFetridge	WHSCT	Assistant Director Acute Services Nursing and Midwifery
Name Redacted	WHSCT	Head of Support Services
	WHSCT	A/Locality Service Manager
	WHSCT	Emergency Planning
	WHSCT	Communications Manager
	WHSCT	Consultant Surgeon
Dr. Carolyn Harper	PHA	Dir Public Health
Dr. Lorraine Doherty	PHA	Ass. Dir Public Health

NAME	ORGANISATION	ROLE
Dr. Gerry Waldron	PHA	Consultant in Health Protection
Dr. Muhammad Sartaj	PHA	Consultant in Public Health
Dr Stephen Bergin	PHA	Consultant in Public Health
Stephen Wilson	PHA	Ass. Dir Communications
Name Redacted	PHA	Communications Manager
	DoH	OBSERVER - Head of Secondary Care
	PSNI	OBSERVER
	PSNI	OBSERVER
Dr Anna McKeever	PHA	OBSERVER
Dr Jenny Mack	PHA	OBSERVER
Name Redacted	NIFRS	OBSERVER
Dr Richard Wright	SHSCT	Medical Director
Simon Gibson	SHSCT	Assistant Director, Medical Directors Office
Name Redacted	SHSCT	Emergency Planner
	SHSCT	Head of Service, Patient Flow
	SHSCT	Head of Transport Services
	SHSCT	Head of Service, Non-Acute Hospitals
	SHSCT	Lead Nurse, Critical Care
	SHSCT	Consultant , ICU
Anne McVey	SHSCT	Assistant Director, Unscheduled Care
Name Redacted	SHSCT	Head of Communications
	DoH (NI)	Emergency Planning Branch

Appendix 7 Subject Matter Experts (SMEs)

Speaker	Organisation
Dr. Nick Gent	Consultant, Public Health England
Professor Jennifer Leeming	Her Majesty's Coroner
Fiona Murphy	Assistant Director of Nursing, Salford NHS Trust
Justin Burke-Jones	(NILO) Head of Emergency Preparedness & Business Continuity, Isle of Wight NHS Trust