



Report on Exercise Makgill

November 2006



Contents

Reference	Content	Page Number
1	Executive Summary	1
2	Background	5
2.1	Exercise Makgill: Aim	5
2.2	Exercise Makgill: Objectives	5
2.3	Exercise Makgill: Participants	5
2.4	Exercise Makgill: Scenario	5
3	Approach	6
4	Evaluation and Analysis	8
5	Risk Ratings	9
5.1	Risk Summary: Exercise Makgill Objectives	9
5.2	Risk Summary: Exercise Delivery and Control	9
6	Findings for the Health Sector	10
6.1	Objective One: Public Health Interventions	11
6.1.1	<i>Surveillance Capability and Capacity</i>	12
6.1.2	<i>Early detection and isolation of cases</i>	12
6.1.3	<i>Quarantine of contacts</i>	12
6.1.4	<i>Use of Antivirals</i>	12
6.2	Objective Two: Cluster Control	13
6.2.1	<i>Contact Tracing by Public Health Service</i>	13
6.2.2	<i>Isolation Procedures and Protocols</i>	14
6.2.3	<i>Reconfiguration of Health Services</i>	14

	6.2.4	<i>Preparation for Establishment of Community Based Assessment Centres</i>	14
6.3		Objective Three: Communications	15
	6.3.1	<i>Health Sector Communications</i>	15
	6.3.2	<i>Public Communications</i>	17
	6.3.3	<i>Media Communications</i>	17
6.4		Objective Four: Emergency Operational Centres	18
	6.4.1	<i>EOC Centres</i>	18
	6.4.2	<i>CIMS</i>	18
7		Exercise Control and Delivery	19
	7.1	Background for Exercise Control	19
	7.2	Analysis and Evaluation	19
	7.2.1	<i>Summary of Responses</i>	20
8		Findings for Exercise Control and Delivery	22
	8.1	Objective One: Communication and Facilitation with EOC Facilitators	22
	8.1.1	<i>Communications</i>	22
	8.1.2	<i>Human Resources</i>	22
	8.1.3	<i>Systems, Tools and Processes</i>	23
	8.2	Objective Two: Monitoring and Tracking Exercise “Play”	23

1 Executive Summary

This report identifies findings from Exercise Makgill that relate to the Ministry of Health, District Health Boards, ESR, and other health sector participants. In general, recommendations are not provided as the findings need to be discussed by the relevant health professionals who will then determine the appropriate action to be taken to address the identified issues. Where suggestions have been made on a possible way forward, the matter has been linked to the specific agency involved (that is, DHB, ESR, the Ministry, or PHU).

Exercise Makgill was carried out on 9 November 2006 with the purpose of assessing the Health Sector's ability to respond to the "Stamp It Out" stage of a pandemic event in New Zealand.

The objectives of Exercise Makgill were to practice and assess:

- **Public Health Interventions:** including surveillance capability and capacity, early detection and isolation of cases, quarantine of contacts and use of antivirals.
- **Cluster Control:** including contact tracing procedures by public health services, isolation procedures and protocols, reconfiguration of health services, preparation for establishment of community-based assessment centres (CBACs).
- **Communications with Public and Media:** including content and distribution of fact sheets, management of website information (consistency and currency), and regular media briefings.
- **Exercise Operations Centre:** including the capability and capacity of an EOC to effectively operate during a pandemic event.

In addition, exercise delivery and control (EXCON) was assessed. The objectives for EXCON were to:

- Conduct the exercise through facilitating timely communication of injects to exercise facilitators and evaluators; and
- Monitor the exercise and determine when corrective actions (such as new exercise inputs) were required to bring the exercise back on track.

Overall, the exercise was a success in that it was able to identify the gaps and weaknesses in the current plans, so that improvements can be made in the future.

All the participants contributed a high level of engagement which enabled the exercise to achieve its objectives, and feedback from the facilitators indicated that it was a worthwhile and enjoyable exercise.

It is worth noting that the feedback indicated that the following aspects went particularly well:

- Most participants felt that the exercise was well organised and realistic.
- Briefings and presentations prior to the exercise helped participants to understand and engage with the Exercise.
- Participant feedback indicated that there was a good level and mix of disciplines and that the participants included the right people for this exercise.
- Participants did an excellent job in identifying their own areas for improvement, and ensuring that gaps were identified and communicated back to the Ministry in a timely manner.
- There was a high level of engagement throughout the sector, which helped to ensure that the aims of Exercise Makgill were achieved.
- Contact tracing procedures and operations were carried out efficiently and effectively in all districts.
- Isolation procedures and protocols were found to be satisfactory and will be further tested during Exercise Cruickshank.

1.1 Summary of Findings

The findings for each objective have been grouped together in the following categories:

- Policy, Procedures and Guidance
- Systems, Tools and Processes
- Human Resources: Capability and Capacity
- Communications, and
- Monitoring.

There were a total of 16 key findings for areas requiring improvement. The risk ratings referred to below are discussed in more detail in Section 5 of this report.

Policies, Procedures and Guidance

- There is a need for more comprehensive policies, procedures, protocols and guidance to enable an effective and timely response to a pandemic event. **Rating: High**

- A set of clear guidelines is required to inform the establishment and operation of CBACs. **Rating: Moderate**
- Clarification of some current policies and procedures is necessary. **Rating: Moderate**

Systems, Tools and Processes

- Communication systems across the sector need improvement to allow effective communications to take place during an emergency. At times processes were not being followed due to lack of clarity on what was expected. In one instance a DHB was unwilling to engage in the established process because they were unclear of what was required and preferred to follow their own established process. There is a need to develop clear and consistent communication systems and processes that the sector is willing to engage with. **Rating: High**
- Overall, the current systems and tools require improvement and further development to ensure that they are effective and utilised consistently. **Rating: Moderate**
- The resources provided to evaluate Exercise Makgill: Exercise Control, need more training and improved tools for evaluation activities. **Rating: Moderate**
- Reconfiguration and increased technical support is required to ensure that all DHBs are able to access the full capabilities of FIMS. **Rating: Low**
- Some EOCs across the sector found that they require an increase in facilities and equipment to enable them to respond effectively during a pandemic event, and are addressing this issue as a result of the exercise experience. **Rating: Low**

Human Resources

- In some areas preparation, training and use of staff resources was scarce and proved insufficient for some exercise participants to perform as efficiently as required. **Rating: High**
- In some areas, further training in CIMS will allow staff to better understand their role and increase the capability in the sector regarding the CIMS (Coordinated Incident Management System). **Rating: High**
- In some cases further training and/or briefings will enable facilitators and evaluators to more effectively carry out their role during the exercise. **Rating: High**
- A number of DHBs reported that lack of staffing resources mean that research into alternatives to home quarantine has not been adequately explored. **Rating: Moderate**
- Roles and responsibilities across the sector require clearer definition to avoid confusion and misunderstandings. **Rating: Moderate**

- There is a need for more trained staff to be available for the amount of work that needs to be carried out during a pandemic event, including alternates and additional resources where required. In particular, there is a need for more trained staff to be available to carry out the activities required to enable effective communication. **Rating: Moderate**

Communications

- Pre-exercise communications need to be more comprehensive and where new or amended information is released, this needs to be communicated clearly to avoid confusion and misunderstandings. **Rating: High**

Monitoring

- The National Exercise Control team needs to ensure that there is a timely and adequate response to exercise activity carried out by participants in response to injects or requests for information. **Rating: Moderate**

These findings are discussed in more detail throughout the report where discussion is based around objectives and feedback from various parts of the sector.

2 Background

2.1 Exercise Makgill: Aim

The aim of Exercise Makgill was to exercise specific aspects of the New Zealand Influenza Pandemic Action Plan (NZIPAP) in order to assess the capacity and capability of the New Zealand health sector to respond to the Stamp It Out stage of the NZIPAP. It allowed the health sector to exercise their plans and identify any gaps that needed to be addressed.

2.2 Exercise Makgill: Objectives

The objectives of Exercise Makgill were to practice and assess:

- **Public Health Interventions:** including surveillance capability and capacity, early detection and isolation of cases, quarantine of contacts and use of antivirals.
- **Cluster Control:** including contact tracing procedures by public health services, isolation procedures and protocols, reconfiguration of health services, preparation for establishment of community-based assessment centres (CBACs).
- **Communications with Public and Media:** including content and distribution of fact sheets, management of website information (consistency and currency), and regular media briefings.
- **Exercise Operations Centre:** including the capability and capacity of an EOC to effectively operate during a pandemic event.

2.3 Exercise Makgill: Participants

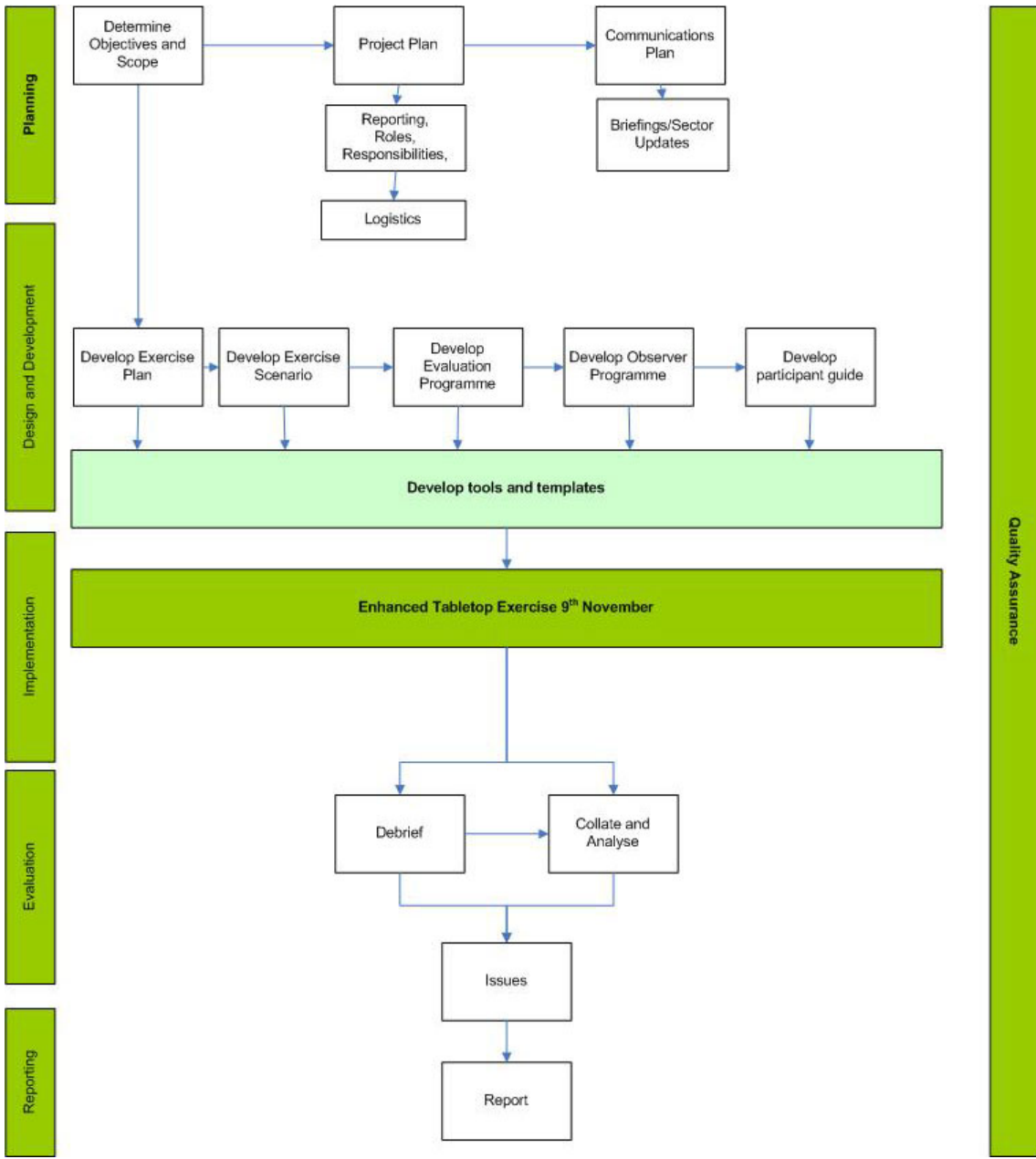
Exercise Makgill restricted participation to the health sector only. This included 21 District Health Boards, Public Health Services, the Institute of Environmental Science and Research, and the Ministry of Health. Each participating party nominated a facilitator and at least one evaluator to aid the running and evaluation of the exercise.

2.4 Exercise Makgill: The Scenario

Exercise Makgill took place on 9 November 2006, and the scenario was conducted within the framework of scenario 5.2 of the NZIPAP version 16.

3 Approach

Diagram 1: Exercise Makgill Methodology



3.1 Quality Assurance

During the development and design of Exercise Makgill, all material was reviewed by a Health Sector Advisory Group and by the National Coordinator Pandemic Planning. Final sign off was carried out by the National Coordinator Pandemic Planning.

4 Evaluation and Analysis

The information collected during Exercise Makgill was evaluated and analysed using qualitative processes. A level of judgement was used to draw conclusions and identify the root cause relating to a range of comments. The actual data on responses is presented in graph form in Appendix One.

Data and information about the results of the exercise were collected through:

- Debriefings with exercise participants, facilitators, and evaluators
- Observation notes and comments from evaluators using pre-developed templates
- Narrative feedback provided from DHBs and two Public Health Services
- Role player notes, including responses from players to queries posed by role players, and
- Independent verification of information provided to and from ESR, the Ministry, and DHBs.

Feedback was received from 20 District Health Boards and seven Public Health Service units.

5 Risk Ratings

The following system has been used to identify the significance of the observations.

HIGH	First priority – to be addressed in the short term.
MODERATE	Second priority – to be addressed in the short term.
LOW	Third priority – to be addressed in the medium term.

5.1 Risk Summary: Exercise Makgill Objectives

The table below summarises our findings in relation to the objectives of Exercise Makgill according to their risk ratings. These findings are set out in detail in Section 6: Findings for the Health Sector.

AREA	Significance of Issues Identified			
	High	Moderate	Low	Total Issues
Policies, Procedures and Guidelines	1	2	0	3
Human Resources: Capacity and Capability	2	4	0	6
Systems, Tools and Processes	0	2	2	4
Total Issues	3	8	1	13

5.2 Risk Summary: Exercise Delivery and Control

The table below summarises our findings in relation to the delivery of Exercise Makgill according to their risk ratings. These findings are set out in detail in Section 8: Findings for Exercise Control and Delivery.

AREA	Significance of Issues Identified			
	High	Moderate	Low	Total Issues
Communications	1	0	0	1
Human Resources: Capacity and Capability	1	0	0	1
Systems, Tools and Processes	0	1	0	1
Monitoring	0	1	0	1
Total Issues	2	2	0	4

6 Findings for the Health Sector

The findings listed in this section under each objective have been grouped into five key areas, to attempt to address the core issues, rather than present a long list of findings that are very similar in nature for each objective. The five groupings are:

- Policies, procedures and guidelines
- Systems, tools and processes
- Human Resources
- Communications, and
- Monitoring

The discussion section following the findings has been written to address each specific sub-objective under the four main objectives, to provide more detail on each area that was being exercised during Exercise Makgill.

6.1 Objective One: Public Health Interventions

There were four key findings in this area:

- **Policies, Procedures and Guidelines:** There is a need for more comprehensive policies, procedures and guidelines to be provided by the Ministry to enable an effective and timely response to a pandemic event. **Rating: High**

These include:

- policies and procedures around emergency communications, including clarification around roles and responsibilities between the Ministry, ESR, DHBs, Primary Care and Regional Health Coordinators
- a detailed Standard Operating Procedures manual (for a pandemic type event)
- protocols for providing information and the level of information available to enable early detection and isolation of cases
- a clear policy and procedure to ensure that the appropriate channels are used to influence the public should quarantining become necessary
- clarification around roles and responsibilities in the Antiviral Medication Interim Guidelines to determine who is authorised to release antivirals when they are required. The criteria for administering antivirals also require clarification and need to be reviewed to enable effective distribution during a pandemic event

Responsibility: The Ministry of Health

- **Systems, Tools and Processes:** Communication systems across the sector need improvement to allow effective communications to take place during an emergency. At times processes were not followed due to lack of clarity on what was expected. There is a need for the Ministry to develop, communicate and establish a consistent and clear communication system and processes that the sector is willing to engage with. **Rating: High**

Responsibility: The Ministry of Health (in consultation with District Health Boards)

- **Human Resources:** A number of DHBs reported that lack of staffing resources mean that research into alternatives to home quarantining has not been adequately explored. **Rating: Moderate**

Responsibility: District Health Boards (to be explored and prioritised appropriately, as part of the new funding arrangements)

- **Human Resources:** Roles and responsibilities relating to emergency management across the sector require clearer definition from the Ministry to avoid confusion and misunderstandings. **Rating: Moderate**

Responsibility: Ministry of Health (in consultation with District Health Boards)

These findings are discussed below in relation to each sub-objective of Objective One: Surveillance Capability and Capacity, Quarantine of Contacts, and Use of Antivirals.

6.1.1 Surveillance Capability and Capacity

Ineffective communication across the sector hindered the ability to effectively monitor and track the progress of the pandemic event throughout New Zealand. During the exercise participants found communications across the sector to be “untimely, inadequate, insufficient to enable decisions to be made, inconsistent and confusing” (comments taken from feedback from the sector).

During the exercise there was some uncertainty around who was responsible for reporting information, what tools should be used, and the exact lines and frequency of reporting in the context of an ongoing emergency.

There is a need for improved policies and procedures around emergency communications to be developed, including clarification around roles and responsibilities between the Ministry, ESR, DHBs, Primary Care and Regional Health Coordinators.

A number of Emergency Planners from the DHBs suggested that the introduction of a detailed Standard Operating Procedures manual (for a pandemic type event) would be of assistance in providing clarity in this area.

There were also a number of issues around the ESR EpiServ system. ESR found that when information arrived at ESR the extract file did not always have all the data elements from the case report form. There is a need for staff to receive more comprehensive training so that they

have the appropriate skills and training to avoid frustration at both ends. Frustrations included staff finding the system cumbersome, and ESR not receiving correct and appropriate levels of information to enable them to run reports to aid efficient surveillance operations.

6.1.2 Early detection and isolation of cases

The protocols for providing information and the level of information available to enable early detection and isolation of cases require clarification and enhancement to provide effective guidance for the sector.

Some participants would like to see the National Laboratory Guidelines for a Pandemic further developed with clearer indications around diagnostic testing to provide assurance that these would be able to be turned around within the 24-hour period required in order to support early detection. In addition, clarity is required around the current protocols regarding the safe transportation of samples to laboratories so that they can be easily followed by staff to ensure samples arrive at ESR in safe packaging.

6.1.3 Quarantine of contacts

Exercise Makgill highlighted that, in many cases, alternatives to home quarantine have not yet been adequately explored. Some DHBs believe that quarantining, in reality, would be difficult or impossible to enforce. There would be heavy reliance on media influence, and a clear and adequate policy and procedure is required to ensure that this influence is able to be utilised.

There are insufficient staff resources available in some areas to enable the sector to adequately research alternatives to home quarantine and this matter should be prioritised by each District Health Board in relation to their funding needs in the emergency management area.

It may be that the real issue is around the provision of support for people in quarantine and how that would be provided. This issue will be explored during the upcoming Exercise Cruickshank.

In the meantime, a clear policy and procedure is required to ensure that the appropriate channels are used to influence the public should quarantining become necessary.

6.1.4 Use of Antivirals

Participant feedback indicated that the systems and procedures in place require further development to allow timely tracking and monitoring of antiviral distribution. The sector believes that a register is needed to monitor and track who has received antivirals. The Ministry is addressing this matter.

DHBs have requested that the roles and responsibilities in the Antiviral Medication Interim Guidelines require clarification, as the current descriptions are not clear enough to define who is authorised to release antivirals when they are required. The criteria for administering antivirals also require clarification and need to be reviewed to enable effective distribution during a pandemic event.

6.2 Objective Two: Cluster Control

There were four key findings in this area:

- **Human Resources:** In some areas preparation, training and use of staff resources was scarce and proved insufficient for some exercise participants to perform as efficiently as required. **Rating: High**

Responsibility: District Health Boards

- **Human Resources:** There is a need for more trained staff to be available for the amount of work that needs to be carried out during a pandemic event, including alternates and additional resources where required. In particular, there is a need for more trained staff to be available to carry out the activities required to enable effective communication. **Rating: Moderate**

Responsibility: District Health Boards

- **Policies, Procedures and Guidelines:** A set of clear guidelines is required to inform the establishment and operation of CBACs. **Rating: Moderate**

Responsibility: Ministry of Health

- **Systems and Processes:** Reconfiguration and increased technical support is required to ensure that all DHBs are able to access the full capabilities of FIMS (if this system is to continue to be used in the future). **Rating: Low**

Responsibility: District Health Boards and the Ministry of Health

These findings are discussed below in relation to each sub-objective of Objective Two: Contact Tracing, Isolation Procedures and Protocols, Reconfiguration of Health Services, and Preparation for Establishment of Community-Based Assessment Centres (CBACs).

6.2.1 Contact Tracing by Public Health Service

In general, contact tracing operations ran smoothly. All Public Health Services are experienced in conducting these kinds of activities, and there were no high risk issues identified in this area.

However, some DHBs who were trialling FIMS found that they did not have the full range of FIMS functions available on their systems, due to computers not being configured properly and this caused some issues for those DHBs. DHBs should ensure that, whatever systems they are using for contact tracing, those systems are tested regularly by experienced and trained staff to ensure that they are able to be used effectively during a pandemic event.

6.2.2 Isolation Procedures and Protocols

Isolation procedures and protocols were found to be satisfactory and will be further tested during Exercise Cruickshank.

6.2.3 Reconfiguration of Health Services

While many of the DHB EOCs have plans in place to acquire additional resources, it was noted by participants that contact with the identified additional resources is irregular and that these additional resources do not always have appropriate and adequate training to enable them to carry out duties in an EOC if required.

All participants have identified a need for the necessary training to be provided to staff so that they are able to carry out duties above and beyond their normal day-to-day duties, enabling them to be effective in an emergency situation.

6.2.4 Preparation for Establishment of Community Based Assessment Centres (CBAC)

There is a need for comprehensive and clear guidelines to be available to inform the operation of CBACs. For example, while DHBs have good processes in place for checking site suitability for a CBAC, the Ministry and DHBs do not have clearly documented processes for authorising and setting up a CBAC.

Due to the lack of clear guidelines and mixed messages within the NZIPAP/ NHEP, there was confusion among the DHBs about who gives the authority to activate a CBAC, indicating a lack of training and awareness among EOC staff in relation to the National Health Emergency Plan.

For example, the National Health Emergency Plan states that *“the final decisions on the nature, location, and activation of a CBAC will be made locally, with the regional coordinator advised on any decision to activate a centre.”* However, the NZIPAP states that *CBACs should be actioned as necessary...*, and then goes on to say they should be actioned *...“ after Code Red alert in consultation with the National Coordinator”*. Directions in the NZIPAP and NHEP need to be made consistent and clear.

In addition, DHBs commented that a clear set of guidelines from the Ministry, addressing how, when and what to do to set up and operate a CBAC would be useful.

DHBs commented that they are stretched to provide trained and appropriate staffing to resource and operate CBACs when required. This is a funding issue and is being addressed as part of the new funding arrangements with the Ministry.

6.3 Objective Three: Communications

There were three key issues in the area of communications:

- **Policies, Procedures and Guidelines:** Clarification of the current policies and procedures around operational communications is required. **Rating: Moderate**

Responsibility: Ministry of Health

- **Human Resources:** More trained staff need to be made available to carry out the activities in the DHB EOCs to enable effective communication. **Rating: Moderate**

Responsibility: District Health Boards

- **Systems, Tools and Processes:** The current operational communication systems and tools require improvement and further development to ensure that they are effective and utilised consistently. **Rating: Moderate**

Responsibility: Ministry of Health in consultation with District Health Boards

These findings are discussed below in relation to each sub-objective of Objective Three: Health Sector Communications (Ministry of Health, ESR and District Health Boards), Public Communications, and Media Communications.

6.3.1 Health Sector Communications

Communications across the health sector require improvement to ensure effective, timely and efficient communications operate between the Ministry and other parts of the health sector (see Surveillance Capability and Capacity above). The issues around timeliness and quality of communications were a result of a number of issues across the Ministry, ESR and DHBs.

Ministry of Health

Systems and Processes

- The process and channels for managing emails was not clear (that is use of an event log and databases).
- Ministry staff experienced problems accessing information through the NHCC email addresses, delays in sending and receiving information, and problems when attempting to access databases and printing information. These issues may be attributable to the Ministry's EOC set up where all computers were connected through a hub to a single connection.

- DHB EOCs did not make use of the national reporting templates. It is not clear whether this was because they were unaware of their existence, or because they did not find the templates useful and appropriate.
- Participants felt that there was a lack of situational reports and updates on national and international trends being sent out to regional coordinators and DHBs from the Ministry and the matter of reporting will be addressed for Exercise Cruickshank.
- DHB and PHU queries were not acknowledged in a timely manner, possibly due to resource issues at the National EOC.

Staffing resources

- There is a need for more communication resources within the Ministry EOC to ensure that the Ministry is not overwhelmed with media and public inquiries, hindering the ability to provide timely responses. The EOC at the Ministry only had space for one communications person, where in fact three personnel were necessary to deal with the work load.
- Staff need to be made aware of the existence of an email event log and given instruction in how to use it during an emergency event.
- Ministry staff require training on what information can be reported from EpiServ so that they are able to make clear requests to ESR on what they require.

ESR

Policies and procedures

- ESR indicated a need for clarification from the Ministry about what information the Ministry would like to see reported.

Systems and processes

- Regular communication between the Ministry and ESR is necessary. In particular ESR has requested that there be a teleconference with the Ministry early in the day to determine what exact data requirements are needed and by when.

DHBs

Systems and processes

- DHB feedback indicated that they felt isolated and that they required more comprehensive guidance from the Ministry on national issues.
- Communications between the Regions and DHBs did not work effectively and these channels and processes need clarification to ensure timeliness and efficiency of responses and decision making.

6.3.2 Public Communications

Exercise Makgill did not extensively test this area. However, it was clear from feedback from participants that communication plans throughout the health sector require better guidance to ensure that consistent, accurate and timely information is provided to the public.

DHBs believe that more detailed guidance is required from the Ministry to address this area.

6.3.3 Media Communications

Responses to media inquiries during the exercise were not received in a timely manner, and in some instances, there was no response at all from the Ministry to inquiries from local participants. It is unclear whether this was the result of email delivery issues or incorrect email addresses being used.

There need to be regular and consistent media statements from the health sector in the standard format required and DHB feedback indicated that more direction from the Ministry of Health in regards to the national message was necessary. There were no press releases from the Ministry during the exercise.

6.4 Objective Four: Emergency Operational Centres (EOC)

There were two key findings in this area:

- **Human Resources:** Further training in CIMS and EOC operations across the sector will allow staff to better understand their role and increase the capability in the sector regarding emergency response activity. **Rating: High**

Responsibility: Ministry of Health and District Health Boards

- **Systems, Tools and Processes:** Some DHB EOCs found that they require an increase in facilities and equipment to enable them to respond effectively during a pandemic event, and are addressing this issue as a result of the exercise experience. **Rating: Low**

Responsibility: District Health Boards

These findings are discussed below in relation to each sub-objective of Objective Four: EOC Centres and CIMS.

6.4.1 EOC Centres

As a result of the exercise some EOCs identified the need for additional facilities and equipment to effectively operate their EOC during a pandemic event.

Due to resource constraints, these EOCs felt they were not well set up to ensure smooth communication flows within the centre, and key information was not visible to the EOC staff. This issue is being addressed by the relevant EOCs.

6.4.2 CIMS

One DHB did not implement the CIMS system at all, and of those that did many found that the roles and responsibilities were unclear, that information did not flow according to process and that handover procedures were not followed.

Further training for staff in the CIMS procedures and processes is required for clarity around roles, responsibilities, and communication flows between District Health Boards, Public Health Services, Regional Coordinators, Medical Officers of Health, and the Ministry of Health.

The Ministry of Health and District Health Boards have identified a need for up to date and easy to use guidelines, duty cards and Standard Operating Procedures to inform the use of the CIMS system.

7 Exercise Control and Delivery

7.1 Background for Exercise Control

Exercise Control (EXCON) comprised the staff responsible for the development, management and coordination of facilitation, evaluation, and documentation of the Exercise.

The objectives for Exercise Control were to:

- 1 conduct the exercise by facilitating timely communication of injects to exercise facilitators and evaluators;
- 2 monitor the exercise and determine when corrective action (such as new exercise inputs) are required to bring the exercise back on track.

7.2 Analysis and Evaluation

The analysis and evaluation of exercise control activities involved feedback from a number of sources.

Source	Description
EXCON evaluators	Evaluators were present in the EXCON facility in Wellington during the exercise. These were: <ul style="list-style-type: none"> • Lt Col Gerard Wood, Director of Nursing Services, NZ Defence Force; and • Inspector Darroch Todd, Manager Counter Terrorism Planning, NZ Police
Participant feedback	Every participant had the opportunity to complete a Participant Feedback form. Part II of this evaluation specifically related to Design and Conduct of Exercise, where a number of measures were graded on a scale of 1–5.
DHB evaluators	Included in feedback from the DHB exercise evaluators were comments on aspects of EXCON
EXCON ‘hot-wash’ debrief	Held immediately upon the conclusion of Exercise Makgill, this debrief captured evaluations from the EXCON team
Facilitators/Evaluators debrief	Held by teleconference on the day following Makgill to capture any issues identified by the DHB, PHU exercise facilitators and evaluators.

This information helped to shape the findings in Section 8: Findings for Exercise Control and Delivery.

Much of the evaluation data is of a qualitative nature, though the participant feedback template required participants to rate aspects of the design and conduct of the exercise. From the table below the key area for exercise control to improve on is:

- Communication with participants, facilitators and evaluators before, during and after the exercise.

It is noted that much of the data provided was very brief. Attention needs to be paid to invoking more meaningful feedback evaluations for future exercises.

7.2.1 Summary of Responses

Evaluation questions and a summary of the participants' feedback are shown below (excluding N/A responses).

It is worth noting that overall participants felt that it was a worthwhile exercise. The key issues are around the usefulness of the documentation provided for participant guidance and evaluation. This feedback has been noted and there will be some emphasis on improving these documents for Exercise Cruickshank.

#	Question	Summary of responses
1.1	The exercise was well organised	41% of respondents agreed or strongly agreed 44% of respondents were neutral 15% of respondents disagreed or strongly disagreed
1.2	The exercise scenario was realistic	50% of respondents agreed or strongly agreed 32% of respondents were neutral 18% of respondents disagreed or strongly disagreed
1.3	The briefing and/or presentation helped me understand and become engaged in the scenario	57% of respondents agreed or strongly agreed 30% of respondents were neutral 13% of respondents disagreed or strongly disagreed

#	Question	Summary of responses
1.4	The facilitator/ controllers were knowledgeable about the material and kept the exercise on target	<p>63% of respondents agreed or strongly agreed</p> <p>(note that participants have also commented on the need for better information and training to be provided for facilitators and evaluators, which is a reflection on the quality of documentation provided rather than the ability of the people appointed to these roles, all of whom did an excellent job on the day of the exercise)</p> <p>29% of respondents were neutral</p> <p>8% of respondents disagreed or strongly disagreed</p>
1.5	The exercise handbook used during the exercise was a valuable tool	<p>26% of respondents agreed or strongly agreed</p> <p>31% of respondents were neutral</p> <p>43% of respondents disagreed or strongly disagreed</p>
1.6	The exercise control pack used during the exercise was a valuable tool	<p>30% of respondents agreed or strongly agreed</p> <p>35% of respondents were neutral</p> <p>35% of respondents disagreed or strongly disagreed</p>
1.7	Participation in the exercise was appropriate for my role	<p>73% of respondents agreed or strongly agreed</p> <p>17% of respondents were neutral</p> <p>10% of respondents disagreed or strongly disagreed</p>
1.8	The level and mix of disciplines and participants included the right people for this exercise	<p>64% of respondents agreed or strongly agreed</p> <p>28% of respondents were neutral</p> <p>8% of respondents disagreed or strongly disagreed</p>

8 Findings for Exercise Control and Delivery

8.1 Objective One: Communication and Facilitation with EOC Facilitators

There were three key issues relating to this objective:

- **Communications:** There is a need for more comprehensive and accurate pre-exercise communications to be provided in a timely manner. **Rating: High**
- **Human Resources (Capability):** Better information and training needs to be provided for facilitators and evaluators to enable them to effectively carry out their role during the exercise. **Rating: High**
- **Systems, Tools and Processes:** The evaluation material needs to be further developed, and simplified to allow effective evaluation of any future exercises. **Rating: Moderate**

8.1.1 Communications

Ineffective and insufficient communications have a negative impact on the achievement of an exercise's objectives and create a negative perception from exercise participants. It is necessary to ensure that participants receive adequate instruction and guidance in a timely manner, so that they obtain the best value and learning from participating in any future exercises.

A lack of timely and effective communications before and during Exercise Makgill resulted in some confusion among participants including:

- A lack of understanding around the objectives and purpose of the exercise, resulting in feedback that was outside the scope of the day.
- Due to time constraints, some communications were sent out before details of the exercise were finalised, resulting in conflicting messages and confusion. Future exercises should ensure that the exercise details have been finalised before handbooks and exercise instructions are distributed. Where changes are made, these should be clearly communicated to the right people to avoid confusion.

8.1.2 Human Resources (Capability)

There was some confusion around the appointment of facilitators and evaluators, including who was responsible for the appointments, and what the skills and expertise required for each position were.

Some DHBs indicated that they were hindered by the lack of suitably qualified and experienced people at a local level and also a lack of clarity around how the exercise was to be conducted.

Other issues identified by the participants included:

- A lack of funding to source the appropriate personnel;
- Insufficient information provided to support these roles.

These issues have been noted and improvements made in this area for Exercise Cruickshank.

8.1.3 Systems, Tools and Processes

The EXCON evaluators noted that the evaluation criterion for the assessment of Exercise Control was “weak and lacking in substance”.

Lack of specific and measurable performance indicators limited the value and learnings gained from running an exercise of this magnitude. Steps are being taken to ensure that the objectives and performance indicators for Exercise Cruickshank add value to the EXCON role.

8.2 Objective Two: Monitoring and Tracking Exercise “Play”

There was one key issue in this area:

- **Monitoring:** The National Exercise Control team needs to ensure that there is a timely and adequate response to exercise activity carried out by participants in response to injects or requests for information. **Rating: Moderate**

Feedback from participants and evaluators indicated that they were dissatisfied with the level of response from Exercise Control to exercise play. This included:

- A need for a greater level of response from Exercise Control to actions carried out by participants in response to inject prompts;
- A need for Exercise Control to provide additional instructions and injects in response to exercise play.

In developing injects and instructions for the next round of exercises, consideration should be given to how the EXCON team will ensure that adequate and appropriate response is made in relation to exercise “play” during the day.